# NCPEA Education Leadership Review

Volume 17 Number 1
Spring 2016

A nationally refereed journal sponsored and published by the National Council of Professors of Educational Administration

# NCPEA
# Education Leadership Review

**Spring 2016**
**Volume 17, Number 1**
**ISSN 1532-0723**

**Sandra Harris, Editor**
*Lamar University*
**Casey Graham Brown, Assistant Editor**
*University of Texas Arlington*
**Craig Peck, Assistant Editor**
*University of North Carolina at Greensboro*


**NCPEA Publications Director, Brad Bizzell**
*Radford University*

*NCPEA Education Leadership Review* is a nationally refereed journal published two times a year, in Spring (March/April), and Fall (September/October) by the National Council of Professors of Educational Administration. 

# *Education Leadership Review* – Spring 2016
# Contents

# Using Job Embeddedness to Explain New Teacher Retention

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

**Jennifer Moradian Watson**
*California State University, Fresno*

**Julie Olson-Buchanan**
*California State University, Fresno*

*The high turnover rates among teachers, particularly novice teachers, is a significant problem in the field of education. This study examines the relationship between teacher turnover and a construct found in organizational literature -- job embeddedness. Job embeddedness is the extent to which an employee connects socially and emotionally to their job and the community in which they work. Data from 143 elementary, middle, and high school novice teachers in three Central California school districts in the San Joaquin Valley indicate that the degree to which teachers are connected to their schools and communities is a substantial factor in whether new teachers stay or leave. The use of multivariate analysis of variance (MANOVA) identified a correlation between embeddedness and retention. The findings suggest that job embeddedness is a useful construct for better understanding novice teacher turnover. Further, practical implications of this study suggest that efforts to enhance the social and emotional links between novice teachers, their jobs and surrounding community may help stem the high turnover rate among new teachers.*

**NCPEA Education Leadership Review, Vol. 17, No. 1– May, 2016**
**ISSN: 1532-0723** 

## Introduction

A strong predictor of student performance is teacher quality (Darling-Hammond, 2000; Rockoff, 2004), yet schools with students with the highest need have the greatest problem with teacher attrition (Boyd, Grossman, Lankford, Loeb & Wyckoff, 2008). Further research indicates teacher turnover is related to subsequently lower student achievement, and this effect is particularly pronounced for low performing schools and schools with a high proportion of minority students (Ronfeldt, Loeb, & Wyckoff, 2013). This problem has become more pronounced since 1994 (National Commission on Teaching and Americas Future, 2010), particularly for novice teachers.

Large numbers of novice teachers leave education or their original school site at alarming rates. Boe, Cook and Sunderland (2008) found that the highest rate of teacher attrition occurs in the first three years of teaching. The National Center for Educational Statistics (NCES, 2010) reports that 12% of new teachers (with 1-3 years of experience), who began in 2007 left the profession within two years and 23% left the profession within 5 years (NCES, 2015). Of the teachers surveyed in 2007, another 10% changed schools the following school year. The NCES (2005) found that certain subject areas are more difficult to staff such as math, science and special education. Furthermore, this study noted that low performing schools have higher proportions of underprepared and/or novice teachers than their counterparts (NCES 2005). Students' race, poverty, language and ethnic make-up, as well as class size, have been related to turnover level (Loeb, Darling-Hammond, & Luczak, 2005).

The negative outcomes caused by a high turnover rate among novice teachers (e.g., transition costs, recruitment costs) are particularly problematic when coupled with the large number of veteran teachers expected to retire in the near future (U.S. Department of Labor, 2010) and the anticipated increased population of K-12 students (NCES, 2014). The Bureau of Labor Statistics reports the overall unemployment rate in the United States to 5.9%, (Bureau of Labor Statistics, U.S. Department of Labor, The Economics Daily, Unemployment, 2014) however an estimated 12% additional teachers will be needed in the K-12 school setting through 2022 (Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Kindergarten and Elementary School Teachers, 2014; Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Middle School Teachers, 2014). As teachers leave the work force due to attrition and turnover, student populations increase the most in the southern and western portions of the United States between 2011-2022 (Hussar and Bailey, 2013). Teacher projections for the next decade estimate that California public school enrollment will increase 8.7% with a projected need of 28% more teachers through 2017 (NCES, 2008). The need for qualified teachers combined with the retirement of baby boomers and population expansion make the retention of novice teachers imperative.

Prior educational research has identified that teachers leave education for a variety of reasons including changes in their personal circumstances (Grissmer & Kirby, 1987), dissatisfaction with workplace conditions (Berry, 2008; Billingsly, 1993; Kukla-Acevedo, 2009), and dissatisfaction with students' behaviors (Rochkind, Ott, Immerwahr, Doble & Johnson, 2007). Other studies exist that help to explain why some stay in education. Site leadership (Bogler, 2008; Brown & Wynn, 2009; Pogodzinksi, Youngs, Frank & Belman, 2012), effective mentoring (Brill & McCartney, 2008; Dingus, 2008; Ingersoll & Strong, 201; Kapadia & Coca, 2007), helpful professional development (Eberhard, Reinhardt & Stottlemeyer, 2000) and valued

collegial relationships (Certo & Fox, 2002; Flores & Day, 2006; Warshauer & Appleman, 2009) have been identified as factors that help lead to teacher retention.

Despite the amount of research attention given to this important problem, we have more to learn about why novice teachers leave or stay, as well as how we can use this information to improve retention rates. Based on the negative effects, including cost and loss of human capital of turnover and heightened concerns about employee retention, it is urgent to identify reasons why some employees stay and others leave (Van Dyk, 2012). Educational research has identified factors leading to retention, yet another potential strategy is to examine the relevance of research on employee retention outside the field of education. This study integrates the broader human resource management literature to examine the utility of job embeddedness, as it relates to novice teacher turnover. Job embeddedness is a construct that focuses on organizational attachment factors that may keep employees in their current position (Mitchell, Holtom, Lee & Erez, 2001). For the purpose of this study, two of the three links originally developed by Mitchell et al. (2001) have been examined to determine if those novice teachers who demonstrate a higher level of connection are more likely to remain in their positions.

Next we discuss the economic case for reducing teacher turnover, the education research that has examined teacher turnover, and then the job embeddedness construct and how it may be used to examine teacher turnover.

## Teacher Turnover: Human and Economic Capital

The economic argument for the importance of reducing teacher turnover is compelling. Since 2007, school districts have faced diminishing state and national funding based on the national economic crisis (Hull, 2010). On top of the costs of the economic downturn, the expenses accrued from teacher attrition are substantial, yet differ among districts and states. Recent estimates of turnover costs per teacher range from $10,000 to $18,300. The NCTAF has estimated that the cumulative total of turnover costs to districts is $7.2 billion dollars a year (Barnes, Crowe, & Schaefer, 2007).

School site costs associated with voluntary turnover and migration of teachers continues to pose numerous problems in education (Barnes, et al. 2007; NCTAF, 2010; Shockley, Guglielmino & Watlington, 2006). Sites must expend resources each time a new teacher is added on staff. This is particularly problematic for urban public schools which lose up to 20% of their teachers each year. Los Angeles Unified spends $94,211,250 annually for training, resources, administrative time to recruit, interviewing and hiring (Barnes, et al. 2007). Turnover costs reduce scarce resources and create additional tasks for site and district level administrators, further taxing an already overburdened system (Texas Center for Educational Research, 2000).

High teacher turnover cost is further exacerbated by a concurrent emphasis on narrowing the student learning gap by ensuring the acquisition and maintenance of high teacher quality. In 2002, educational legislation passed through the United States Congress, "No Child Left Behind" (NCLB). This statute outlined the standards for "highly qualified" educators (P.L. 107-110. 115 STAT 1425). Darling-Hammond (2000) argues that well-prepared teachers are critical and can be a stronger influence on student achievement than a student's background. In spite of reform efforts, achievement gaps between the highest and lowest performing students persist (Haycock, 2001). One factor in the deficit may be a "teaching quality gap" (Useem, et al., 2007) created by a yearly influx of novice teachers. High turnover in some schools, particularly urban schools, contributes to the inequity (Haycock, 1998).

## Predictors of Teacher Turnover

Given the importance of teacher retention to student success and the prohibitive costs of teacher turnover, the research literature has examined a number of possible predictors of teacher turnover. In particular, researchers have primarily focused on demographic characteristics of those who are more likely to exit the field of teaching as well as relevant predictive characteristics of schools and students.

### Teacher Characteristics

Years of study on teacher attrition has identified multiple variables that are associated with turnover. Research has found that teachers who are the least experienced (Billingsley, 1993; Boe et al., 2008; Guarino, Santibañez, & Daley, 2006) as well as the most academically able as demonstrated by college entrance scores (Billingsley, 1993; Feng, 2005; Murnane, Singer, Willett, Kemple, James, & Olsen, 1991) leave the profession at higher rates. Billingsley found that one of the most common problems was an inaccurate view of teacher responsibilities; disconnection between perceived and actual teacher duties. In terms of other demographic characteristics, teachers who leave education are predominately young, female, Caucasian, secondary teachers (Murnane et al., 1991) without graduate degrees and who teach in specialized areas such as special education, math, or science (Borman & Dowling, 2008). Men, who previously worked in another industry, are over 35 and work in secondary schools, also leave education at relatively higher rates (STRDC, 2000).

### The Voice of the New Teacher

Many teachers enter the field of education with a strong desire to make a difference. A recent study on self-efficacy and retention examined the desire to make a difference among its preschool-to-high school teacher participants (Redman, 2015). These same educators relayed concerns they had previously experienced within their first five years of teaching. Some stated that the perceptions of their colleagues were an issue due to their lack of experience in the classroom. The author goes on to enumerate other concerns of the novice teachers such as: inadequate professional development, inconsistent mentoring experiences and overwhelming feelings in relationship to teaching standards and trying to accomplish leadership, state and national expectations within the classroom. Although none of these teachers stated that any of the above enumerated led to an exit from the field, the level of on and off campus factors that create anxiety can further enhance other stresses found within the profession.

### School and Student Characteristics

Certain school site conditions have also been identified as factors related to novice teacher turnover (Rochkind, Ott, Immerwahr, Doble, & Johnson, 2007). School characteristics associated with higher rates of teacher attrition include urban schools, private schools, schools with high rates of student discipline problems and large numbers of English language learners (Feng, 2005; Ingersoll, 2001; Loeb, Darling-Hammond, & Luczak, 2005). Schools with fewer resources, lower teacher salaries (Kelly, 2004), or lower spending on instructional materials also have higher attrition rates (Borman & Dowling, 2008). Lack of professional development

opportunities is another factor factored in teacher attrition. Rochkind et al. (2007) reported that teachers complained of insufficient training to work with students with diverse needs and students who have behavior problems. In California, working conditions such as large class sizes and student needs are related to turnover (Loeb et al., 2005). Ingersoll (2001) identified that excessive demands on new teachers contribute to attrition, as do unstable organizational conditions. Salary complaints are rarely cited as the only reason for leaving (Certo & Fox, 2002). Also, a combination of factors identified in turnover research suggests that students, classroom, school site, and administrative factors may lead to higher turnover (Borman et al., 2008; Feng, 2005; Ingersoll, 2001; Loeb, et al., 2005).

Research to this point is informative. Although some of these factors are outside the control of school districts, other factors serve to provide suggestions for how novice teacher turnover could be curbed. Turnover may be slowed by providing: more realistic scenarios to those pursuing teaching professions, as well as, increased professional development opportunities and expanding resources and increasing salaries for teachers. However, current economic conditions and other budget restraints limit the viability of some of these solutions. The education literature has not fully examined relevant retention literature from the human resource management field. Next, we introduce and discuss one particular construct, job embeddedness that has demonstrated validity in the broader human resource management literature.

## Job Embeddedness: The Theory of Staying

In 2001, Mitchell et al. introduced job embeddedness as a combination of organizational attachment factors that offered an alternative explanation of employee retention. Job embeddedness is the degree to which employees are integrated into the employment organization and the community where they reside. Research outside of education suggests that turnover is lower when job embeddedness is relatively high (Mitchell, Holtom & Lee, 2001; Yao, Lee, Mitchell, Burton, & Sablynski, 2003; Zhang, Fried, & Griffeth, 2012). Job embeddedness has been coined as "the theory of staying" (Holtom & Inderrieden, 2006).

Job embeddedness is a collection of six dimensions related to one's integration into an organization. These dimensions are found in organizations and also in the outside community. They are referred to as "links, fit, and sacrifice" (Mitchell, et al., 2001; Ramesh & Gelfand, 2010). Job embeddedness is the product of these elements (Mitchell, et al., 2001).

Table 1
*The Six Dimensions of Job Embeddedness*

| Organization | Community |
|---|---|
| Fit | Fit |
| Links | Links |
| Sacrifice | Sacrifice |

The job embeddedness dimensions of links, fit, and sacrifice explain the attachments to work (Mitchell, Holtom, & Lee, 2001; Mitchell, et al., 2001). Links are connections developed

in relationship to the employee and the institution or others associated with the organization. Linked employees may be connected through formal or informal means. Examples of work linkages are work-related teams or co-worker relationships. Out of work links include hobbies, service activities, church or community organizations the employee is involved with that create a network of associations that tie the employee to the community (Mitchell, Holtom & Lee, 2001; Mitchell, et al., 2001).

Fit differs from links as it relates to the perception of shared values and goals with the organization and environment. Mitchell, Holtom and Lee (2001) found that a better fit leads to an employee who experiences a greater bond. If the employees' goals, values, and future plans are aligned with the organizations' goals, values and future plans, the likelihood of the employee remaining with the organization is very high.

Sacrifice is the perception of psychological or financial stress from leaving the institution. Employees who leave may uproot family, leave friends, or change their children's school. These on and off the job connections create a perceived sacrifice for the employee, thus a difficult psychological break from the organization. Studies have found that the more connected an employee is, both in and out of the organization, the more difficult it is to depart (Hom, Mitchell, Lee, & Griffeth, 2012).

Job embeddedness reflects the "totality of embedding forces that keep a person on a job rather than on the negative attitudes that prompt the person to leave the job" (Mitchell et al., 2001, p. 1109). Job embeddedness is shown to be a robust predictor of retention across diverse groups of employees including law enforcement officers, military personnel, informational technology personnel, hospital, retail, bank employees, and coaches at the collegiate level (Mallol, Holtom & Lee, 2007).

New studies on job embeddedness further supports the original supposition of factors that help employees stick within an organizational setting. Recently, Jiang, Liu, McKay, Lee, and Mitchell (2012) conducted a meta-analytic review of over 65 job-embeddedness studies. The technique of meta-analysis is often used to explore multiple studies that examine the statistical significance of pooled data. Results indicate that "on-the-job and off-the-job embeddedness negatively related to turnover intentions and actual turnover" (p. 1077). Further analysis of the data provided evidence that the link between job embeddedness and turnover is stronger in females than their counterparts (Jiang, et al., 2012).

After over a decade of analysis, the construct of job embeddedness continues to further illuminate strategies to help with employee retention. If job embeddedness is relevant in the education context it provides a different way to explain why teachers leave. It may also suggest how circumstances must change if educators are to be induced to stay. Thus, this study examines the following research question:

**Research Question**: Does job embeddedness predict novice teacher retention?

## Method

Surveys were sent to two groups of potential respondents: current and former K-12 teachers in three Central California school districts. The districts surveyed are located in two rural agricultural areas and one suburban region all within the San Joaquin Valley of California. Teachers with fewer than five years of teaching experience who were hired between 2006 and 2010 were targeted. Surveys were sent to 500 currently employed K-12 teachers who had been working for their district for less than 5 years. 154 surveys were returned (30.8 % return rate),

but 26 of these returned surveys were unusable because the teachers, while new to the district, were not novice teachers. Sixty-seven percent were females under 30 years of age. Of the respondents, 57% had taught 4-years and 58% taught at the elementary school level. Forty-one percent of the sample worked in a rural district and 43% of respondents work in rural, Title 1 schools. Additionally, 86% were categorized as general education teachers and 67% work in schools where the Academic Performance Index (API) score is over 800. The API is an indicator used in California to determine if schools and districts are performing at the state benchmark.

Surveys were also sent to an additional 100 novice teachers who had voluntarily left one of these three districts during that same period. Of these 100 surveys, 29 were returned due to an incorrect address and 15 were returned and usable, resulting in a 21 % return rate. Similar to the first group, 67% were females but 60% were between the ages of 31 and 50. Seventy-four percent had taught four years, 53% as K-6 teachers and 47% as 7-12$^{th}$ grade teachers. General education teachers make up 73% of the sample and a large number worked in non-Title 1 schools (67%). Sixty-percent of these respondents were from rural schools and 47% of their schools had an Academic Performance Index (API) scores over 800 which was previously used in California to determine if a school was academically performing at the designated benchmark.

**Instrumentation**

Mitchell et al. (2001) developed a 42 item survey in Likert-type, fill-in-the-blank and yes/no format of the different facets of job embeddedness. Items focus on the respondent's fit into the school culture, their linkages to co-workers and members of the community, and the sacrifices they would need to make if they were to leave. Total scores indicate the degree of job embeddedness which is calculated by computing the mean of the six aspects of the overall construct (Mitchell, et al., 2001).

The analysis of data for this study focused on the areas of Organizational and Community Fit in relationship to Organization and Community Sacrifice. Thirty Likert-type questions were asked to all respondents surveyed in order to determine if individuals perceived connections to the organization and community led to a higher level of embeddedness. In order to evaluate embeddedness differences between those who remained and those who left, three items were added regarding respondents' intentions to leave their schools within a year.

Several demographic variables were added including the respondent's grade level assignment, whether the classroom teacher was in general or special education, and whether the school was a Title 1 institution. A general school-wide descriptor of academic performance was also included. In California, an Academic Performance Index (API) indicates whether school performance meets the statewide target of 800 for all schools.

**Procedure**

Two lists of novice teachers were provided by each district's Human Resources department. One list of individuals continuing to teach in the district, and second list of those who had left. Each of the novice teachers was sent a copy of the embeddedness survey with items adjusted to the past tense to accommodate those who had left. Each of the teachers in both groups were contacted multiple times with the incentive of a gift card provided by lottery to one of the participants in each group.

Items were tabulated into one of four categories: items dealing with how well the individual fit the organization (OrgFit), how connected they felt to the community (ComFit), the work-related sacrifices they would make if they were to leave the organization (OrgSac), and the community-related sacrifices incurred by leaving (ComSac). Once the 30 items were scored, subtotals were created for each of the four categories. These four categories were selected due to their use of Likert type responses (the other two dimensions used fill-in answers and, thus, were not used for this study).

**Analysis**

The initial question is whether embeddedness scores from the instrument would distinguish between those who remained in the districts, and those who left. Descriptive statistics and frequency distributions were calculated for responses. The internal consistency of the data was determined by Cronbach's alpha. The analytical approach was multivariate analysis of variance (*MANOVA*). The second question is whether embeddedness is inversely related to turnover, a correlation issue.

## Results

Coefficient alphas were calculated for the survey measures. Internal consistency coefficients for response data ranged from .726 for items related to "sacrifice" to .865 for the degree of "fit" in the organization.

The correlation values in Table 2 suggest that, with the exception of the OrgFit/OrgSac correlation, the items associated with the subcategories measure distinct characteristics.

Table 2
*Correlation between 4 dimensions of job embeddedness*

| Variable | OrgFit | ComFit | OrgSac | ComSac |
|---|---|---|---|---|
| OrgFit | 1 | | | |
| ComFit | .180* | 1 | | |
| OrgSac | .669** | .197* | 1 | |
| ComSac | -.130 | .-221** | .085 | 1 |

*Note.* *.Correlation is significant at the 0.05 level (2-tailed). **.Correlation is significant at the 0.01 level (2-talied).

The fundamental question is whether embeddedness scores serve to distinguish between novice teachers who have chosen to remain in the classroom and those who elected to leave. The *MANOVA* results are in Table 3.

Table 3
*Summary of Multivariate Results for Job Embeddedness in Relationship to Stayers and Leavers*

| Procedure | F Value | Sig | Partial *Eta* Square |
|---|---|---|---|
| Hotelling's Trace | 228.044[a] | .000 | .869 |

The *MANOVA* results, Hotelling's Trace, in this case since there were two groups, indicate that the aggregated scores created from the subtests is significantly different for those who remain in education and those who leave ($F = 228.044$; $p < .001$); the embeddedness scores can distinguish between "stayers" and "leavers."

The significant result leaves unanswered the related question of the practical importance of this outcome. The partial *eta*-squared value ($h_p^2$) indicates that about 87% of the variance in whether the novice remains or leaves can be explained by differences in the level of embeddedness.

Univariate analyses (Table 4) indicate that organization fit, community fit, and community sacrifice scores are all significantly different for "stayers" and "leavers." The organizational sacrifice scores are not significant.

Table 4
*Summary of Univariate Results for Job Embeddedness in Relationship to Stayers and Leavers*

| Source | SS | df | MS | F | p |
|---|---|---|---|---|---|
| OrgFit | 328.224 | 1 | 328.224 | 11.162 | .001 |
| Error | 4146.238 | 141 | 29.406 | | |
| ComFit | 148.300 | 1 | 148.300 | 13.083 | .000 |
| Error | 1598.330 | 141 | 11.336 | | |
| OrgSac | 26.140 | 1 | 26.140 | .780 | .379 |
| Error | 4724.517 | 141 | 33.507 | | |
| ComSac | 29877.280 | 1 | 29877.280 | 726.510 | .000 |
| Error | 5798.538 | 141 | 41.124 | | |

SS=Sum of Squares, MS=Mean Square

## Discussion

The tendency for novice teachers to leave the classroom during their early years of teaching has been examined in a number of different ways. Prior research has been informative, identifying characteristics of those that stay or leave the profession. Even though research has been extensive, the most recent teacher attrition and mobility data from the U. S. Department of Education shows that 7% of novice teachers surveyed left the profession and another 13% moved to another school (Goldring, & Riddles, 2014). The classroom is a complicated place to work and human aspects are if anything, variable. The approach taken in this study was to incorporate a construct in the human resource management field, job embeddedness, to examine teacher retention in the education context. The theory maintains that turnover is lowest where employees are most completely integrated into their positions and community. Integration, or embeddedness, is operationally-defined in terms of how well the individual fits in the position

and the community, how linked the individual is to position and community, and the level of sacrifice required if the individual were to leave. The theory predicts that turnover will be lowest where job embeddedness is highest. It was tested here by examining two of the three potential connections and whether job embeddedness scores are significantly different for novice teachers who indicate an intention to remain in their positions, compared to those who that had left.

The purpose of this study was to determine if job embeddedness is related to novice teacher retention. Teachers were asked a series of questions in relationship to organizational "fit," "links," and "sacrifice." The MANOVA results support the use of job embeddedness in this context. Not only were scores significantly different, but most of the difference can be attributed to stated intention. A relatively high effect size ($h^2$=.869) should be interpreted with caution, representing as it does the first application of this construct to educators but it is difficult to ignore nevertheless. Employees' perceptions of their level of integration to their positions and their communities have a great deal to do with their intentions to remain. The results of this study are consistent with empirical findings in the human resource management literature and provide further support for the Theory of Staying (Mitchell et al., 2001). Further, these findings underscore the relevance of the job embeddedness construct to the education context.

**Implications for Practice**

The findings have intriguing implications for addressing a chronic problem in education -- novice teacher retention. Teachers with less than five years of experience leave the field at a higher rate than more veteran educators (NCES, 2010). The NCTAF claims that teacher turnover may cost more than 7.3 billion dollars per year (2007). Based on high turnover and costs, new strategies to retain teachers are needed. Because job embeddedness is related to novice teacher retention, efforts to improve embeddedness may pay dividends in higher rates of retention. By applying the job embeddedness model to education, leader practitioners can review the "links", "fit" and "sacrifice" model to retain more teachers. That is, if those charged with inducting and retaining new teachers develop procedures designed to enhance the connections new educators feel to the culture of the school and the community, turnover may decline and the costs and disruptions associated with replacing those who leave, substantially reduced. More completely embedding teachers appears to be one promising strategy to improve the quality of schooling that students receive. If those who leave are disproportionately among the academically most able, (Murnane et al., 1991) these findings take on unusual importance. They may give rise to at least a partial strategy for addressing disappointing academic performance.

The use of Professional Learning Communities, mentoring structures, site-based management with collegial interactions, teacher administrator collaboration and decision making are a few of the organizational structures that may be beneficial in enhancing job embeddedness (Bogler, 2008; Brown & Wynn, 2009; Inmann & Marlow, 2004; Kapadia & Coca, 2007). Harris, Wheeler and Kacmar (2011) found that the interactions between leadership and employee called leader-member exchange was a "predictor of organizational embeddedness." Other efforts, such as providing opportunities to network and engage with the broader community, perhaps through education partnerships or civic service, are promising strategies as well. Also, by developing work teams, using collaborative decision making, creating a family atmosphere, and engaging staff in extra-curricular activities, leaders can help create the webs of interconnectivity leading to increased opportunities for embeddedness to develop.

Enhancing job embeddedness may result in other positive outcomes as well. New studies on generational work attitudes have found that when younger employees feel connected or fit within their work environment they are more likely to enjoy their work (Westerman &Yamamura, 2007). Weiss concluded that in institutions where new teachers were part of a learning system, where input was sought regarding decisions affecting student achievement, and were made to feel a part of the school leadership, autonomy and participation increased (1999).

**Limitations**

The relatively low return rate in this study suggests that when surveying younger generations, perhaps an alternative contact might be more fruitful. Web-surveys have become common and provide an alternative, or a supplement to conventional mail (Cook, Heath, & Thompson, 2000; Kaplowitz, Hadlock & Levine, 2004). In future analysis, it is recommended that a degree of qualitative investigation be included in the research model in order to obtain more in depth participatory responses. By incorporating a focus group interview or case study, the researcher can "seek answers to questions" (Berg, 2007) that require a more detailed response than a Likert-type question.

One final limitation in this particular study may be the effect of the economic down-turn in the country. Turnover rates are likely affected by high rates of unemployment. According to the Job Openings and Labor Turnover Survey (March 11, 2011), the recent recession ended in June 2009, however as of 2010, there were still 6 unemployed persons for every job opening and fewer employees quitting their positions due to job scarcity (US Department of Bureau of Labor Statistics, 2011). The results here may not be as generalizable for these reasons.

**Summary and Future Research**

This analysis began with a question, "Can job embeddedness help to predict novice teacher retention?" This study supports the use of this construct to explain turnover in K-12 education and to help practitioners make thoughtful decisions. This body of research will give insight to scholars and leaders that continue to look for new means to retain the important resource of human capital. However, this is the first study to examine this construct as it relates to novice teacher retention. Future research is needed to examine its relevance to other critical jobs in the education context as well. Also, studies that tie individual items on the survey specifically to education-related issues hold the promise to develop the relationship yet further (Crossley, et al., 2007; Cunningham, Fink & Sagas, 2005; Wilson, 2010). As with this study and others, there is a mounting body of research that points to embedded employees translating to retained employees. School and district administrators can look at the 6 dimensions of on-the-job and off-the-job factors in their fight to retain the best and brightest in order to educate all kids at high levels.

## References


Adams, G. (1996). Using a cox regression model to examine voluntary teacher turnover. *Journal of Experimental Education*, *64*(3), 267-285.

Barnes, G., Crowe, E., and Schaefer, B. (2007). *The cost of teacher turnover in five school districts: A pilot study*. A paper presented at the International Congress for School Effectiveness and Improvement. Retrieved from http://eric.ed.gov/ERICWebPortal/search/detailmini.jsp?_nfpb=true&_&ERICExtSearch_SearchValue_0=ED497176&ERICExtSearch_SearchType_0=no&accno=ED497176

Berg, B. L. (2007). *Qualitative* Berry, B. (2008). Staffing high-need schools: Insights from the nation's best teachers. *Phi Delta Kappan*, *89*(10), 766-771.

Billingsley, B. S. (1993). Teacher retention and attrition in special and general education: A critical review of the literature. *The Journal of Special Education*, *27*(2), 137-174. doi: 10:1177/002246699302700202.

Boe, E., Cook, L., & Sunderland, R. (2008). Teacher turnover: Examining exit attrition, teaching area transfer, and school migration. *Council for Exceptional Children, 75*(1), 7-31.

Bogler, R. (2008). The influence of leadership style on teacher job satisfaction. *Educational Administration Quarterly*, *(37)*5, 662-683. doi: 10.117/00131610121969460.

Borman, G., & Dowling, N. M. (2008). Teacher attrition and retention: A meta-analytic and narrative review of the research. *Review of Educational Research, 78*(3), 367-409. doi:10.3102/0034654308321455.

Boyd, D., Grossman, P., Lankford, H., Loeb, S. and Wyckoff J. (2008). *Who leaves? Teacher attrition and student Achievement.* A working paper 14022 for Analysis of Longitudinal Data in Education Research. *National Bureau of Economic Research*. Retrieved from http://www.nber.org/papers/w14022.

Brill, S., & McCartney, A. (2008). Stopping the revolving door: Increasing teacher retention. *Politics & Policy*, *36*(5), 750-774.

Brown, K. M., & Wynn, S. (2009). Finding, supporting, and keeping: The role of the principal in teacher retention issues. *Leadership and Policy in Schools, 8*, 37-63. doi: 10.1080/15700760701817371.

Bureau of Labor Statistics, U.S. Department of Labor, *The Economics Daily*, Unemployment in September 2014 on the Internet athttp://www.bls.gov/opub/ted/2014/ted_20141007.htm (visited *October 20, 2014*).

Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2014-15 Edition*, Kindergarten and Elementary School Teachers, on the Internet at http://www.bls.gov/ooh/education-training-and-library/kindergarten-and-elementary-school-teachers.htm (visited *October 20, 2014*).

Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2014-15 Edition*, Middle School Teachers, on the Internet at http://www.bls.gov/ooh/education-training-and-library/middle-school-teachers.htm (visited *October 20, 2014*).

Certo, J. L., & Fox, J. E. (2002). Retaining quality teachers. *The High School Journal, 86* (1), 55-75.

Cook, C., Heath, F., & Thompson, R. L. (2000). A meta-analysis of response rates in web- or internet-based surveys. *Educational and Psychological Measurement, 60*, 821-836. doi: 10.1177/00131640021970934.

Crossley, C. D., Bennett, R. J., Jex, S. M., & Burnfield, J. L. (2007). Development of a global measure of job embeddedness and integration into a traditional model of voluntary turnover. *Journal of Applied Psychology*, *92*(4), 1031-1042.

Cunningham, G. B., Fink, J. S., & Sagas, M. (2005). Extensions and further examination of the job embeddedness construct. *Journal of Sport Management, 19*, 319-335.

Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. *Education Policy Analysis Archives, 8*(1). Retrieved from http://epaa.asu.edu/epaa/v8n1.

Dingus, J. (2008). "I'm learning the trade": Mentoring networks of Black women teachers. *Urban Education, 43*(3)*,* 361-377. doi: 10.177/0042085907311794.

Eberhard, J., Reinhardt, M., and Stottlemeyer, B., (2000). Strategies for new teacher retention: *Creating a climate of authentic professional development for teachers with three years or less years experience*. The South Texas Research and Development Center. Retrieved from http://eric.ed.gov/ERICWebPortal/search/detailmini.jsp?_nfpb=true&_&ERICExtSearch_SearchValue_0=ED450116&ERICExtSearch_SearchType_0=no&accno=ED450116.

Feng, L. (2005). *Hire today, gone tomorrow: The determinants of attrition among public school teachers*. (Doctoral dissertation, Florida State University). Retrieved from http://mpra.ub.uni-muenchen.de/589/.

Flores, M. A., & Day C. (2006). Contexts which shape and reshape new teachers' identities: A multi-perspective study. *Teaching and Teacher Education, 22*, 219-232.

Futernick, K. (2007). A possible dream: Retaining California's teachers so all students can learn. *The Center for the Future of Teaching and Learning.* Retrieved from http://www.calstate.edu/teacherquality/.

Goldring, R., Taie, S., and Riddles, M. (2014). Teacher Attrition and Mobility: Results From the 2012–13 Teacher Follow-up Survey (NCES 2014-077). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved from http://nces.ed.gov/pubsearch.

Grissmer, D. W., & Kirby, S. N. (1987). *Teacher attrition: The uphill climb to staff the nation's schools.* Retrieved from RAND; Center for the study of the teaching profession website: http://www.rand.org/pubs/reports/R3512/.

Guarino, C. M., Santibañez, L., & Daley, G. A. (2006). Teacher recruitment and retention: A review of the recent empirical literature. *Review of Educational Research*, *76*, 173-208. doi: 10.3102/00346543076002173.

Harris, K. J., Wheeler, A. R., Kacmar, K. M. (2011). The mediating role of organizational job embeddedness in the LMX-outcomes relationships. *The Leadership Quarterly, 22,(2), 271-281.* doi: 10.1016/j.leaqua.2011.02.003.

Haycock, K. (1998). *Good teaching matters: How well-qualified teachers can close the gap.* Retrieved from www.edtrust.org/sites/edtrust.org/files/publications/files/k16_summer98.pdf.

Haycock, K. (2001). Helping all students achieve: Closing the achievement gap. *Educational Leadership*, *58*(6), 1-15.

Holtom, B. C., & Inderieden, E. J. (2006). Integrating the unfolding model and job embeddedness model to better understand voluntary turnover. *Journal of Managerial Issues*, *18*(4), 435-452.

Hom, P. W., Mitchell, T. R., Lee, T. W., & Griffeth, R. W. (2012). Reviewing employee turnover: Focusing on proximal withdrawal states and an expanded criterion. Psychological Bulletin, 138, 831–858.

Hussar, W. J., & Bailey, T. M. (2013). *Projections of Educational Statistics to 2022* (NCES 2014-051). U.S. Department of Education, National Center for Educational Statistics. Washington, D.C: U.S. Government Printing Office.

Ingersoll, R. (2001). Teacher turnover and teacher shortages: An organizational analysis. *Educational Research Journal*, *38*(3), 499-534.

Ingersoll, R. M., & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers a critical review of the research. *Review of educational research*, *81*(2), 201-233.

Inman, D. & Marlow, L. (2004). Teacher retention: Why do beginning teachers remain in the profession? *Education, 124*(4), 605-614.

Jiang, K., Liu, D., McKay, P., Lee, T. W., Mitchell, T.R. (2012). When and how is job embeddedness predictive of turnover? A meta-analytic investigation. *American Psychological Association, 97 (5),* 1077-1096.

Johnson, S. M., & Birkeland, S. (2003). Pursuing a "sense of success": New teachers explain their career decisions. *American Educational Research Journal, 40*(3), 581-617. doi: 10.3102/0028312040003581.

Kapadia, K., & Coca, V. (2007). *Keeping new teachers: A first look at the influences of induction in the Chicago Public Schools.* Consortium on Chicago School Research at the University of Chicago. Retrieved from http://ccsr.uchicago.edu/publications/keeping_new_teachers012407.pdf.

Kaplowitz, M. D., Hadlock, T. D., & Levine, R. (2004). A comparison of web and mail survey response rates. *Public Opinions Quarterly, 68*(1), 94-101. doi: 10.1093/poq/nfh006.

Kelly, S. (2004). An event history analysis of teacher attrition: Salary, teacher tracking, and socially disadvantaged schools. *Journal of Experimental Education*, *72*(3), 195-220.

Kukla-Acevedo, (2009). Leavers, movers and stayers: The role of workplace conditions in teacher mobility decisions. *The Journal of Educational Research*, 102(6), 443-452.

Loeb, S., Darling-Hammond, L., & Luczak, J. (2005). How teaching conditions predict teacher turnover in California schools. *Peabody Journal of Education, 80*(3), 44-70.

Mallol, C. M., Holtom, B. C., & Lee, T. L. (2007). Job embeddedness in a culturally diverse environment. *Journal of Business Psychology, 22*(1), 35-44. doi: 10.1007/s10869-007-9045-x.

Mitchell, T. R., Holtom, B. C., & Lee, T. W. (2001). How to keep your best employees: Developing an effective retention policy. *Academy of Management Executives*, *15*(4), 96-108.

Mitchell, T. R., Holtom, B. C., Lee, T. W., Sablynski, C. J., & Erez, M. (2001). Why people stay: Using job embeddedness to predict voluntary turnover. *Academy of Management Journal, 44*(6), 1102-1121.

Murnane, R. J., Singer, J. D., Willett, J. B., Kemple, J. J., & Olsen, R. J. (1991). *Who will teach? Policies that matter*. Cambridge, MA: Harvard University Press.

National Center for Education Statistics, U. S. Department of Education. (2005). *Teaching and California's future. The status of the teaching profession*. Retrieved from http://eric.ed.gov/PDFS/ED491141.pdf.

National Center for Educational Statistics, U. S. Department of Education. (2008). *Projections of education statistics to 2017* (NCES 2008-078). Retrieved from http://eric.ed.gov/PDFS/ED502632.pdf.

National Center for Educational Statistics, U.S. Department of Education. (2010). *Teacher attrition and mobility: Results from the 2008-2009 teacher follow-up survey* (NCES-353). Retrieved from http://nces.ed.gov/pubsearch.

National Center for Education Statistics, U. S. Department of Education (2015). *Career paths of beginning public school teachers: Results from the first through fifth waves of the beginning teacher longitudinal study* (NCES2015-196). Retrieved from http://nces.ed.gov/pubsearch.

National Center for Education Statistics, U. S. Department of Education (2014). Projections of education statistics to 2022 (NCES2014-051). Retrieved from http://nces.ed.gov/pubsearch.

National Commission on Teaching and America's Future (NCTAF). (2010). *Who will teach? Experience matters*. Washington, DC: Author. Retrieved from www.nctaf.org.

Nieto, S. (2003). *What keeps teacher going*? New York: Teachers College Press, Columbia University.

Pogodzinski, B., Youngs, P., Frank, K. A., & Belman, D. (2012). Administrative climate and novices' intent to remain teaching. *The Elementary School Journal*, *113*(2), 252-275.

Ramesh, A., & Gelfand, M. (2010). Will they stay or will they go? The role of job embeddedness in predicting turnover in individualistic and collectivist cultures. Journal of Applied Psychology, 95, 807–823.

Redman, S. F. (2015). Self-Efficacy, and teacher retention: Perception of novice teachers on job preparation, job support and job satisfaction. Electronic thesis and Dissertations. Paper 2611. http://dc.etsu.edu/etd/2611.

Rochkind, J., Ott, A., Immerwahr, J., Doble, J., & Johnson, J. (2007). *Lessons learned: New teachers talk about their jobs, challenges and long-range plans*, Issue No. 1. Retrieved from National Comprehensive Center for Teacher Quality and Public Agenda website: http://publicagenda.org.

Rockoff, J. E. (2004). The impact of individual teachers on student achievement: Evidence from panel data. *The American Economic Review*, *94*(2), 247-252.

Ronfeldt, M., Loeb, S., and Wyckoff, J. (2013). How Teacher Turnover Harms Student Achievement. American Educational Research Journal, 50(1): 4–36.

Shen, J. (1997). Teacher retention and attrition in public schools: Evidence from SASS 91. *The Journal of Educational Research, 91*, 81-88.

Shockley, R., Guglielmino, P. & Watlington, E. (2006). *The costs of teacher attrition*. A paper presented at the International Congress for School Effectiveness and Improvement, Fort Lauderdale, Florida. Retrieved from http://www.pearsonassessments.com/hai/images/NES_Publications/2006_11ShockleyGuglielminoWatlington_558_1.pdf.

South Texas Research and Development Center. (2000). *Strategies for new teacher retention: Creating a climate of authentic professional development for teachers with three years or less years experience.* Retrieved from http://eric.ed.gov/PDFS/ED450116.pdf.

Texas Center for Educational Research, (2000). *The cost of teacher turnover*. Retrieved from http://www.tcer.org/research/index.aspx.

U.S. Department of Labor, Bureau of Labor Statistics. (2010). Occupational outlook handbook, 2010-2011 edition. Retrieved from http://www.bls.gov/oco/ocos318.htm

U.S. Department of Labor, Bureau of Labor Statistics. (2011). Job openings and labor turnover survey highlights. Retrieved from http://www.bls.gov/web/jolts/jlt_labstatgraphs.pdf//.

Useem, E., Offenberg, R., & Farley, E. (2007). *Closing the teacher quality gap in Philadelphia*. Retrieved from Research for Action website: http://eric.ed.gov/PDFS/ED496638.pdf.

Van Dyk, J. (2012). The relationship between organisational commitment, retention factors and job embeddedness. Unpublished master's dissertation, University of South Africa, Pretoria.

Warshauer, S., & Appleman, D. (2009). "In it for the long haul": How teacher education can contribute to teacher retention in high-poverty, urban schools. *Journal of Teacher Education*, *60*, 323-337. doi: 10.1177/0022487109336181.

Weiss, E. M. (1999). Perceived workplace conditions and first-year teachers' morale, career choice commitment, and planned retention: A secondary analysis. *Teaching and Teacher Education 15*, 861-879.

Westermann, J. W. & Yamamura, J. H. (2007). Generational preferences for work environment fit: Effects on employee outcomes. *Career Development International, (12)*2, 150-161. doi: 10.1108/13620430710733631.

Wilson, J. (2010). Examining job embeddedness survey items for an adventure education population. (Doctoral dissertation, Indiana University, 2010). Dissertation Abstracts International, (UMI No. 3409115).

Yao, X., Lee, T. W., Mitchell, T. R., Burton, J. P., & Sablynski, C. J. (2003). Job embeddedness: Current research and future directions. In R. Griffeth & P. Hom (Eds), *Innovative theory and empirical research on employee turnover* (pp. 153-187). Greenwich, CT: Information Age.

Zhang, M., Fried, D. D., & Griffeth, R. W. (2012). A review of job embeddedness: Conceptual, measurement issues, and directions for future research. Human Resource Management Review, 22, 220–231.

# Learning from Graduates and Interns: Examining Graduate and Student Experiences in the Education Administration Internship

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


**Jennifer Clayton**
*George Washington University*

**Rebecca Thessin**
*George Washington University*

*The purpose of this study was to more fully understand: (1) the degree to which administrative interns are provided with the opportunity to lead administrative experiences; (2) the types of administrative experiences in which interns engage during the administrative internship experience; and (3) the value of the administrative internship to aspiring administrators. A survey instrument was designed and administered to two cohorts of aspiring administrators in one university's administrative preparation program to answer these questions. Overall, we found that recent interns indicated they had been well prepared to lead managerial tasks during their practicum experiences and that interns were increasingly seeing leadership of instructional activities and staff development. This finding runs counter to previous research conducted on interns' experiences leading instructional activities. Study respondents also highlighted the mentor/intern relationship as a key factor influencing the aspiring administrator's opportunity for leadership experience during the internship.*

## Introduction

Despite the crucial nature of the education administration internship, there is much disparity both between and within states as to the requirements, implementation, and evaluation of the internship experience for students (Author, 2012; Orr, 2011; Perez, Uline, Johnson, James-Ward, & Basom, 2011). Research suggests full-time practicums, in which aspiring educational leaders are relieved of classroom responsibilities, are most likely to provide interns with the leadership experiences needed to assume an administrative position (Lovely, 2004; Norris, Barnett, Basom & Yerkes, 2002; SREB, 2005; Wallace, 2010). Unfortunately, many aspiring leaders do not have the resources to cede a teaching position to engage in a full-time administrative internship.

As a result, to complete required administrative hours, many aspiring administrators participate in summer internship experiences or engage in a mixture of activities that are administrative in nature during planning time and before and after school. The quality of these experiences, as well as the degree to which interns are provided with opportunities to assume leadership during these types of administrative practicums, greatly varies. Aspiring administrators often lack the opportunity to engage in active and direct leadership opportunities, instead focusing on passive, observational opportunities (Fry, Bottoms, & O'Neill, 2005). Fry et al. (2005) also found that internships are generally not structured to provide the continuum of observing, participating in, and leading activities that develop aspiring principals' abilities to improve schools and increase student achievement, two primary responsibilities of principals in the area of instructional leadership. Yet, mounting research points to the critical role of the school principal in improving instruction (Leithwood, Louis, Anderson, & Wahlstrom, 2004; Marzano, Waters, & McNulty, 2005).

In addition to the challenge of ensuring that administrative interns assume leadership roles in part-time administrative preparation programs, aspiring administrators must also gain experience in the wide range of activities for which school leaders are asked to assume responsibility. Principals are expected to be instructional leaders, regularly observing classroom teachers, providing constructive feedback, and serving as the curriculum expert (Wahlstrom & Louis, 2008), even while they still serve as the facilities manager, the budget manager, and the disciplinarian (Davis et al., 2005). Further, preparing new leaders for the first year of the principalship is known to be incredibly difficult as new principals face the challenge of reshaping a vision for the school and addressing issues remaining from the preceding administrator (Casavant & Cherkowski, 2001). Leadership preparation programs that aim to provide aspiring administrators with all the necessary skills for the principalship struggle to ensure that aspiring leaders acquire each of the needed competencies to fulfill their future roles (Author & Author, 2013).

In a previous study we conducted, we explored how current school and district leaders who are alumni of one university's educational administration preparation program describe how they acquired the essential skills and experiences needed to be effective in leadership positions (Author & Author, 2013). Current administrators who were interviewed for this prior study identified their internship experiences as a key component of their growth and preparation to be successful school leaders. These alumni indicated that the degree to which they were provided with the opportunity to lead as interns was a critical factor in contributing to the value of their own positive internship experiences (Author & Author, 2013). It was also consistently reported that internship experiences helped prepare alumni to assume pseudo-administrative roles[1] right

[1] Coaches, department heads, teachers-on-assignment in central office, etc.

after completion of the program, even though many waited to become full-time administrators. However, as this prior study relied on interview data with a select number of alumni, we lacked data on how many students in this administrative preparation program are actually provided with leadership opportunities during the internship experience and on the types of experiences in which they are provided with the opportunity to lead.

The purpose of this study was to more fully understand the degree to which interns are provided with the opportunity to lead and the types of administrative experiences in which interns in this administrative preparation program engage. Students in this program are all completing their graduate work part-time, while also maintaining full-time positions in other educational roles, often as teachers or instructional specialists. We wondered whether administrative interns received more opportunities to lead managerial tasks than to gain instructional leadership experience, in line with evidence from current research. Further, while our previous study had asked alumni to analyze their experiences retrospectively, in this study, we sought to understand how aspiring administrators described the value of the internship experience to their preparation as future administrators when asked to reflect on it one-two months after the internship's completion. The instrument administered to recent interns for the purposes of this study was informed by our prior research about how current K-12 district and school leaders described acquisition of the essential skills and experiences needed to be effective in their positions (Author & Author, 2013).

The specific research questions explored in this study were:

1. What types of experiences do aspiring administrators engage in during the administrative internship?
2. To what degree are administrative interns provided with the opportunity to lead the administrative experiences in which they engage?
3. How do current administrative interns describe the value of the administrative internship to their future roles as school leaders?

The results of this research have implications for administrative preparation programs seeking to ensure that the internship experience provides aspirant administrators with an extensive range of administrative experiences, as are employed by effective school leaders, and with the opportunity to lead these activities while preparing for administrative roles on a part-time basis.

## Review of Literature

### Effective School Leadership

As leadership preparation programs continue to reform their programmatic foci and delivery methods, it is important they stay grounded in existent literature regarding effective school leadership. Principals have a critical role in building schools that promote effective teaching and learning and in ensuring that all students achieve, in contrast to the role of the principal-manager of the past. Today's schools are expected to teach a broad range of students with varying needs, while steadily improving achievement, an expectation that requires an effective principal to not only be an accomplished instructional leader, but to also allocate resources effectively and to lead a continual process of organizational improvement (Darling-Hammond et. al, 2007).

There are few responsibilities in schools that do not fall under the authority of the principal, as the job has continued to expand in reach and scope to include responsibilities that

many would argue exceed the capabilities of one person. A principal is asked to be an educational visionary, disciplinarian, community builder, budget analyst, facilities manager, and navigator of various relationships with stakeholders, to name just a few of his responsibilities (Davis, Darling-Hammond, LaPointe, & Meyerson, 2005). Particularly in large schools, the demands of the day-to-day job of leading a school organization, which involves putting out fires both literally and figuratively, take precedence over the data analysis and long-term planning required to effectively improve instruction (Darling-Hammond et. al, 2007). In order to prepare aspiring principals to effectively meet all of these job requirements, leadership preparation programs must carefully consider how to design and focus the content of required courses and practicum experiences to prepare individuals to fulfill this wide array of responsibilities (Davis et al., 2005).

**Instructional leadership.** While principals are confronted by myriad responsibilities, it is clear that the principal's role as the instructional leader in initiating change efforts to improve teaching and learning for every child is paramount (Davis, Darling-Hammond, LaPoint, & Meyerson, 2005). Research has demonstrated that school leadership is second only to classroom teaching in school-level factors that influence student achievement (Leithwood, Louis, Anderson, & Wahlstrom, 2004; Louis, Leithwood, Wahlstrom, & Anderson, 2010). The teacher in front of the classroom directly impacts student learning, but the principal can directly affect teachers' abilities to meet every child's learning needs (Leithwood, Louis, Anderson, & Wahlstrom, 2004). Darling-Hammond, LaPointe, Meyerson, Orr and Cohen (2007) state that the principal's most important role is ensuring that every teacher is able to provide quality instruction. An effective school leader, therefore, must have an understanding of how to lead adult learning for the purpose of facilitating improved student learning.

Numerous researchers have identified specific actions principals must take to be effective in improving student achievement, each of which require leaders to demonstrate multiple skills and competencies. Leithwood, Louis, Anderson and Wahlstrom (2004) identified three practices at the core of successful leadership: setting direction, developing people, and redesigning the organization. Setting direction includes establishing a clear and achievable goal to guide instructional improvement across the organization (Stoll & Louis, 2007; Schmoker, 2004). Principals must also develop people by supporting teachers in improving their own practice through well-designed and focused opportunities for professional learning (Corcoran, 1995; Curry & Killion, 2009; Hord, 2009, Annenberg Institute for School Reform, 2004). Finally, structures, processes, and protocols must be designed and implemented to engage the entire school community in an ongoing cycle of improvement that will facilitate achievement of instructional goals (Armstrong & Anthes, 2001; Boudett, City, & Murnane, 2005; Easton, 2004; Garvin, Edmondson, & Gino, March 2008; Holcomb, 2001; Love, Terc, & Regional Alliance for Mathematics and Science Education Reform, 2002; Pappano, 2007).

Mendels (2012) discussed five similar and necessary actions for current principals to lead schools effectively through instructional leadership, including: "1) shaping a vision; 2) creating a climate hospitable to education; 3) cultivating leadership in others; 4) improving instruction; and 5) managing people, data, and processes" (pp. 55-56). Additionally, Robinson, Lloyd, and Rowe (2008) found that when administrators focused on the key business of teaching and learning, student outcomes were positively affected.

Marzano, Waters and McNulty (2005) sought to add specificity to the actions principals must take to improve student learning and identified 21 categories of principal responsibility that correlate with improved student achievement. The responsibilities they identified in the literature

that correlated most significantly with student academic achievement (>.26) included protecting teachers from issues of discipline, adapting leadership to the needs of the situation with flexibility, monitoring the effectiveness of school practices and their input on student learning, advocating for the school to stakeholders through outreach, and utilizing situational awareness to address current and potential problems (Marzano et al., 2005).

In light of the complexity of the principal's role, and particularly the number of areas in which aspiring principals must gain practice and experience in order to learn how to be an effective instructional leader, development of these skills must be prioritized during the administrative internship. LaPointe and Davis (2006) found that exemplary leadership programs focus on instructional leadership by seeking "to develop the ability to coach and support teachers, to share a vision for reform, and to lead a team to implement that vision for improved teaching and learning" (p. 4). Further, Pounder (2011) articulated how a focus on instructional leadership, specifically through using authentic tasks and field work focused on improving student results, develops the principal's ability to lead improvement in schools (Perez et. al, 2011; Orr & Orphanos, 2011). Yet, in their study of educational leadership preparation programs, Fry et al. (2005) discovered a lack of hands-on activities that prepare aspiring principals as instructional leaders ready to lead school improvement and facilitate improved student achievement. This study, therefore, sought to understand to what degree administrative interns in a part-time educational administration program at one university acquired this hands-on leadership experience.

**Administrative Internship Design and Activities**

Within the field of leadership preparation, there is agreement by both scholars and practitioners of the need to engage aspiring leaders in authentic field-based learning experiences that tightly align to coursework (Perez et. al, 2011). The theoretical foundations obtained during formal leadership preparation coursework are applied in a practical setting during the administrative internship experience by presenting students with real-life problems to solve (Perez et al, 2011). Furthermore, by integrating real-world practice with theoretically-based reflection in the classroom, aspiring administrators can see the theory in action (Darling-Hammond et. al, 2007) and experience the process of learning in real-time (Kolb, 1984). Well-designed internships align with course readings and include developmental assessments of interns' strengths and weaknesses. Such internship experiences are well-situated to extend the learning of aspiring leaders and prepare them for entry-level administrative positions. Orr and Orphanos (2011) furthered this notion in saying, "the higher the quality of programs and internship experiences, the more positive the effects on candidate learning and subsequent use of effective leadership practices" (p. 48).

Research suggests that administrative interns report finding value in their experiences as well (Dunaway et al., 2010; Orr, 2011). The internship gives aspiring school leaders the opportunity to problem solve and to attend to the daily challenges faced by those currently serving in administrative positions. Huber (2008) indicated the benefit of internships is found in the synthesis of coursework and practical experiences in real schools. Leithwood et al. (1996) learned that graduates of administrative preparation programs found their internships to be valuable as a result of the opportunity this experience provided to problem solve and to integrate theory and practice. Leithwood et al.'s (1996) study also found that a high quality, formal, leadership preparation program accounted for about eight percent of the variation in leader

effectiveness. Yet, the value of the internship experience can be affected by numerous factors, and most clearly by the internship requirements.

**Impediments to the internship.** While numerous states have established systems of leadership development to include specific requirements of pre-service leadership programs, discrepancies and variations continue to exist in the administrative internship (Roach, Smith and Boutin, 2011). Internship experiences vary across programs with regard to required numbers of hours, the sustained nature of those hours, the activities conducted within the internship, and the protocols for reflection and university faculty visitation utilized across programs. Some programs emphasize leadership and management skills while others focus on cultivating a deep understanding of instruction (Davis et al., 2005). These differences in program requirements are also representative of differences in the required number of internship hours that individual U.S. states indicate must be met for administrative certification to be granted (Barnett et al., 2009). In many cases, programs have designed discrete, unrelated administrative tasks for students to complete to meet the hours requirement, resulting in the internship becoming a compliance activity for both faculty and students (Perez et al., 2011).

Murphy (1990) pointed to the part-time delivery structure and evening classes incorporated into administrative preparation programs as indicators of these types of low expectations and below-standard program content. Indeed, in their research, Darling-Hammond et al. (2007) found that robust internships rated highly by graduates were full-time, yearlong, paid experiences in which a full-time certified administrator mentors interns. These internship characteristics shaped the experiences of aspiring administrators in the Delta State University program and in San Diego's Educational Leadership Development Academy (ELDA), as two examples. However, as many aspiring administrators continue working full-time while earning their administrative license, research on the internship factors that lead to variance in outcomes is critical to informing the requirements of part-time administrative internships.

Such variance in internship requirements is evident internationally as well. In Ontario, participants complete a sixty-hour internship at their own schools, and in Singapore, participants take part in two four-week internships at their schools that alternate with seminars (Huber, 2008). In both development programs, participants observe or shadow their school leader, carry out a project independently, and visit other schools to broaden their understanding. Many other countries may not have formal internships as part of a preparation program, but rather view the preparation of school leaders as a process that begins with early identification of leadership potential in teachers (Schleicher, 2012). Once this identification occurs, teachers are provided opportunities to serve on committees or in quasi-administrative positions as department heads or grade level leads. Singapore, Finland, and Norway, for example, focus on this type of early development. Additionally, some countries such as Denmark and the Netherlands have developed courses or seminars that allow interested school leaders to engage in reflective and practical activities to assess their own value, as well as provide their local agencies the opportunity to screen them. They are then eligible for more intensive training programs (Schleicher, 2012).

Variation is also apparent in the role of the mentor, coach, or site supervisor, affecting the value of the internship experience for aspiring leaders. Browne-Ferrigno and Muth (2004) state, "Although professors can design leadership preparation programs that focus on the theoretical underpinnings of educational administration, active engagement by practicing principals who serve as mentors to prospective candidates and novice school leaders provides authenticity" (p. 471). In fact, Walker, Bryant and Lee (2013) studied critical features of leadership preparation

programs internationally and found that practitioners play active roles in mentoring and job shadowing in effective programs. The criticism often voiced of a lack of authenticity and connection to "real practice" is avoided through active involvement and collaboration of both district and university personnel.

Administrative preparation programs that enroll aspiring leaders who are currently working full-time face additional challenges, including facilitating students' opportunities to obtain leadership experience at multiple types of school settings while in the program; visiting and observing schools to engage in cohort-based learning during the workday in light of the need for teachers to take professional days to do so; and balancing students' needs to gain essential competencies, often on an expedient time frame, while they balance their own work and family commitments. The results of this study will inform other part-time administrative preparation programs in prioritizing the key components of the internship experience to prepare future effective school leaders, while also aligning internship requirements to fit the lives of current working professionals.

## Theoretical Design

Using the sociocultural learning tenets of Dewey (1916), Lindemann (1926), furthered by Merriam and Caffarella (1999), we examined how these adult graduate students engaged in learning through their internship experiences. An important component of the learning theories posited by the aforementioned authors are the importance of context and interaction of the learner socially in the environment. In this way, we viewed educational interns as experiencing a necessary component of learning by engaging in the environment and social context of schools and educational settings. Throughout their formal coursework in the leadership preparation program, interns acquired a theoretical foundation that included short engagement in the field. The internship provided an opportunity to fully engage full-time in educational settings in the role of an educational leader. According to Dewey (1916), "By doing his (sic) share in the associated activity, the individual appropriates the purpose which actuates it, becomes familiar with its methods and subject matters, acquires needed skills, and is saturated with its emotional spirit" (p. 26). The notion of experiential learning and social learning was furthered by Knowles in the mid-1970s through his work on adult learning (andragogy) and was renewed in 2015 along with Holton and Swanson. While there persists questions about how adults and children may or may not experience learning differently, the notion of learning while doing continues as a focus.

As we designed the instrument and worked to understand the experiences of the interns, we were attentive to these theoretical foundations that helped us approximate the level of real world and contextual learning experienced during the internship. The foundational questions of relevancy and active engagement allowed us to explore the level of involvement the interns had in myriad leadership activities.

## Methodology

### Instrument Design

During 2011-2012, we conducted interviews with 20 graduates of an educational administration program who were currently serving as administrators to gain insight into their current responsibilities and how those lined up with their preparation experience. We also sought to understand their perspective on the myriad preparatory experiences they had and how those did

or did not prepare them for their current roles (Author & Author, 2013). Two critical findings from this prior study included the need for engagement in early leadership activities while in a teaching role and the need for practical, hands-on experiences during leadership preparation experiences. These interviews contributed to our instrument design as we sought to gather descriptive data about how aspiring leaders were experiencing the internship.

The instrument (please see Appendix A for the full survey) collected demographic information, such as age, race, and position title. We then utilized a Likert-scale style set for students to rate their internship activities, based upon the 2005 SREB (Southern Regional Education Board) survey scale categories (Fry, Bottoms, & O'Neill, 2005), as did not participate (1), observed but did not participate (2), participated in activity (3), or led activity (4). The program provided categories and activities to interns and mentors as quality internship experiences. While we did not utilize the SREB question items, the Likert categories provided a needed continuum from observation to leadership to frame the work. Local administrators, program faculty, ELCC (Educational Leadership Constituent Council) standards, and reference to licensure requirements contributed to the activities presented. Finally, we designed and utilized open-ended questions to gather basic qualitative data regarding the following questions:

- Other than those listed, what other experiences did you participate in as an intern?
- Which of your experiences did you find most beneficial to your preparation as a school leader? Please explain why this was most influential.
- Did you encounter any specific challenges in working with your site mentor? If so, please describe.
- In your interaction with your site mentor, what benefits did you experience, if any?
- If you were provided with the opportunity to lead certain activities, to what would you attribute your mentor's willingness to delegate this responsibility to you?
- What aspects of your activities as an intern did you feel well prepared to complete? What aspects did you feel unprepared for?
- What were your expectations of the internship experience? Were you expectations met? Why or why not?

**Program Context**

The administrative preparation program that served as the research site for this study enrolls students in Master's and Education Specialist degree programs, as well as in an Administrative Certificate program. Students enroll at three different campus locations depending on their location of residence, but all students, regardless of campus location or the program in which they choose to enroll, complete the same 320 hour internship requirement. These hours are fulfilled through a combination of embedded hours in myriad courses and two dedicated internship courses, one of which requires full-time summer work.

In the first 80-hour internship course, students are expected to initiate and lead an administrative project under the guidance of a site-based mentor and the university supervisor. Most students in the program complete this first internship on a part-time basis in their own school settings. In the summer immediately prior to students' completion of the program, they complete the second 175-hour internship. During this internship, students are expected to take on the role of a full-time administrator by assuming leadership of at least one significant, semester-long project. Students must also assume responsibility to lead, facilitate, or participate in other administrative responsibilities in a multitude of areas during this internship, including from

hiring, budgeting, and supervising teachers to leading curriculum development, data analysis, and school improvement initiatives. Students are expected to fulfill administrative tasks that meet each of the six ELCC Standards. As a few examples, students may fulfill ELCC Standard 1 by supporting the development of or implementation of a component of the school's improvement plan (SIP), or by using data to monitor SIP goals, as two possibilities. ELCC Standard 3 might be met by contributing to the development of the master schedule, leading department or team meetings, or revising the school's safety and security plan, among other possibilities. Due to budget cuts by school districts over the last few years, some students in this program do not have the benefit of completing their second internship in a school with a summer school session and instead lead and participate in administrative tasks that take place during the summer in preparation for the coming school year.

Researcher role. As faculty members who teach in this university's Educational Administration program, we ensured that we would not unduly influence student participation. Therefore, neither of us served as the instructor for the summer internship course during the semesters when this survey was administered. We utilized student registration records to contact students who enrolled in the summer internship at each of our three campus locations during these summer sessions. In order to increase participation in the instrument between the first and second administration, we also presented to each class at its commencement to describe the study and to request students' participation. All participation was voluntary and confidential and participants were assured that their responses would have no impact, positive or negative, on their academic rating in the course.

**Participant Sample**

We distributed the instrument to all interns at one university within a week of completing their summer internship experience for two consecutive summers. At the completion of the first summer internship, we invited 56 interns to participate, and 19 responded for a response rate of 34%. In the second summer, we announced the instrument at the course commencement in addition to emailing the instrument invitation at the end of the course. During this second summer administration, we invited 78 interns to participate and 40 responded for a response rate of 51%. For purposes of analysis, we have combined the two years' data. The 59 interns included 48 women and 11 men who self-reported their race as 36 White, 19 Black, 3 Asian, and 1 Hispanic. Thirty-eight participants were under the age of 40, with the remaining 21 being between the ages of 41 and 60. Fifty of the interns had 1-15 years of educational experience. We were pleased with the cross-section we received of school types where interns were currently employed, including 24 in urban schools, 25 in suburban, 5 in rural, 2 in charter schools, 1 in a private school, and 2 in educational organizations.

We also wanted to understand the setting in which the participants completed their internships. The two students who worked in educational organizations also completed their internships there. The other students interned at an elementary school (14), middle school (6), high school (22), and central office (16). Within these settings, students worked in urban schools or settings (24), suburban schools (28), rural schools (5), a charter school (1), and a private school (1).

## Qualitative Analysis of Open-Ended Responses

We used the qualitative data analysis software, AtlasTI, to assist with coding the open-ended responses. Open-ended questions on the instrument yielded varying depth of responses, ranging from a phrase to several paragraphs. In this way, it was challenging for us to identify specific themes due to abridged quotes. Three themes did emerge, however, that we saw evident in both smaller phrases and in the more extended responses. The themes included the value of the internship experience to personal growth, the significance of mentor trust and interactions, and the impact of critical incidents. Consistent with Lincoln and Guba's (1985) recommendations to establish trustworthiness, we engaged in individual coding, followed by interpretive community conversations, to ensure the codes were consistent in application and meaning. Given the limited nature of the qualitative aspect of this study and the anonymous status of the instrument, we were not able to engage in member checking.

# Findings

Findings from the instrument administered in this study will be described and categorized under each research question. In regards to the first and second research questions, the results of the instrument indicate that aspiring administrators in this university's educational administration preparation program obtained experiences as direct participants, even if not as leaders, in areas of instructional leadership, and gained observational experience in leadership areas that were more managerial in nature. In regards to the third research question on the value of the internship experience, three main themes emerged: the value of the internship experience to personal growth, the significance of mentor trust and interactions, and the impact of critical incidents on the aspiring leader's development.

## Leadership Experiences

In order to understand the level of leadership the interns engaged in on a variety of leadership categories and specific activities, we utilized the ratings of the SREB survey administered in 2005 which provided a Likert-scale style set for students to rate as did not participate (1), observed but did not participate (2), participated in activity (3), or led activity (4). Although we did not utilize the SREB survey statements, the Likert categories provided a meaningful way to create a continuum to allow participants to respond to their level of leadership on other activities. As we examined the percentage of each rating, we found some trends relative to what types of activities interns led versus engaged in as an observer. When it came to planning, staff development, discipline, supervision of instruction, scheduling, and stakeholder interactions, we found that interns assumed larger roles as direct participants, even if not as leaders. With more managerial tasks such as guidance and counseling services, food service, facilities, and budgeting, more observational interaction seemed to pervade. We calculated the percentage for each item and they are shown in rank order in Table 1.

Table 1
*Level of Leadership in Internship Categories*

| Leadership Category | 4<br>Led activity | 3<br>Participated in activity | 2<br>Observed, but did not participate | 1<br>Did not participate |
|---|---|---|---|---|
| Planning | 57.89 | 47.37 | 8.77 | 3.51 |
| Staff development | 33.33 | 49.12 | 10.53 | 7.02 |
| Discipline | 33.33 | 33.33 | 3.51 | 29.82 |
| Supervision and evaluation | 29.82 | 43.86 | 3.51 | 21.05 |
| Stakeholder Relationships | 28.07 | 61.40 | 17.54 | 22.81 |
| School-community relations | 24.56 | 42.11 | 15.79 | 15.79 |
| Scheduling | 22.81 | 52.63 | 8.77 | 15.79 |
| Transportation | 21.05 | 35.09 | 5.26 | 38.60 |
| Substitute teacher procedures | 21.05 | 21.05 | 24.56 | 31.58 |
| Curriculum and instructional planning | 19.30 | 28.07 | 19.30 | 33.33 |
| Publications (policy and guideline handbooks) | 19.30 | 42.11 | 12.28 | 24.56 |
| Technology | 17.54 | 38.60 | 19.30 | 24.56 |
| Special programs (gifted and talented, art and music, etc.) | 15.79 | 22.81 | 14.04 | 47.37 |
| Staffing | 14.04 | 45.61 | 17.54 | 22.81 |
| Student activities (including budgets) | 12.28 | 35.09 | 10.53 | 42.11 |
| Budgeting | 10.53 | 17.54 | 31.58 | 40.35 |
| Instructional materials (including library, media, computer, etc.) | 8.77 | 7.02 | 3.51 | 8.77 |
| Food service | 8.77 | 17.54 | 15.79 | 54.39 |
| Guidance and counseling services | 5.26 | 17.54 | 22.81 | 54.39 |
| Care and maintenance of facilities | 3.51 | 29.82 | 26.32 | 40.35 |

N=59; Reported in Percentages

We then provided interns with a list of more specific activities and asked them to rate their participation in them using the same scale. Interns seemed to have the most involvement in leading activities around professional development, managing the school building and transportation, preparing the school improvement plan, and conducting program evaluation.

Intern generally observed activities that involved designing school or districtwide curricula or plans and coordinating community events. Table 2 shows the calculated mean for each activity.

Table 2
*Level of Leadership in Intern Specific Activities*

| Activity | 4<br>Led activity | 3<br>Participated in activity | 2<br>Observed, but did not participate | 1<br>Did not participate |
|---|---|---|---|---|
| Plan and/or facilitate professional development | 33.33 | 36.84 | 7.02 | 22.81 |
| Manage school building facilities and/or transportation | 29.82 | 36.84 | 10.53 | 21.05 |
| Prepare annual school or district improvement or strategic plan | 29.82 | 33.33 | 12.28 | 24.56 |
| Conduct program evaluation | 28.07 | 29.82 | 14.04 | 26.32 |
| Analyze data on a need for school or division | 26.32 | 43.86 | 10.53 | 19.30 |
| Coordinate and conduct student discipline | 26.32 | 42.11 | 3.51 | 28.07 |
| Manage special school program related to instruction that involved stakeholders | 21.05 | 26.32 | 15.79 | 36.84 |
| Conduct committee or team meeting | 17.54 | 19.30 | 12.28 | 50.88 |
| Prepare master schedule | 17.54 | 21.05 | 8.77 | 52.63 |
| Facilitate IEP meeting | 17.54 | 31.58 | 10.53 | 40.35 |
| Facilitate vision, mission, or other school reform activities | 14.04 | 19.30 | 5.26 | 61.40 |
| Conduct formal evaluation of teacher | 14.04 | 15.79 | 3.51 | 64.91 |
| Conduct informal observations of classrooms or learning walks with staff | 14.04 | 29.82 | 5.26 | 49.12 |
| Perform budget-related tasks or analysis | 14.04 | 26.32 | 14.04 | 43.86 |
| Conduct informal observations specifically related to diversity issues | 10.53 | 38.60 | 8.77 | 42.11 |
| Develop safety and | 8.77 | 10.53 | 15.79 | 64.91 |

| Activity | 4<br>Led activity | 3<br>Participated in activity | 2<br>Observed, but did not participate | 1<br>Did not participate |
|---|---|---|---|---|
| security plans | | | | |
| Create newsletter for distribution | 8.77 | 8.77 | 15.79 | 66.67 |
| Interview and/or hire new staff | 7.02 | 33.33 | 17.54 | 42.11 |
| Redevelop district wide plans | 7.02 | 26.32 | 7.02 | 59.65 |
| Design technology plan | 5.26 | 19.30 | 21.05 | 54.39 |
| Participate in PTA/PTO events | 5.26 | 15.79 | 12.28 | 66.67 |
| Conduct faculty meeting | 3.51 | 19.30 | 28.07 | 49.12 |
| Coordinate community event or initiate community partnerships | 1.75 | 12.28 | 7.02 | 78.95 |
| Design or implement new curriculum or assessment system | 1.75 | 12.28 | 14.04 | 71.93 |

N=59; Reported in Percentages

**Value of Internship**

As we analyzed the open-ended instrument responses, three main themes emerged: the value of the internship experience to personal growth, the significance of mentor trust and interactions, and the impact of critical incidents on the aspiring leader's development.

In more than half of the open-ended responses, we saw consistency in references to the importance of this type of internship experience. Many of the interns discussed the internship as being necessary and critical to their professional development, much as they viewed their student teaching experience. One reported, "While I learned much on the job in my first year teaching, I cannot imagine not having student taught first. This experience gives me the foothold to start, but also reminds me how much I will have to learn." Interns discussed the increased capacity that came through their experiences, such as one intern who wrote, "I felt confident when I began, but learned so much that I didn't know I needed to." An area of concern echoed by some aspiring leaders was the notion of managing time. One intern saw the experience as assisting development in that area and wrote,

> Actually being placed in the position to learn how important multi-tasking is as well as staying organized. It was beneficial to see what an administrator's day really consists of and how many responsibilities you have. You may be working on a very important project, but if you have parents come in or a student discipline issue, you have to stop what you are doing and take care of the pressing issue immediately.

Several other interns referenced specific incidents on which they placed high value in the context of their overall preparatory experience.

When we asked interns about their internship activities, we consistently saw reference to the importance of the intern's interactions with the mentor, specifically the mentor's willingness (or lack thereof) to turn over important tasks for the intern to lead. Often, interns working in their regularly assigned buildings were able to garner trust more quickly than those who were meeting mentors for the first time. All responses included references to the mentor "trusting" the intern and turning over important responsibilities such as decision-making, administration of summer school, and teacher observations. One intern also discussed the mutual benefit of the mentoring arrangement, saying:

> My mentor was very supportive and easy to work with. At the time, she was struggling with her own issues regarding the balance of family and work responsibilities. Talking with her helped me clarify my thinking on these issues and their potential consequences. She indicated the mentoring experience renewed her desire to work as an educational administrator. In the end, we both benefitted from the experience.

Another intern discussed the mentor's willingness to let her find her own style in the protected structure of an internship, saying "She would model situations for me and let me shadow her; however she also knew that her way of doing things wouldn't necessarily always be mine. She had a great amount of faith in me." Finally, some interns discussed positive mentor interactions that altered previously held views based upon prior negative experiences with building leaders. For example, one intern wrote, "I gained confidence that there actually were qualified, professional, personable leaders who have vision to help students and who are not just trying to climb the ladder." Another said, "My mentor believed in me and my abilities; something I had never felt before professionally."

The final theme that emerged in the area of mentor interaction was around trust. While some interns placed responsibility for not being given access to activities or leadership opportunities on the lack of leadership by their mentors, others placed that responsibility squarely on their own shoulders. In a positive sense, several recognized their own competencies and their willingness to demonstrate those as necessary for being given more "practice opportunities". One intern wrote, "My mentor's willingness to delegate responsibility to me is because of my ethics, determination, organization, and willingness to motivate others to bring out the best in them as well as learning from those same individuals and from my own experiences." Similarly, another intern reported, "They had complete belief in my competence resulting from my initial display of preparation and enthusiasm."

Finally, we recognized a theme regarding critical incidents, or a moment or event that interns found particularly meaningful to their development that caused them to question the nature of leadership, their personal leadership journeys, and systemically the state of education. One intern wrote, "Until I began this internship, I thought I knew more than my principal. In fact, if I am honest, it was one of my motivators for going into administration…I could do it better." Now, having completed this, I have a new sense of the challenges of this job and think all teachers would benefit from an administrative internship." Another echoed, "I was frustrated. I always thought all teachers were as dedicated as I saw myself to be; however, there were many teachers who were clock-punchers and were not there for kids." The disorienting dilemmas often were around parental behavior that they had not witnessed as teachers. Interns reported parents who would not pick up their children or who did not want to hear about poor academic performance as being disappointing and leaving them less hopeful about improving school performance.

## Discussion and Implications

Through sociocultural learning, we sought to understand the extent of active engagement experienced by interns in the real-world setting of K-12 education, as opposed to the academic classroom experience. Some current interns surveyed for this study reported they were delegated menial tasks and spent their internship experience shadowing administrators, engaging very little in leading activities akin to those ascribed to school leaders. Many interns were provided with the opportunity to assume leadership in some areas. Overall, we found that current and recent interns, like the alumni who preceded them in the program, indicated they had exposure to managerial tasks during their practicum experiences. However, unlike the experiences of prior groups, interns were increasingly provided with leadership opportunities in the areas of instruction and staff development.

Research has clearly confirmed the significance of the principal's role as an instructional leader in improving teaching and learning for every child (Davis, Darling-Hammond, LaPoint, & Meyerson, 2005). As demonstrated in the instrument results, interns in this educational leadership preparation program often assumed some leadership for or directly participated in certain instructional areas, preparing them to become leaders in these areas as future administrators. Interns specifically indicated that they had these opportunities in the areas of staff development, planning and supervision, and evaluation of instruction. Many of the activities in which interns from this program most frequently engaged, including analyzing data, conducting faculty meetings, and facilitating professional development, also closely aligned with areas of instructional leadership.

Evidence from this program of students' participation in, and, in some cases, leadership of, instruction during the internship actually runs counter to previous research. In a survey of 61 university preparation programs, Fry, Bottoms, and O'Neill (2005) found that a third of university programs required interns to lead activities that contribute to improving student achievement, and less than one-fourth required interns to lead activities in which they implement good instructional practices. As one specific example, this team found, "Fewer than half require aspiring principals to lead activities in which faculties analyze schoolwide data
and examine the performance of subgroups within the school" (p. 5). Many of the respondents to the instrument in this program did participate in or assume some leadership for activities that foster instructional leadership. A number of factors could have led to this surprising result. First, administrative interns in this university program complete their internships during the summer months, between May and August. The instrument through which data was gathered on intern experiences was distributed in the months of August and September, immediately following students' completion of the internship. It is possible that the types of activities in which aspiring leaders engaged will correlate with the administrative activities occurring during the summer months. For instance, schools commonly organize full days for staff learning in June, following the school year's completion, and in August, in preparation for the upcoming year. Much of the work that is completed by administrators during the summer months would qualify as "planning," whether planning for the school's summer school program or planning for the upcoming school year. Additionally, as this university program aims to place every intern, to the degree possible, in a setting in which summer school will be held, it would be probable for interns to acquire experience observing and providing feedback on instruction. In contrast, it is less likely for special programs, guidance and counseling services, and budgeting tasks to be completed during the summer timeframe.

Another factor that may have led interns to benefit from experiences in instructional leadership is the program's mentor/intern placements. This university-based leadership preparation program maintains strong relationships with specific nearby school districts, facilitating the placement of interns in these districts year after year. The school districts with whom the program partners are aware of the university's internship requirements and aim to place interns in settings where they will acquire these experiences. The university also frequently places summer administrative interns with graduates of this same program who have also often reflected on the internship experiences that best prepared them to assume administrative roles. In this way, the university partner helps to ensure that the administrative intern will be provided with leadership experiences that will contribute to his/her growth as an administrator. This model should be considered by other preparation programs as it highlights the importance of school-university partnerships.

Further, while administrative interns in this university preparation program are required to complete internship hours in at least two types of school settings (i.e. public v. private; Title I v. non-Title I; elementary v. secondary), a number of interns completed their internship with either a current or a former supervisor as their mentor. Even though being paired with a mentor previously unknown to the intern could lead the intern to acquire new leadership skills, working with a mentor with whom the intern already had a trusting relationship could have contributed to the opportunities that interns had to assume leadership in instructional areas. In the comments gathered on the instrument, other interns indicated that they specifically aimed to communicate their skills to their administrative mentors, which some believed contributed to the positive experiences they gained during the administrative internship.

While it is not possible to determine from the instrument results which specific factors may have led more administrative interns to assume responsibilities in areas of instructional leadership than is typical during the administrative internship, other administrative preparation programs that facilitate aspiring leaders' completion of administrative internship requirements on part-time bases may want to consider the types of administrative activities they require to be completed at certain times of the school year. For example, it may be most probable for interns to gain experience in the areas of budget and hiring in the January – April timeframe, in which courses focusing on these leadership topics, as well as administrative hours completion, could be targeted for this timeframe. Aspiring leaders who do have the opportunity to participate in a full-time administrative practicum may have the flexibility to gain more varied experiences whenever they arise, with little additional planning by the university.

Moreover, regardless of whether the aspiring leader participates in a full or part-time practicum, results from this study further confirm the powerful impact that the mentor/intern relationship has on the administrative intern's experience. Browne-Ferrigno and Muth (2004) found that active engagement by mentor principals leads the intern to have an authentic experience. Using sociocultural learning to understand this sheds light on the myriad learning, which is possible through context-based learning. In this case, the mentor principal, through socialization with the intern, provides extensive learning opportunities that may, in fact, go beyond the task list used in this instrument and include skills and dispositions more challenging to measure. Internship preparation programs, therefore, must consider how to select, pair, and prepare current administrators to be effective mentors.

Still, despite their involvement in areas of instructional leadership, only some interns in this university-based preparation program, as evidenced by the mean ratings displayed in Tables 1 and 2, assumed direct leadership for administrative activities at their school sites. Fry, Bottoms,

and O'Neill (2005) similarly found that few programs offer a "developmental continuum of practice" in which the aspiring principal first observes, then participates in, and then leads school reform work (p. 5). Offering a continuum of experiences over time, as this university program was designing and preparing to implement at the time this study was conducted, would likely better prepare interns to assume leadership roles, as opposed to observational and participatory roles, during their final full-time administrative practicums. It is possible that structuring internship activities in a continuum format may be more essential for some aspiring administrative interns than others, since prior leadership experiences may have prepared some students to assume these responsibilities earlier in the program.

## Future Research

Future research of university-based administrative preparation programs is needed for two specific purposes: (1) to determine which specific factors contribute to interns' opportunities to lead activities during their internships, and specifically to lead in instructional areas, and (2) to understand the factors that contribute to the strength of the mentor/mentee relationship and its impact on the internship experience. First, while program requirements will certainly have some influence on the types of activities and the degree of leadership for activities that aspiring administrators assume, many program-related supports and situational factors also influence interns' abilities to lead administrative tasks during their internships. Reviewing the experiences of administrative interns in programs in which: (1) specific internship requirements are expected to be completed at certain times of the school year; (2) a continuum of experiences are offered; and (3) interns have certain degrees of leadership experience prior to the internship would reveal which of these factors, if any, influence interns' opportunities and abilities to assume roles as instructional *leaders* during the internship experience.

Further, as the significance of mentor trust and interactions emerged as a key factor that contributed to the value of the internship in this study, future research should be conducted to understand the factors that contribute to the strength of the intern/mentor relationship and its impact on the intern's opportunity to lead during the administrative internship. Possible influential factors may include the preparation that mentors receive to act in their roles. A mentor handbook, in addition to web-based supports for mentors, and required in-person training sessions for both mentors and interns, may be tools that university-based administrative preparation programs consider in preparing current administrators to be mentors in the districts with whom they partner. However, the impact of these types of preparatory experiences on the intern/mentor relationship has not been fully examined in the literature.

Additional factors that may influence the effectiveness of the intern/mentor relationship, and the intern's ability to assume leadership tasks during the administrative internship experience, should also be examined in future research so that key factors can be discussed with aspiring administrators and their mentors in preparation for the internship experience. As numerous interns referenced the importance of trust in the mentor/intern relationship, how trust is established during part-time administrative preparation experiences should be examined in future research. Understanding how an intern can quickly earn the trust and respect of the mentor may contribute to greater opportunities to lead administrative tasks during the internship. The mentor's prior experiences with mentoring and his understanding of the mutual beneficence of this relationship may also influence the effectiveness of the relationship that develops with the intern. Additional factors such as compensation for mentors and the level of commitment and

interest that mentors have in their roles to prepare future administrators may influence the relationship that develops with the administrative intern and his opportunity to lead. The degree to which these factors, if any, have an effect on the intern/mentor relationship will need to be explored in future research studies to be more clearly understood.

## Conclusion

As we continue to examine the experiences of administrative interns, it is important to have a clear understanding of what administrative interns actually do during their practicum experiences and importantly, in what context they learn. Often, interns are dispersed to schools to work with a site mentor with little oversight or input from university faculty. In doing so, it becomes critical to collect data, interact in site visits, and review interns' journals to identify challenges and issues that may need to be addressed. As shown through the results gathered by this university-based leadership preparation program, interns' experiences may be influenced by the timing of their experiences and by the efforts taken by the university to establish productive intern/mentor partnerships. This instrument allowed us to examine the experiences of two cohorts of students to understand their levels of leadership during the internship experience and the leadership opportunities in which they were permitted to engage.

Interns engaged in activities classified as instructional leadership more than those in prior studies or than were reported by program staff. Still, in some cases, interns had intense responsibilities and a plethora of hours in managerial activities and sometimes even support staff level activities. Leadership preparation programs need to work together to engage in improvement of the administrative internship and to ensure multiple opportunities for interns to engage in learning opportunities that approximate the realities faced by school leaders. As summer school programs and other special programs historically associated with internships dissipate with budget cuts, collaborative and creative approaches to the internship experience will be required to ensure a well-prepared leadership pool.

## References


Annenberg Institute for School Reform. (2004). *Professional learning communities*. Providence, RI: Annenberg Institute for School Reform.

Armstrong, J., & Anthes, K. (2001). How data can help. American School Board Journal, 188(11), 38-41.

Author (2012). Aspiring educational leaders and the internship: Voices from the field. International Journal of Leadership in Education: Theory and Practice, 15(3) 1-14.

Author and Author (2013). Perspectives of school leaders on the administrative internship. Journal of Educational Administration, 51(6), 790-811.

Brown, K.M & Anfara, V.A., Jr. (2002). From the desk of the middle school principal: Leadership responsive to the needs of young adolescents. Lanham, Maryland: Scarecrow Press.

Browne-Ferrigno, T., and Muth, R. (2004). Leadership mentoring in clinical practice: Role socialization, professional development, and capacity building. Educational Administration Quarterly, 40(1), 468-494.

Boudett, K. P., City, E. A., & Murnane, R. J. (Eds.). (2005). Data wise: A step-by-step guide to using assessment results to improve teaching and learning. Cambridge, MA: Harvard Education Press.

Casavant, M. and Cherkowski, S. (2001). Effective leadership: Bringing mentoring and creativity to the principalship. NASSP Bulletin, 85(624), 71-81.

Corcoran, T. C. (1995). Transforming professional development for teachers: A guide for state policymakers. Washington, DC.: National Governors' Association, Center for Policy Research.

Curry, M., & Killion, J. P. (Winter 2009). Slicing the layers of learning. Journal of Staff Development, 30(1), 56.

Darling-Hammond, L., LaPointe, M., Meyerson, D., Orr, M. T., & Cohen, C. (2007). Preparing school leaders for a changing world: Lessons from exemplary leadership development programs. Stanford, CA: Stanford University, Stanford Educational Leadership Institute.

Davis, S., Darling-Hammond, L., LaPointe, M., & Meyerson, D. (2005). School leadership study: Developing successful principals. Stanford, CA: Wallace Foundation.

Dewey, J. Democracy and Education: An Introduction into the Philosophy of Education. New York: McMillan, 1916.

Easton, L. B. (2004). Powerful designs for professional learning. Oxford, OH: National Staff Development Council.

Fry, B., Bottoms, G. and O'Neill, K. (2005), The Principal Internship: How Can We Get ItRight? Atlanta, Georgia: Southern Regional Education Board.

Fullan, M., & Stiegelbauer, S. M. (1991). The new meaning of educational change (2nd ed.). New York, NY: Teachers College Press.

Garvin, D. A., Edmondson, A. C., & Gino, F. (March 2008). Is yours a learning organization? Harvard Business Review, 109.

Hall, G. E., & Hord, S. M. (2006). Implementing change: Patterns, principles, and potholes (2nd ed.). Boston, MA: Pearson.

Holcomb, E. L. (2001). Asking the right questions : Techniques for collaboration and school change (2nd ed.). Thousand Oaks, Calif.: Corwin Press.

Hord, S. M. (1997). Professional learning communities: What are they and why are they important? Issues about Change, 6(1), November 25, 2008.
Hord, S. M. (2004). Professional learning communities: An overview. In S. M. Hord (Ed.), Learning together, leading together: Changing schools through professional learning communities (pp. 5-5-14). New York and Oxford, Ohio: Teachers College Press and National Staff Development Council.
Kolb, D. (1984), Experiential Learning: Experience as the source of Learning and Development, Prentice Hall, Upper Saddle River, NJ.
Knowles, M. (1980). The modern practice of adult education: Andragogy versus pedagogy (Rev. and updated ed.). Englewood Cliffs, NJ: Cambridge Adult Education.
Knowles, M., Holton,E. & Swanson, R. (2015). The adult learning: The Definitive classic in adult education and human resource development. New York: Routledge.
Leithwood, K., Louis, K. S., Anderson, S., & Wahlstrom, K. (2004). How leadership influences student learning: Review of research. Wallace Foundation. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED485932&site=eds-live; http://www.wallacefoundation.org.
Lincoln, YS. & Guba, EG. (1985). Naturalistic Inquiry. Newbury Park, CA: Sage Publications.
Lindemann, E. The Meaning of Adult Education. New York: New Republic, 1926.
Louis, K. S., Leithwood, K., Wahlstrom, K. L., & Anderson, S. E. (2010). Investigating the links to improved student learning: Final report of research findings. St. Paul, MN: University of Minnesota. Retrieved from http://www.wallacefoundation.org/KnowledgeCenter/KnowledgeTopics/
CurrentAreasofFocus/EducationLeadership/Documents/Learning-from-Leadership-Investigating-Links-FinalReport.pdf
Love, N., Terc, & Regional Alliance for Mathematics and Science Education Reform. (2002). Using data, getting results: A practical guide for school improvement in mathematics and science. Norwood, Mass.: Christopher-Gordon Publishers, Inc.
Lovely, S. (2004). Staffing the principalship: Finding, coaching, and mentoring school leaders.Alexandria, VA: ASCD.
Mendels, P. (2012). The effective principal. Learning Forward, 33(1).
Merriam, S., and Caffarella, R. Learning in Adulthood (2nd Ed.). San Francisco: Jossey- Bass, 1999.
Norris, C.J., Barnett, B.G., Basom, M.R., & Yerkes, D.M. (2002). Developing educational leaders: A working model: The learning community in action. New York: Teachers College Press.
Orr, M.T. (2011). Pipeline to preparation to advancement: Graduates' experiences in, through, and beyond leadership preparation. Educational Administration Quarterly, 47(1), 114-172.
Orr, M.T., & Orphanos, S. (2011). How graduate-level preparation influences the effectiveness of school leaders: A comparison of the outcomes of exemplary and conventional leadership preparation programs for principals. Educational Administration Quarterly, 47(1), 18-70.
Pappano, L. (2007). More than "making nice". Harvard Education Letter, 23(2), 1-3.
Perez, L., Uline, C., Johnson, J., Jr., James-Ward, C. & Basom, M. (2011). Foregrounding fieldwork in leadership preparation: The transformative capacity of authentic inquiry. Educational Administration Quarterly, 47(1), 217-257.

Roach, V., Smith, L.W. & Boutin, J. (2011). School leadership policy trends and developments: Policy expediency or policy excellence? Educational Administration Quarterly, 47(1), 71-113.
Robinson, V., Lloyd, C., & Rowe, K. (2008). The impact of leadership on student outcomes: An analysis of the differential effects of leadership types. Educational Administration Quarterly, 44(5), 635-674.
Schmoker, M. (2004). Learning communities at the crossroads: Toward the best schools we've ever had. Phi Delta Kappan, 86(1), 84-88.
Southern Regional Education Board. (2005). The principal internship: How can we get it right? Atlanta: Southern Regional Education Board. Retrieved from http://www.sreb.org.
Stoll, L., & Louis, K. S. (2007). Professional learning communities: Divergence, depth and dilemmas. Maidenhead: McGraw-Hill/Open University Press.

## Appendix A

Intern Survey Questions

1. Responses to the following demographic questions will be used to describe the characteristics of the individuals who participated in this study in the aggregate, and will not be tied to specific question responses. Your response is appreciated but is not required.

   Gender

a. Female
b. Male

2. Age

a. 21-30
b. 31-40
c. 41-50
d. 51-60
e. 61-70

3. My race is best described as

a. Unspecified
b. American Indian
c. Asian
d. Black
e. Hispanic
f. White
g. Hawaiian

4. What is the title of your current position?

5. How many years of experience do you have in your current position?

a. 1-5
b. 6-10
c. 11-15
d. 16-20
e. 21-25
f. 26 or more

6. Please describe any other full-time positions you have held in education.

7. How many years of experience do you have in education?

a. 1-5
b. 6-10
c. 11-15
d. 16-20
e. 21-25
f. 26 or more

8. How would you best identify the type of school or educational setting in which you currently work?

a. Urban
b. Suburban
c. Rural
d. Charter
e. Private
f. Educational Organization
g. Other (please specify) _____

9. Please tell us about the type of school or Central Office setting in which you completed your internship for 6287B. Which of the following would best describe your setting?

a. Elementary school
b. Middle school
c. High school
d. K-8 school
e. Central office location
f. Other, please specify _____

10. Which of the following descriptors best identifies the type of school or educational setting in which you completed your internship for 6287B?

a. Urban
b. Suburban
c. Rural
d. Charter
e. Private
f. Other, please specify _____

11. Please indicate the degree to which you observed, participated in, and/or led activities in each of the following internship activity categories.

| | Did not participate | Observed, but did not participate | Participated in activity | Led activity (ies) |
|---|---|---|---|---|
| Planning | | | | |
| Staff Development | | | | |
| Curriculum development and assessment | | | | |
| Special programs (gifted and talented, art and music, etc.) | | | | |
| Scheduling | | | | |
| Staffing | | | | |

| | Did not participate | Observed, but did not participate | Participated in activity | Led activity (ies) |
|---|---|---|---|---|
| Supervision and evaluation | | | | |
| School-community relations | | | | |
| Stakeholder relationship building and interaction (parents, community members) | | | | |
| Discipline | | | | |
| Budgeting | | | | |
| Student activities | | | | |
| Food service | | | | |
| Transportation | | | | |
| Care and maintenance of facilities | | | | |
| Substitute teacher procedures | | | | |
| Publications (policy and guideline handbooks) | | | | |
| Guidance and counseling services | | | | |
| Technology | | | | |
| Safe school plans | | | | |

12. Please rate your level of involvement in each of the following specific activities during your administrative internship in 6287B.

| | Did not participate | Observed, but did not participate | Participated in activity | Led activity (ies) |
|---|---|---|---|---|
| Analyze data on a need for school or division | | | | |
| Plan and/or facilitate professional development | | | | |
| Prepare annual school or district improvement | | | | |
| Conduct informal observations of classrooms or learning walks with other staff | | | | |
| Conduct formal evaluation of teacher | | | | |
| Prepare master schedule | | | | |
| Coordinate committee or team meeting | | | | |
| Coordinate community event or initiate community partnerships | | | | |
| Participate in PTA/PTO activities | | | | |
| Create newsletter for distribution | | | | |
| Conduct program evaluation | | | | |
| Facilitate IEP meeting | | | | |
| Design or implement new curriculum or assessment system | | | | |
| Manage school building facilities and/or transportation | | | | |
| Interview and/or hire new staff | | | | |
| Facilitate vision, mission, or other school reform activities | | | | |
| Perform budget-related tasks or analyses | | | | |
| Redevelop districtwide plans | | | | |
| Develop safety and security plans | | | | |
| Design technology plan | | | | |

13. Other than those listed in the two previous questions, what other experiences did you participate

in as an intern in 6287B, if any?

14. Which of your experiences in 6287B did you find most beneficial to your preparation as a school leader? Please explain why this experience(s) was most influential.

15. What factors facilitated your development of a productive relationship with your site mentor?
16. Did you encounter any specific challenges in working with your site mentor? If so, please describe.

17. If you were provided with the opportunity to lead certain activities as an intern, to what would you attribute your mentor's willingness to delegate this responsibility to you?

18. What aspects of your activities as an intern did you feel well prepared to complete? What aspects did you feel unprepared for?

19. What were your expectations of the internship experience? Were your expectations met? Why or why not?

20. What specific aspects, if any, of the internship process and/or experience at GWU could be improved? Please be specific.

# Current and Future Education Leaders' Perceptions of Race to the Top's Teacher Evaluation and Compensation Components, Before and After Implementation

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


**Orin Smith**
*Orange County Public Schools*

**Daniel Windish**
*Seminole County Public Schools*

**Rosemarye Taylor**
*University of Central Florida*

*This longitudinal study examined the professional perceptions of educational leaders as to the fairness and impact of teacher evaluation and compensation reforms under Race to the Top. The study surveyed graduate students in education and educational leadership programs to assess changes in their perceptions from prior to RTTT implementation (2011) to the initiative's final funding year (2014). Study results revealed a negative general trajectory for perceptions of the fairness and impact of RTTT reforms between 2011 and 2014. The evaluation and compensation components, including value-added models, were viewed less favorably among administrative and instructional personnel in almost all areas surveyed.*

**NCPEA Education Leadership Review, Vol. 17, No. 1– May, 2016**
**ISSN: 1532-0723 © 2016 National Council of Professors of Educational Administration**

Race to the Top (RTTT), the 2010 competitive educational reform initiative, compelled state and local educational agencies to institute systematic reforms to their educational systems that promoted student achievement in America's public schools. Competing states were asked to enumerate a vision of reforms in specific areas, such as teacher evaluation and compensation, and were awarded federal grant dollars based upon the strength of their proposals. The state of Florida received one of the largest RTTT awards, $700 million, to implement the state's proposed reforms. This study focused on the components of RTTT dealing with teacher evaluation and compensation reform.

Although RTTT is the federal government's first attempt at compelling states to reform their teacher evaluation and compensation systems, state-level reforms have been undertaken on numerous occasions over the last several decades. In previous years, studies on teacher evaluation and compensation reform have been limited and difficult to summarize due to several factors including inconsistent types of reforms and methodological approaches to studying them (Goldhaber, 2010; Goldhaber, DeArmond, Player, & Choi, 2008; Podgursky & Springer, 2007; Mathematica Policy Research, Inc., 2006). However, Podgursky and Springer (2007) state,

While the literature is not sufficiently robust to prescribe how systems should be designed—for example, optimal size of bonuses, mix of individual versus group incentives—it is sufficiently positive to suggest that further experiments and pilot programs by districts and states are very much in order. (p. 943)

The lack of extant research related to major pieces of the RTTT reforms substantiated the need for a comprehensive look at how these particular components have impacted student achievement. Specifically, the professional perceptions of educational leaders tasked with implementing RTTT reforms needed further study to understand the real-world implications of significant educational reform initiatives. The purpose of this study was to assess educational leaders' perceptions of RTTT components of teacher evaluation and compensation, with particular emphasis on reforms enacted by the state of Florida and the extent to which those reforms aided students at the bottom of the socio-economic scale.

Using a pre-test, post-test model, researchers sought professional perceptions of educational leaders in the state of Florida both prior to, and in the final year of, reform implementation. This approach allowed the researchers to capture long-term shifts in perceptions of the reforms as they were implemented across the state. The elements in focus for this research were the teacher evaluation and compensation components of the legislation.

RTTT applicants were directed to "design and implement new performance evaluation systems for teachers and to utilize the evaluations to determine compensation, promotion and retention of teachers" (Windish, 2012, p. 11). To that end, most state applications included both administrator observations of instructional practice and a value-added model (VAM) that measured student achievement while accounting for specific student-level demographic variables (Grossman, Cohen, Ronfeldt, & Brown, 2014).

Florida's RTTT application compelled school districts to "make student growth the most significant component of compensation, ahead of years of experience and academic degrees" (Smarick, 2011, p. 62). Student growth was to be measured by student performance on standardized assessments developed for all courses offered by participating school districts (Boser, 2012).

## Conceptual Framework

There is a consensus among researchers that socio-economic status (SES) impacts student achievement. Additionally, researchers have consistently found that teacher quality and the quality of their instruction can have positive impacts on student achievement regardless of SES (Goldhaber 2010; Laine, Behrstock-Sherratt, & Lasagna, 2011). The RTTT initiative leveraged this empirical evidence to facilitate major reforms to public education systems that measure and reward teacher quality (Laine et al., 2011).

Both broad-reaching and highly political, the RTTT initiative sought to improve student achievement and bridge the learning gap between low-SES students and their more affluent peers. RTTT's grant-based structure provided funding for applying states to implement reforms in four areas: (a) adopting curriculum standards that prepare students for college and the workplace; (b) building data systems to track the progress of students; (c) recruiting, developing, rewarding, and retaining effective educators; and (d) turning around the lowest achieving schools. "RTT also contains a significant shift in focus from 'highly qualified' to 'highly effective' teachers in federal education policy and proposes the first-ever federal definition of teacher effectiveness" (McGuinn, 2010, p. 28). Smarick (2011) summarized RTTT as,

> [Asking] states to measure student growth and to tie these results to individual teachers. It also asks states to develop annual teacher evaluations and include student growth as a component of each teacher's official assessment. Finally, it asks them to use these evaluations to inform a number of personnel decisions, such as tenure, removal, and compensation. (p. 61)

Many states, including Florida, developed teacher evaluation and compensation reforms that included value-added models to assess teaching quality through student academic achievement and growth (Smith, 2015). Value-added models were originally conceived as a way to identify teacher contribution to student achievement while accounting for myriad student-level characteristics that might otherwise confound a reliable assessment of teacher effectiveness. States utilizing a value-added model were not bound to a specific formula or required to incorporate specific moderating variables. For example, the state of Florida's VAM formula, developed by American Institutes of Research (n.d.), accounted for a wide range of student-level effects commonly thought to impact student achievement, with one significant omission. As stated by Smith (2015),

Even though VAMs were designed with the variable (Sanders & Rivers, 1996) and empirical data plainly demonstrates its impact on student achievement (Ladd, 2012; Lubinski & Crane, 2010; Sirin, 2005), Florida does not include a direct measure of socio-economic status as a predictor variable in the state's value-added model. (p. 56)

It should be noted that Florida's VAM formula and the variables it considers, are not necessarily representative of all value-added models used by other RTTT-funded states (Smith, 2015). That being said, the efficacy of the state's particular VAM formula may shed light on the validity of a federal educational reform model that prescribes few constructs for an evaluation system that has high-stakes implications on the educational leaders who operate under it.

## Method

### Population and Sample

In central Florida, two graduate education student samples were surveyed on their perceptions of Florida's Race to the Top components of teacher evaluation and compensation. These two samples consisted of 158 and 392 graduate students during 2011 and 2014, respectively. The 2011 sample included students enrolled in the Education Doctorate in Education ($n$ = 54) and Education Doctorate in Educational Leadership Executive Track ($n$ = 104) programs. The 2014 sample included students enrolled in the Education Doctorate in Education ($n$ = 110), Education Doctorate in Educational Leadership Executive Track ($n$ = 95), Educational Specialist in Educational Leadership ($n$ = 12), Master's Degree in Education Leadership ($n$ = 165) degree programs, and Educational Leadership certification ($n$ = 10) program.

As convenience samples, these individuals were graduate students at the time of the study and were selected as we anticipated them to be more knowledgeable than the general population of instructional and administrative personnel in the areas of educational reform, learning, and development. Additionally, we believed their efforts to pursue an advanced degree in education or educational leadership implied a predisposition to fill future leadership roles within the field of education. Finally, the two populations surveyed were deemed to be similar due to their matriculation in the same or similar graduate education programs at a single university and employment in local school districts. The structure and curriculum of the graduate programs were stable during the time of the two administrations.

Of those who responded to the 2011 survey ($N$ = 54), half ($n$ = 27) self-identified as currently working in an administrative position and half as working in an instructional position within the field of education. Of the 2014 respondents ($N$ = 142), 43% ($n$ = 61) self-identified as administrative personnel, 45% ($n$ = 64) as instructional personnel or staff, and 12% ($n$ = 17) as other.

### Instrumentation

The survey utilized was first developed and administered in 2011, prior to Florida's full implementation of the RTTT evaluation and compensation components. The 2011 survey included items for the collection of quantitative and qualitative data, through an online survey system and in-person interview protocols. Based on feedback from knowledgeable education leaders, the survey language was refined for the 2014 administration after the full implementation of Florida's RTTT reforms. Refinements to the Electronic Survey of the Fairness and Impact of Teacher Evaluation and Compensation Components of Race to the Top included the addition of qualitative items to encourage greater participation than the interview method yielded in the 2011 administration. (See Appendix A).

Quantitative items were designed in a Likert-type format with an intuitive numerical scale for ease of analysis by the researchers. Respondents were asked to rate their level of knowledge of RTTT on a unipolar scale: 1 (*no knowledge*), 2 (*little knowledge*), 3 (*moderate knowledge*), 4 (*great knowledge*), and 5 (*expert knowledge*). Next, respondents were asked to rate the fairness of the reforms on a numerical scale: 1 (*extremely unfair*), 2 (*unfair*), 3 (*fair*), and 4 (*extremely fair*). The following item inquired about respondents' change in perceptions of RTTT, from prior to implementation to the date of the study on the following Likert-type scale: 1 (*much less unfavorable*), 2 (*somewhat less favorable*), 3 (*no change*), 4 (*somewhat more*

*favorable*), and 5 (*much more favorable).* Respondents were then asked to rate the extent to which they perceived RTTT to have improved the educational system in the state of Florida on the following scale: 1 (*not at all improved*), 2 (*somewhat improved*), 3 (*improved),* and 4 (*greatly improved*). The final Likert-type item asked respondents to rate their perceptions of RTTT's impact on student achievement and growth as, 1 (*strong negative impact*), 2 (*negative impact*), 3 (*no impact*), 4 (*positive impact*), or 5 (*strong positive impact*). As recommended by Dillman, Smyth, and Christian (2009), non-response options (*I don't have enough information* and *not applicable*) were added off-scale, for each of the above survey items, to align the conceptual and visual midpoints of the scale and reduce the potential of negatively skewed responses.

The mixed method study allowed the researchers to gather quantitative data and qualitative comments, through interviews in 2011 and qualitative survey items in 2014, to draw conclusions regarding the participants' perceptions (Johnson, Onwuegbuzie, & Turner, 2007). Although the 2011 qualitative items were administered in an interview, they were administered in 2014 as open-ended survey items to attempt to increase item response rates and gather more information.

**Procedures**

An invitation to participate in the study was sent by university doctoral program coordinators to graduate students in 2011 and in 2014. The invitation included a link to the electronic survey. Program coordinators reminded the students two times for each administration to complete the survey. The response rate in 2011 was 34.2% and 36.22% in 2014.

**Analysis**

The following research questions were used to guide this study. The statistical tests used to analyze data related to each research question are also noted.

Research Question 1: To what extent, if any, is there a relationship between administrative and instructional personnel's self-reported knowledge of RTTT and the perceived fairness of RTTT requirements concerning teacher evaluation and compensation?

To analyze the data gathered for research question one, two Pearson Product-Moment Correlations were used.

Research Question 2: To what extent, if any, is there a difference between administrative and instructional personnel's perceptions of the impact of RTTT teacher evaluation and compensation components on student achievement/growth?

Research Question 3: To what extent, if any, is there a difference in the perceptions of administrative and instructional personnel who have different self-reported school poverty percentages about the impact of RTTT teacher evaluation and compensation components on student achievement/growth? Data for research questions two and three were analyzed using One-way Analysis of Variance (ANOVA).

Research Question 4: To what extent, if any, have administrative and instructional personnel changed in their perceptions of RTTT evaluation and compensation components, from the time RTTT was first implemented to the date of this study? For the 2014 administration this fourth research question was added to assist us to validate our findings from a comparison of the 2011 and 2014 data. Research question four was also analyzed using a one-way ANOVA.

The 2014 administration included four open-ended survey items, modified from the 2011 in-person interview items, to add detail that improved our understanding of the quantitative data related to each research question.

1. "How has your professional perception of RTTT's fairness changed from 2011 to today?" (Research Question 1).
2. "How has your professional perception of RTTT's impact on student achievement/growth changed from 2011 to today?" (Research Question 2).
3. "In your experience, how does school poverty relate to teachers' and administrators' evaluations under the new performance evaluation system?" (Research Question 3).
4. Respondents were asked if their professional classification had changed since 2011. Those providing an affirmative response were asked, "How has your change in professional classification impacted your perception of RTTT?" (Research Question 4).

Responses to the open ended survey items were imported to an Excel file that allowed for identification of patterns of responses. The constant comparison method was used to organize responses into categories and then the categories were given identifiers representing the themes that emerged.

## Findings

For the first three research questions, 2011 and 2014 survey results were analyzed independently and then compared to consider differences between the two studies. The addition of the fourth research question in 2014 helped to establish a baseline of comparison for our analysis of changes in perceptions that used responses from different samples with different sample sizes. Respondents to the 2014 survey were presented opportunities to relate their perceptions of the fairness and impact of RTTT, particularly in relation to students living in poverty. The open-ended questions served to expand our understanding of the quantitative findings related to each research question.

### Research Question 1

Respondents' perceptions of the fairness of RTTT's teacher evaluation and compensation reforms were compared to their self-reported level of knowledge (LOK) of the reform. In both pre-implementation and post-implementation survey administrations, no statistically significant correlation was identified between perceptions of the teacher evaluation reform and LOK ($p > .05$). However, when considering compensation reforms, a small, yet statistically significant, positive correlation was identified for post-condition respondents in 2014. To wit, over time, as respondents' level of knowledge of RTTT increased, so too did their self-reported perceptions of the compensation reforms, $r(99) = .240$, $p < .05$.

Responses to the qualitative item "How has your professional perception of RTTT's fairness changed from 2011 to today?" ($N = 94$, 68%) centered on the use of value-added models in the evaluation and compensation reforms ($f = 57$, 60.6%) particularly related to school-level or team-level VAM scores ($f = 10$, 17.5%). The mix of variables a model considered ($f = 5$, 8.8%) was also mentioned as a concern for these respondents. Reform components were perceived to be poorly communicated and the impact on the classroom was noted by 19, or 20.2%, of respondents. The majority of these respondents *($n = 14$, 73.7%)* expressed limited or no

knowledge of the specifics of local reform efforts. Inconsistent or unclear expectations were of concern to approximately a fourth of these respondents ($f$ = 5, 26.3).

**Research Question 2**

Pre-implementation and post-implementation perceptions of five selected RTTT components analyzed by professional classifications (administrative and instructional), were considered as two separate groups using a one-way ANOVA for 2011 and 2014 data sets. A third ANOVA determined if the variances for each RTTT component, between the two survey administrations, was statistically significant.

The 2011 survey found statistically significant differences on four of the five RTTT components: using student test data in teacher evaluations, $F(2, 47) = 19.084$, $p = .000$; using school-level or team-level VAM scores for teachers of traditionally non-tested subjects or levels $F(2, 47) = 10.057$, $p = .000$; including administrator observations of core practices, $F(2, 44) = 4.567$, $p = .016$; and providing teachers at low-performing schools salary enhancements, $F(2, 39) = 3.591$, $p = .037$. Data from the 2014 survey administration produced nearly opposite results. A statistically significant relationship was identified for only the second RTTT component, which provided for the use of school-level or team-level VAM scores for teachers in non-tested subjects, $F(2, 100) = 3.335$, $p = .040$.

The third ANOVA, considered pre-implementation to post-implementation variances among the RTTT components, found two components to have significantly different ($p < .05$) results from 2011 to 2014. The components providing for the use of school-level VAM scores in lieu of an individual score for teachers in traditionally non-tested subjects, $F(1, 151) = 8.542$, $p = .004$; and for providing salary enhancements for teachers in low-performing schools, $F(1, 132) = 12.763$, $p = .000$, were statistically significant.

Supporting qualitative data were gathered from responses to the survey item "How has your professional perception of RTTT's impact on student achievement/growth changed from 2011 to today?" ($N$ = 84, 61%). The majority of responses to this item ($f$ = 46, 55%) indicated a more negative perception of RTTT's impact on student achievement in 2014, than in 2011; eighteen respondents (21%) indicated no change in their perception; thirteen (15%) indicated they did not know; and seven (8%) indicated a more positive perception of RTTT.

**Research Question 3**

Differences in respondents' perceptions by their school's student poverty level (FRL) were assessed using an ANOVA for the 2011 and 2014 data sets, with FRL as the independent variable and impact scores of the five RTTT components as the dependent variable. For 2011 respondents, the school-level VAM component was found to be statistically significant, $F(3, 46) = 3.336$, $p = .027$. Using a Tukey HSD post-hoc analysis, the difference within responses for the school-level VAM component were between respondents in the 75-100% FRL category and those who selected N/A; however, the small sample size for the two groups ($n$ = 10 and $n$ = 7, respectively) limits the strength of any conclusions that could otherwise be drawn from the relationship. In the 2014 data no significant relationships ($p < .05$) were identified between FRL and RTTT components, indicating that the relationship between respondents' perceptions of the RTTT components were not related to the size of the FRL population at their schools.

From responses to the survey item "In your experience, how does school poverty relate to teachers' and administrators' evaluations under the new performance evaluation system?" ($N = 74$, 52%), three primary categories were identified: (a) Thirty-five (47%) of these respondents raised the issue of the challenges students in poverty must overcome to succeed in a high-stakes learning environment; (b) one fourth of these respondents ($n = 20$) indicated that teaching in low-SES schools presents more non-content related challenges for teachers than are experienced by peers working in high-SES school; and (c) while 16 (22%) of these respondents referenced the idea that VAM does not effectively account for the negative effects of poverty.

**Research Question 4**

Ratings of the change in perceptions of RTTT, from prior to implementation to the date of the 2014 survey, the sample average was between somewhat less favorable and no change ($M = 2.56$, $SD = 1.095$). This self-reported change in perceptions is in line with our previously reported results that indicated educational leaders held more negative views of RTTT reforms in 2014 than they did prior to implementation.

The survey item "How has your change in professional classification impacted your perception of RTTT?" was used to provide insight into the relationship between professional classification and perceptions of RTTT from a different angle; focusing on individuals who had changed roles during the three-year implementation of RTTT. Qualitative findings from the survey item found half ($n = 10$) of respondents indicating their change in professional classification had no impact on perceptions of RTTT, 25% ($n = 5$) indicated a negative shift in perceptions of RTTT as a result of their change in role, 20% ($n = 4$) reported their change in professional classification having a mixed effect on their perceptions of RTTT, and only one respondent indicated a positive shift in their perceptions after their change in professional classification.

## Discussion

The focus of this mixed-methods study was to find out the opinions and perceptions of educational leaders on the RTTT teacher evaluation and compensation components both prior to and after implementation. Comparisons among the opinions of leaders divided by self-reported LOK, professional classification, and self-reported school poverty percentages were conducted both prior to implementation and in the final year of reform implementation. In addition, an examination of changes in perceptions was done to determine if educational leaders had changed their opinions and perceptions of the RTTT teacher evaluation and compensation components.

**Research Question 1**

No statistically significant relationships were found in the quantitative data between self-reported LOK of the RTTT evaluation component and its perceived fairness in 2011 or 2014. However, a positive correlation existed between the LOK and perceived fairness of compensation reforms in the 2014 survey administration. This suggests that the more that was understood about the compensation components of RTTT, the fairer that component was perceived by respondents. When considering level of knowledge and professional classification, an interesting finding emerged. Results from an independent samples T-test, comparing professional classification

(school district-based administrative and instructional personnel) and level of knowledge found a statistically significant difference ($p = .000$) between the two variables. This finding indicates that "a breakdown in communication existed between the school district- and school-levels, where pertinent information related to RTTT implementation would otherwise have been shared" (Smith, 2015, p. 113). A failure of communication related to RTTT reforms was also a repeating theme within the qualitative data from the 2011 and 2014 surveys.

Both quantitative and qualitative data suggested that the levels of understanding of these components among educators in the field were lower than what might be expected, given the sheer size of the RTTT reforms. In both 2011 and 2014, many respondents suggested that their level of knowledge was low and/or the communication regarding the components from school district, state and federal agencies was unclear. This lack of understanding would certainly impact opinions of the fairness of these reforms.

**Research Question 2**

When perceptions between instructional and administrative personnel were compared in 2011 as to the impact of the RTTT teacher evaluation and compensation reform components on student achievement, statistically significant differences ($p < .05$) were found for two of the identified reform elements: (a) using a school-level value-added model score instead of individual scores for teachers that teach traditionally non-tested subjects; and (b) salary enhancements for teachers that work in low-performing schools. Data from 2014 survey administration found no statistically significant relationships between professional classification and any of the five identified components of RTTT reforms. This would indicate that the perceptions of administrative and instructional personnel were becoming less distinct as time went on, to wit, their perceptions were more united after almost four years of implementing the reform elements in their school districts. Further, when comparing the mean ratings on each of the five RTTT elements from 2011 to 2014, the average rating on four of the five elements decreased. "This finding indicated that not only were educational leaders more unified in their perceptions but those perceptions were more negative" (Smith, 2015, p. 115) in 2014 than prior to RTTT implementation in 2011.

Qualitative results show that despite three years of implementation, most educational leaders have either the same perception of the components on student achievement or a more negative perception. With only 8% of respondents having a more positive perception of the impact on student achievement, clearly many educational leaders remain skeptical about the extent to which these particular components are helping to improve instruction and student achievement.

**Research Question 3**

As was found in the analysis of research questions one and two, the data for research question three indicated generally homogenous perceptions of RTTT reforms among the respondents based upon self-reported school poverty percentages. A pattern emerged from the qualitative data wherein educational leaders believed that SES should impact how VAM scores are calculated. Many respondents believed that the RTTT components did not properly account for the negative effects of poverty. Educational leaders from both high- and low-SES schools reported this sentiment, and along with the quantitative data this shows that more educational

leaders believe that the selected components of the RTTT reforms do not positively impact students, regardless of economic demographics. Educational leaders' perceptions related to student achievement and SES are well documented in the literature, so much so that, as concluded by Smith (2015),

Educators are right to perceive student poverty as a significant hurdle in the learning process. Further, an evaluation system that seeks to compensate for student-level variables, yet fails to adequately account for SES, may not be effective at identifying quality learning environments or improving learning outcomes. (p. 117)

**Research Question 4**

After 3 years of implementation, the qualitative data indicated an increase in the number of educational leaders that have a more negative view of the RTTT reforms concerning teacher evaluation and compensation. Additionally, a change in professional classification, from instructional to administrative positions, did not necessarily alter the perceptions of those leaders on the selected components. When it did, however, the qualitative data suggested that very few gain a more positive view of the reforms. This is consistent with findings reported earlier that indicated educational leaders, regardless of professional classification, had developed very similar perceptions and opinions of evaluation and compensation reforms from RTTT.

## Limitations

The purposive sample of graduate students in one central Florida University is a limitation that prevents the findings' generalizability to other populations. However, given the unique variable of being a graduate student, the findings may reflect perceptions of others within the larger group of educators with advanced degrees.

The small sample size from the 2011 survey administration is also a limitation worth considering. A sample size of 158 would constitute only a small fraction of the broader population of educational leaders with advanced degrees, thus limiting the generalizability of the pre-test findings as well as any comparisons with the post-test data.

Finally, given the fact that RTTT reforms are still in their early years of full implementation, the effectiveness of said reforms may not be fully observable for years in the future. Any early predictions, regardless of the quality and quantity of data upon which they are made, are still predictions. Evidence of the real-life impact of RTTT on student achievement and growth, as well as educational leaders' perceptions of the reforms, will need extensive further study in the coming years.

## Conclusions and Implications for Policy

We identified three findings from this study that impact policy and practice.

1. The communication strategies and systems adopted by large organizations, like school districts, must be more adept at disseminating critical and timely information from top to bottom within the organization. Respondents to both surveys reported limited knowledge or confusion surrounding specific requirements of their school district's RTTT evaluation and compensation reforms. The fact that many respondents to the 2014 survey indicated little knowledge of the reforms or uncertainty of the reforms should be of concern to

school district administrators tasked with rolling out new evaluation and compensation systems to their schools.

2. In the past, educational leaders in the field have been skeptical of major educational reform efforts, such as RTTT and NCLB before it. This lack of confidence in the reforms may stem from a perception that the priorities created by these reforms do not align with the empirical evidence in scholarly literature or with best practices utilized in the classroom. If policy makers are serious about improving the quality of our public schools they must make a more concerted effort to listen to research-based evidence as well as the perceptions and opinions of educational leaders in the field who will ultimately be responsible for implementing reform legislation. As is evidenced by the findings from this study, educational leaders have a precise and cogent understanding of the factors that drive student achievement and growth. Moreover, that knowledge is directly aligned with the most current research that exists in the fields of education, educational reform, and learning and development.
3. The prevalence and persistence of childhood poverty must be addressed. Elected officials, genuinely interested in improving public education, should look outside of the educational system for the policies in most need of reform. As stated by Smith (2015),

   > While educational reform policies may be effective at improving life outcomes for children in poverty over the long-term, changes in social policies that support those in poverty have a greater likelihood of short- and intermediate-term benefits for poor families, and more specifically for poor children, whose academic achievement is frequently handicapped by limited family resources. (Smith, 2015, pp. 129-130)

No educational reform will ever be effective at significantly improving educational outcomes if we allow approximately half of public school students (Layton, 2015) to languish in poverty. To succeed at raising student achievement for all children, the U.S. must ensure that socially equitable policies, which truly level the playing field, are adopted and sustained. Without equitable public policy priorities the U.S. will continue its fall from prominence as the land of opportunity for all.

## References


American Institutes of Research (n.d.). *Florida Value-Added Model Technical Report.* Retrieved from http://www.fldoe.org .

Boser, U. (2012). *Race to the top: What have we learned from the states so far? A state-by-state examination of race to the top performance*. Center for American Progress. Retrieved from http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED535605 .

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys. The tailored design method.* Hoboken, NJ: Wiley.

Goldhaber, D. (2010). *Teacher pay reforms: The political implications of recent research.* CEDR Working Paper 2010. University of Washington, Seattle, WA. Retrieved from http://www.cedr.us/papers/working/CEDR%20WP%202010-4_Teacher%20Pay%20Reforms%20(8-23-10).pdf .

Goldhaber, D., DeArmond, M., Player, D., & Choi, H. J. (2008). Why do so few public school districts use merit pay? *Journal of Education Finance, 33*(3), 262-289.

Grossman, P., Cohen, J., Ronfeldt, M., & Brown, L. (2014). The test matters: The relationship between classroom observation scores and teacher value added on multiple types of assessment. *Educational Researcher, 43*(6), 293-303. doi:10.3102/0013189X14544542

Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research, 1*(2), 112-133. doi: 10.1177/1558689806298224 .

Laine, S., Behrstock-Sherratt, E., & Lasagna, M. (2011). *Improving Teacher Quality: A Guide for Education Leaders.* San Francisco, CA: Jossey-Bass.

Layton, L. (2015, January 16). Majority of public school students are in poverty. *The Washington Post.* Retrieved from http://www.washingtonpost.com

Mathematica Policy Research, Inc. (2006). *Options for studying teacher pay reforms using natural experiments.* Washington, D.C.: Mathematica Enterprise Institute. Retrieved from http://mathematica-mpr.org/publications/PDFs/teacherpayreform.pdf

McGuinn, P. (2010). *Ringing the bell for K-12 teacher tenure reform.* Washington, D.C.: Center for American Progress. Retrieved from https://www.americanprogress.org/wp-content/uploads/issues/2010/02/pdf/teacher_tenure.pdf

Podgursky, M., & Springer, M. G. (2007). Credentials versus performance: Review of the teacher performance pay research. *Peabody Journal of Education, 82*(4), 551-573. doi: 10.1080/01619560701602934

Smarick, A. (2011, Winter). Diplomatic mission. *Education Next*, *11*(1), 56-63.

Smith, O. (2015). *Central Florida educational leaders' professional perceptions of race to the top components concerning teacher evaluation and compensation*. (Doctoral dissertation, University of Central Florida).

Windish, D. H. (2012). *Central Florida educational leaders' professional opinions of the race to the top grant components concerning teacher evaluation and compensation prior to implementation.* (Doctoral dissertation, University of Central Florida).

# Appendix

Survey of the Fairness and Impact of Teacher Evaluation and Compensation Components of RTTT

1. What is your gender?
   Female
   Male
   Prefer not to disclose

2. In which Graduate Degree Program are you enrolled?
   Ed.D. in Education
   Executive Ed.D. in Educational Leadership
   Ed.S. in Educational Leadership
   M.Ed. in Educational Leadership
   Modified Core in Educational Leadership
   Other

3. Current Professional Classification:
   School District-based Administrator
   School-based Administrator (principal, assistant principal, dean)
   Instructional (classroom teacher, counselor, dean, specialist)
   School District-based Instructional Coach
   School-based Instructional Coach
   Other (Please Specify) _____

4. Current School Level where Employed or Interned:
   Elementary
   Middle
   K-8
   High
   School District
   Higher Education (College or University)
   Other (Please Specify) _____
   N/A

5. Current Percentage of Free/Reduced Lunch at School where Employed or Interned:
   0 -24
   25 - 49
   50-74
   75-100
   I Don't Have Enough Information
   N/A

6. Current School District where Employed, if applicable:
   Brevard County
   Flagler County
   Lake County
   Orange County
   Osceola County
   Polk County
   Seminole County
   Florida Virtual School
   Other (Please Specify) _____
   N/A

   For the following three items, please select the response that best fits your role prior to implementation of RTTT (in 2011).

   Please select the response below that best matches your pre-RTTT Professional Classification:

7. Pre-RTTT School Level:
   Elementary
   Middle
   K-8
   High
   School District
   Higher Education (College or University)
   Other (Please Specify) _____
   N/A

8. Pre-RTTT Percent of Free/Reduced Lunch at the school where employed or interned:
   0 - 24
   25 - 49
   50 - 74
   75 - 100
   I Don't Have Enough Information
   N/A

9. From where have you received your information on RTTT? Select all that apply.
   School District
   Graduate Classes
   State Conferences
   Educational Journals/Publications
   Email Communication from RTTT
   Professional Organizations
   Guest Speakers
   Collective Bargaining Unit
   FLDOE
   Email Blasts
   Colleagues
   Webinars
   Media/News
   U.S. DOE
   Other (Please Specify) _____

10. Rate your knowledge of Race to the Top using the following scale:
    Expert Knowledge (Can facilitate a seminar on RTTT)
    Great Knowledge
    Moderate Knowledge
    Little Knowledge
    No Knowledge (I have not heard of RTTT)

11. Based on your knowledge of RTTT, rate the FAIRNESS of the initiative concerning the following two items:

| | | | | | | |
|---|---|---|---|---|---|---|
| | Extremely Fair | Fair | Unfair | Extremely Unfair | I Don't Have Enough Information | Not Applicable |
| Teacher Evaluation | • | | | • | • | • |
| Teacher Compensation | • | | | • | • | • |

12. To what extent has your perception of RTTT changed from prior to implementation in 2011 to today?

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Much More Favorable | Somewhat More Favorable | No Change | Somewhat Less Favorable | Much Less Favorable | I Don't Have Enough Information | Not Applicable |
| Compared to 2011, today my | | | | | | • | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| perception of RTTT is... | | | | | | | |

13. In your experience, to what extent have the RTTT teacher evaluation and compensation components improved the quality of public education in the state of Florida?

| | | | | | |
|---|---|---|---|---|---|
| | Greatly Improved | Improved | Somewhat Improved | Not At All Improved | I Don't Have Enough Information |
| | • | • | • | • | • |

14. Rate the IMPACT of the following RTTT components on student achievement and growth.

| | | | | | | |
|---|---|---|---|---|---|---|
| | Strong Positive Impact | Positive Impact | No Impact | Negative Impact | Strong Negative Impact | I Don't Have Enough Information |
| The first 50% of Teacher Evaluation/Appraisal is based on student performance on a Statewide Assessment (VAM). | | | | | | • |
| The first 50% of Teacher Evaluation/Appraisal, for those who teach a subject or level in which students are not tested, is based on school-wide or team performance (VAM). | | | | | | • |
| The second 50% of Teacher Evaluation/Appraisal is based on administrator observations of core effective practices and at least one additional metric. | | | | | | • |
| Teachers may be able to optionally participate in a separate performance pay scale (Performance Pay). | | | | | | • |

| | | | | | | |
|---|---|---|---|---|---|---|
| Teachers at the lowest performing schools may be offered recruitment and retention salary enhancements. | | | | | | • |

15. Have you been assessed under RTTT's requirements for professional evaluation and compensation?
    Yes
    No

    Answer question if "Yes" is selected for "Have you been assessed under RTTT's requirements for professional evaluation and compensation?"
16. Do you believe your evaluation was fair?
    Yes
    No

17. How has your professional perception of RTTT's FAIRNESS changed from 2011 to today?
    (Narrative Response)

18. How has your professional perception of RTTT's IMPACT on student achievement/growth changed from 2011 to today?
    (Narrative Response)

19. Has your professional classification changed since 2011?
    Yes
    No

    Answer question if "Yes" is selected for "Has your professional classification changed since 2011?"
20. How has your change in professional classification impacted your perception of RTTT?
    (Narrative Response)

21. How does your perception of RTTT compare with other professionals with whom you have had related discussions?
    (Narrative Response)

22. In your experience, how does school poverty relate to teachers' and administrators' evaluations under the new performance evaluation system?
    (Narrative Response)

Thank you for taking the time to complete this electronic survey!

# Organizational Practices of High-Achieving Rural School Districts in California's San Joaquin Valley

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


**Amanda López Doerksen**
*California State University, Fresno*

**Donald Wise**
*California State University, Fresno*

*For over 25 years, researchers have identified 'best practices' used by high-achieving school districts. However, little research exists regarding rural school systems, making it difficult to determine whether the best practices identified are relevant within this context. This study filled a void in research by focusing on the organizational practices of high-achieving, rural school districts. The findings from this study demonstrate the complex interrelatedness of organizational practices and the variables that attribute to internal coherence within a district, which resulted in higher levels of student achievement. The findings provide educators with a greater understanding of organizational practices that may assist rural and other school districts in identifying, understanding, and engaging in organizational practices that lead to high academic achievement.*

School districts face enormous challenges in increasing student achievement and achieving equity for every student. Many districts are composed of varying school types, each with diverse populations of students. As such, districts must be able to address the various needs of each school in order to ensure high levels of student achievement for every student and every school within the district.

Historically, scholars have viewed schools as the primary means for improving student achievement (e.g., Chubb & Moe, 1990; Teddlie & Stringfield, 1993). Whether a school operates effectively or not increases or decreases a student's chances of academic success (Marzano, Waters, & McNulty, 2005). However, whether a school operates effectively and whether it can sustain its effectiveness, is oftentimes dependent upon the effectiveness of the school district in which it resides (McLaughlin & Talbert, 2003).

Research over the past 25 years has identified the importance of school districts in improving achievement for all students (Togneri & Anderson, 2003). Moreover, scholars have found that the improvement efforts of one school has not proven to promote or guarantee the improvement efforts of other schools within a district, which can lead to increased variability of schools within the district (Anderson, Mascall, Stiegelbauer, & Park, 2012; Marzano & Waters, 2009). The schools typically left behind are those serving low-income and minority students (Webb, 2007; Winston, 2003).

Researchers began looking to school districts to understand the district's role in improving the academic achievement of these particular students, recognizing that "improving learning opportunities for all children will require more than individual talents or school-by-school efforts" and "will demand system-wide approaches that touch every child in every school in every district across the nation" (Togneri & Anderson, 2003, p. 1). This research clarified that school districts matter fundamentally to what goes on in schools and classrooms and that without effective district engagement, school-by-school reform efforts would fail to improve the achievement of all students. These previous studies documented the key role school districts play in promoting the improvement of teaching and learning and their potential to lead to organizational school improvement. Other researchers have acknowledged the extent to which school districts can improve student achievement by implementing organizational improvement strategies that focused on teaching and learning (Anderson et al., 2012; Bottoms & Schmidt-Davis, 2010; Darling-Hammond et al., 2006; Elmore & Burney, 1997, 1998; Hightower, 2002; Massell & Goertz, 2002; McLaughlin & Talbert, 2003; Murphy & Hallinger, 1988; Snipes, Doolittle, & Herlihy, 2002; Snyder, 2001; Togneri & Anderson, 2003).

The organizational practices identified in Table 1 are a result of the synthesis of studies related to school district effectiveness (see: Anderson et al., 2012; Anderson & Young, 2014; Bottoms & Schmidt-Davis, 2010; Cawelti & Protheroe, 2001; Darling-Hammond et al., 2006; Elmore & Burney, 1997; Hightower, 2002; Leithwood, 2010; Marzano & Waters, 2009; Massell & Goertz, 2002; McLaughlin & Talbert, 2003; Murphy & Hallinger, 1988; Skrla et al, 2000; Snipes, Doolittle, & Herlihy, 2002; Supovitz, 2006; Togneri & Anderson, 2003; Zavadsky, 2009). Effective school districts were found to use a large repertoire of practices to organize and support organizational success in student learning. The impact of these practices was found to be dependent on the districts' use of the strategies in a comprehensive and coordinated way, not in the use of some strategies over others or in isolation (Anderson, 2003). The studies in Table 1 document the key role school districts play in promoting the improvement of teaching and learning and their potential to lead to organizational school improvement.

## Purpose of the Study

The purpose of this study was to investigate the organizational practices of high-achieving rural school districts in California's San Joaquin Valley that served predominately high-poverty and minority students. This study identified how these school districts employed these practices across the organization in order to become high-achieving, despite their student population of high-poverty and minority students. The specific research questions that guided this study were:

1. What are the organizational practices employed by high-achieving rural school districts with high populations of minority and socioeconomically disadvantaged students in California's San Joaquin Valley?
2. How do rural school districts use these organizational practices to improve teaching and learning for minority and socioeconomically disadvantaged students?
3. To what degree do central office administrators, school administrators, teachers, and support staff perceive these organizational practices to attribute to the high achievement of the district?

While a number of studies have investigated the effectiveness of school districts, none have examined rural school districts. The study of rural school districts is particularly significant due to the limited amount of research conducted in rural school systems. This is of particular concern considering 57% of school districts in the United States are located in rural areas and serve 24% of the U.S. student population (National Center for Education Statistics, 2013). Johnson and Strange (2007) note that rural education is predominant in states where there are no large cities; but because rural states have smaller populations, these school systems have relatively few rural students. The states with the largest numbers of rural students are those with heavily urbanized areas. However, despite the large quantity of rural students in these states, they only constitute a small minority of their state's student population. Rural students in urban states like California are "out of sight, out of mind" despite their notable academic underperformance (p. ii).

Rural school districts must provide the same educational opportunities for students as districts in more urbanized areas. The limited amount of research addressing rural school districts makes it difficult for these districts to learn how to attain high levels of academic achievement within this context. This study sought to assist rural districts in identifying, understanding, and engaging in organizational practices that lead to high academic achievement.

## Context of the Study

This study explored the organizational practices utilized by rural school districts in California's San Joaquin Valley to become high-achieving. This region, embedded within the Central Valley, consists of eight counties: Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare (Great Valley Center, 2008), which span from the city of Stockton in the north to Bakersfield in the south (Cowan, 2005). California's San Joaquin Valley provides a unique context for studying high-achieving rural school districts due to its predominately rural setting, changing population, high rates of poverty and English learners, and low rates of postsecondary education as compared to state demographics.

Communities in these counties experience some of the lowest levels of educational attainment. The San Joaquin Valley has the lowest high school completion rate (28%) of any region in the state, and only 16% of adults in the area have a bachelor's degree, which is half of

California's rate at 30% (Burd-Sharps & Lewis, 2011). Three San Joaquin Valley regions, Visalia-Porterville, Merced, and Bakersfield-Delano, have been identified among the 10 least-educated regions in the country.

Differences between students in the San Joaquin Valley as compared to students in the state are notable. According to the California Department of Education (2013), the San Joaquin Valley serves 77% minority students, 70% socioeconomically disadvantaged students, and 23% English learners, all of which are higher than the state average (74% minority, 59% socioeconomically disadvantaged, and 22% English learners). In 2012, 34% of children under the age of 18 were living in poverty compared to 24% in the state (US Census Bureau, 2013). These data are important to note, as children who live in poverty often live in stressful environments and lack access to basic necessities, adequate nutrition, and are more likely to have poor health. They also are less likely to further their education and have a stable job and income as adults (Great Valley Center, 2008). Understanding how districts become high-achieving within the context of these unique circumstances can assist school districts in similar contexts to improve the achievement of high-poverty and minority students.

## Theoretical Framework

The concept of best practices used by high-performing school districts has been investigated in previous studies (see Table 1 in Appendix). Many of these studies focused on urban, large, small, or a variety of types of districts; however little research exists on rural school district effectiveness, making it difficult to determine whether these best practices are relevant within this context. Patton (2001) states "A major problem with many 'best practices' is the way they are offered without attention to context" (p. 331). Patton argued that in order for previously identified best practices to be valid, they must be studied within the rural context. This study used Patton's argument (2001) to identify best practices utilized by multiple rural school districts to provide insight into the types of practices necessary, and the way in which they were implemented, for rural school districts to become high-achieving.

## Methodology

This was an embedded mixed methods multiple case study designed to investigate the organizational practices employed by high-achieving rural school districts. This study sought to investigate school districts that were performing at or above the state's average performance, despite high percentages of minority students and students identified as socioeconomically disadvantaged.

### Sample and Participants

A purposive sample was used to identify the districts selected for this study. The following criteria were established for districts to be included in the study:

1. California public school districts in the San Joaquin Valley identified as rural by the National Center for Education Statistics (NCES)
2. A three year AYP average (2011, 2012, 2013) that met or exceeded the state's three year AYP average in English language arts (57%) and mathematics (59%)

3. A student population with 70% or more identified as minority and socioeconomically disadvantaged

Fifty-one percent of districts in the region (104 out of 203) were identified as rural by NCES in the 2011-2012 school year. Of these 104 rural school districts, only nine were identified as meeting or exceeding the state's three year AYP average in English language arts (57%) and mathematics (59%).

From the sample of districts suitable for this study, a purposive sample of high-poverty and high-minority rural school districts was selected. Because of the high levels of minority and socioeconomically disadvantaged students in the San Joaquin Valley, the districts were purposively selected to be similar to the region's demographics, having 70% or more of its student population identified as minority and socioeconomically disadvantaged.

Of the nine school districts that met or exceeded the state's three year AYP average in English language arts and mathematics, only four districts had a student population with 70% or more identified as minority and socioeconomically disadvantaged (see Table 2).

Table 2

*Demographics and Achievement Data of State, Region, and Participating School Districts, 2012-2013*

| | County | Rural Locale | Enrollment | Number of Schools | Grade Span | Percent Minority | Percent SED | Average ELA AYP* | Average Math AYP* |
|---|---|---|---|---|---|---|---|---|---|
| California | | | | | | 74 | 58 | 57.0 | 59.2 |
| San Joaquin Valley | | | | | | 77 | 70 | n/a | n/a |
| Mid-sized K-12 District | Fresno | Fringe | 10,916 | 20 | K-12 | 84 | 74 | 61.9 | 70.2 |
| Small 9-12 High School District | Kern | Fringe | 4,323 | 5 | 9-12 | 98 | 99 | 60.7 | 69.6 |
| Single-school K-8 District | Fresno | Fringe | 374 | 1 | K-8 | 88 | 84 | 59.4 | 63.0 |
| Small K-12 District | Fresno | Distant | 1,568 | 4 | K-12 | 84 | 85 | 57.1 | 67.0 |

* AYP percentages for English-language arts and mathematics for the 2011, 2012, and 2013 were averaged to provide a single percentage for each content area.

All four of these school districts that met the stated criteria were selected for the study. The four districts provided a representative sample of the varying types of rural school districts, as one was a single-school K-8 district, one a small 9-12 high school district, one a small K-12 district, and one a mid-sized K-12 district. A comparison of the districts' characteristics is presented in Table 3.

Table 3
*Profiles of Participating School Districts 2012-2013*

| Characteristic | Mid-Sized K-12 District | Small 9-12 District | Single-School K-8 District | Small K-12 District |
|---|---|---|---|---|
| County | Fresno | Kern | Fresno | Fresno |
| Rural Locale | Fringe | Fringe | Fringe | Distant |
| Enrollment | 10,916 | 4,323 | 374 | 1,568 |
| % Continuous Enrollment | 96 | 97 | 94 | 96 |
| Number of Schools | 20 | 5 | 1 | 4 |
| Grade Span | K-12 | 9-12 | K-8 | K-12 |
| 2013 Growth API | 833 | 788 | 813 | 790 |
| Three Year Average ELA AYP | 61.9 | 60.7 | 59.4 | 57.1 |
| Three Year Average Math AYP | 70.2 | 69.6 | 57.1 | 67.0 |
| % Minority Students | 84 | 98 | 88 | 84 |
| % Free or Reduced-Price Lunch | 74 | 99 | 84 | 85 |
| % English Learner | 16 | 29 | 60 | 21 |
| % Reclassified-Fluent English-Proficient (RFEP) | 23 | 40 | 6 | 41 |
| % Students with Disabilities | 6 | 6 | 7 | 9 |
| Number of Teachers | 554 | 171 | 17 | 76 |
| % Minority Teachers | 33 | 63 | 18 | 29 |

**Data Collection**

This multiple case study was conducted using qualitative and quantitative techniques that drew upon multiple sources of evidence (Creswell, 2007). Interviews and focus groups provided an in-depth description of the organizational practices employed in each of the participating school districts, while a survey provided additional information from individuals at various levels in the district that may not have been included in the interviews and focus groups. The analysis of documents from each district provided support and validated practices utilized within each district.

Semi-structured interviews with central office and school administrators (n = 14) and one or two focus groups with teachers (n = 5) were conducted in each district. A purposeful sample of individuals within each school district was selected for interviews and focus groups based on identified criteria. Superintendents and principals were asked to select interviewees based on their knowledge of their district's systems and practices. Interviews identified which organizational practices district personnel and administrators attributed to the district's high achievement, as well as how those practices were employed within the district. One to two focus groups conducted in each district led to a richer understanding of what teachers in each district believed had attributed to their district's high achievement.

In addition, a self-report online survey was administered to certificated personnel and administrators within each district to provide perceptual data regarding these organizational practices. This survey consisted of seven statements regarding organizational practices. Participants were asked to rate the use of each organizational practice using a Likert-type rating scale. This survey also included several open-ended questions for respondents.

The perceptual data gathered from the online survey informed the qualitative data by providing an understanding of participants' perceptions of organizational practices used in their district. The superintendent of each school district was asked to forward the online survey to all central office administrators, school administrators, and certificated staff. In the mid-sized K-12 district, a purposive sample consisting of rural schools was identified to receive the survey. Surveys were sent to non-respondents three times until an acceptable response rate was obtained in each district.

The study included survey responses from 193 central office administrators, school administrators, teachers, and support staff within the four school districts studied (see Table 4).

Table 4
*District of Study Participants*

| District | N | % |
|---|---|---|
| Mid-sized K-12 District | 53 | 28 |
| Small 9-12 High School District | 48 | 25 |
| Single-school K-8 District | 16 | 8 |
| Small K-12 District | 76 | 39 |
| Total | 193 | 100 |

Finally, district-based documents were reviewed and analyzed to augment evidence and corroborate information from interviews, focus groups, and survey responses.

### Analysis of Data

For the quantitative component of the study, three-way Analysis of Variance (ANOVA) tests were used to determine whether statistically significant differences were present among levels within the district (central office, principals, teachers, and support staff) in regards to the degree to which organizational practices were present in the district. These results were used to inform the qualitative components of this study, which allowed the researcher to gain a deeper understanding of how the identified organizational practices were employed in the district.

For the qualitative component of the study, each case was analyzed using content analysis and the four cases were analyzed using cross-case synthesis to describe organizational practices used in the four rural school districts studied. All interviews, focus groups, and documents from each case were analyzed and reduced to form initial categories using pattern-matching and explanation building. Cross-case synthesis was used to aggregate findings across the four case studies. The findings from the four cases were synthesized to generate insights about organizational practices that contributed to the high-achievement of these rural school districts.

## Findings

### Quantitative Findings

Three-way ANOVA tests were conducted on the independent variables (the district an employee worked, the number of years an employee worked in the district, and the current position of an employee) to measure each of the dependent variables (the total score of all survey responses and

each item on the survey). Tukey's post hoc analysis was used to compare significant differences between mean values.

First, a three-way ANOVA test was conducted on the total score with the district an employee worked, the number of years an employee worked in the district, and the current position of an employee as independent variables. There was a significant main effect for the district an employee worked $F_{(3, 193)} = 3.604$, $p = .015$ between those who worked in the mid-sized K-12 district ($M = 33.72$) and those who worked in the small 9-12 high school district ($M = 28.33$) or the small K-12 district ($M = 30.10$). Based on Tukey's post hoc analysis, there was a significant difference between the mid-sized K-12 district and the small 9-12 district ($p = .000$) and between the mid-sized K-12 district and small K-12 district ($p = .000$). There was no significant main effect for the number of years an employee worked in the district, nor was there a significant main effect for the current position of an employee. All other interactions were not significant (see Table 5).

Table 5
*Three-Way ANOVA - Total Score*

| Total Score | Sum of Squares | df | Mean Squares | F | Sig. |
|---|---|---|---|---|---|
| District Worked | 277.288 | 3 | 92.429 | 3.604 | .015 |
| Years Worked in District | 67.227 | 3 | 22.409 | .874 | .456 |
| Current Position | 56.331 | 3 | 18.777 | .732 | .534 |
| Error | 3897.982 | 152 | 25.645 | | |
| Total | 181301.000 | 193 | | | |

Next, a three-way ANOVA test was conducted using each survey item as the dependent variable and the district of an employee, the number of years an employee worked in the district, and the current position of an employee as independent variables. Results of four of the seven survey items identified significant main effects for the employee's district.

**Survey Item #1: This district is committed to high standards for every student.** A three-way ANOVA showed the main effect for the district of an employee $F_{(3, 193)} = 4.531$, $p = .005$ was significant (see Table 6). Based on Tukey's post hoc analysis, there was a significant difference between the mid-sized K-12 district and the small 9-12 high school district ($p = .000$), between the mid-sized K-12 district and the small K-12 district ($p = .035$), and between the small 9-12 high school district and the small K-12 district ($p = .022$). This means there was a significant difference in how the participants responded based on the district in which they worked. There were no other significant differences.

Table 6
*Three-Way ANOVA - District is Committed to High Standards for Every Student*

| Total Score | Sum of Squares | df | Mean Squares | F | Sig. |
|---|---|---|---|---|---|
| District Worked | 7.758 | 3 | 2.586 | 4.531 | .005 |
| Years Worked in District | 2.659 | 3 | .886 | 1.553 | .203 |
| Current Position | 4.460 | 3 | 1.487 | 2.605 | .054 |
| Error | 86.745 | 152 | .571 | | |
| Total | 4182.000 | 193 | | | |

**Survey Item #2: This district helps schools focus on teaching and learning.** A three-way ANOVA showed the main effect for the district an employee worked $F_{(3,193)} = 3.149$, $p = .027$ was significant (see Table 7). Based on Tukey's post hoc analysis, there was a significant difference between the mid-sized K-12 district and the small 9-12 high school district ($p = .000$) and between the small 9-12 high school district and the small K-12 district ($p = .001$). This means there was a significant difference in how the participants responded based on the district in which they worked. There were no other significant differences.

Table 7
*Three-Way ANOVA - District Helps Schools Focus on Teaching and Learning*

| Total Score | Sum of Squares | df | Mean Squares | F | Sig. |
|---|---|---|---|---|---|
| District Worked | 5.747 | 3 | 1.916 | 3.149 | .027 |
| Years Worked in District | .785 | 3 | .262 | .430 | .732 |
| Current Position | 1.038 | 3 | .346 | .569 | .636 |
| Error | 92.449 | 152 | .608 | | |
| Total | 4018.000 | 193 | | | |

**Survey Item #3: This district uses common assessments to evaluate progress toward school and district goals.** A three-way ANOVA showed the main effect for the district an employee worked $F_{(3,193)} = 4.917$, $p = .003$ was significant (see Table 8). Based on Tukey's post hoc analysis, there was a significant difference between the mid-sized K-12 district and the small 9-12 high school district ($p = .000$) and between the mid-sized K-12 district and the small K-12 district ($p = .000$). This means there was a significant difference in how the participants responded based on the district in which they worked. There were no other significant differences.

Table 8
*Three-Way ANOVA - District Use of Common Assessments to Evaluate Progress*

| Total Score | Sum of Squares | df | Mean Squares | F | Sig. |
|---|---|---|---|---|---|
| District Worked | 11.053 | 3 | 3.684 | 4.917 | .003 |
| Years Worked in District | 1.218 | 3 | .406 | .542 | .654 |
| Current Position | 3.903 | 3 | 1.301 | 1.736 | .162 |
| Error | 113.888 | 152 | .749 | | |
| Total | 3633.000 | 193 | | | |

**Survey Item #5: This district organizes professional development targeted on specific instructional issues in the district.** A three-way ANOVA showed the main effect for the district an employee worked $F_{(3,193)} = 4.640$, $p = .004$ was significant (see Table 9). Based on Tukey's post hoc analysis, there was a significant difference between the mid-sized K-12 district and the small 9-12 high school district ($p = .000$), the mid-sized K-12 district and the single-school K-8 district ($p = .023$), and between the mid-sized K-12 district and the small K-12

district ($p$ = .000). This means there was a significant difference in how the participants responded based on the district in which they worked. There were no other significant differences.

Table 9
*Three-Way ANOVA - District Organization of Professional Development*

| Total Score | Sum of Squares | df | Mean Squares | F | Sig. |
|---|---|---|---|---|---|
| District Worked | 10.227 | 3 | 3.409 | 4.640 | .004 |
| Years Worked in District | 1.613 | 3 | .538 | .732 | .534 |
| Current Position | 2.542 | 3 | .847 | 1.153 | .330 |
| Error | 110.933 | 151 | .735 | | |
| Total | 3522.000 | 193 | | | |

The data from this survey were used to inform the qualitative components of this study, which allowed the researcher to gain a deeper understanding of how the identified organizational practices were employed in the district.

**Qualitative Findings**

Through interviews with teachers, school administrators, central office administrators, and superintendents, each of the four school districts studied provided insights into the organizational practices that led to its high achievement. Six organizational practices were found to be employed in all four districts: (a) a focus on instruction and student achievement; (b) frequent monitoring and data-driven decision-making; (c) shared beliefs and district culture; (d) alignment of curriculum, instruction, and assessment; (e) strong instructional leadership; and (f) collaborative learning communities. Table 10 (in Appendix) identifies specific elements found in each district in regards to these six themes.

The findings from this study were consistent with the past 25 years of research regarding school district effectiveness. Each of the four districts employed all six organizational practices; however, each did so differently. Despite these differences, what was similar was the internal coherence found in each district that developed through the implementation of these practices. This internal coherence within each district - or the districts' deliberate actions to improve systems, procedures, and structures to align the work of the district (City, Elmore, Fiarman, & Teitel, 2009) - provided all employees with a shared understanding of the organizational practices and contributed to a clear sense of identity for each district.

Several variables were found to influence this internal coherence, which in turn impacted how the six organizational practices were employed in each district. The conclusions below address five variables discovered in this study as a result of the synthesis and evaluation of the interviews with teachers, school administrators, central office administrators, and superintendents in all four school districts.

**Leadership**

Strong district-level leadership was evident in all four districts studied and was the impetus for each district's high levels of student academic achievement. This coincides with findings from

Marzano and Waters (2009) which found that when district leaders carry out their leadership effectively, student achievement across the district is positively affected. The previous and current superintendents in these districts set the tone for each district's shared beliefs and culture. Superintendents in each of the four districts were credited with setting high expectations for students and staff, providing a focus on student academic achievement, and instilling a belief in staff to do what is best for students.

These superintendents and district-level leaders instilled and maintained each district's shared belief system and culture. This assisted school administrators and teachers in perceiving they were valued, developed a sense of personal responsibility for student success, allowed them to take pride in their work, and committed them to their district's goals to assist all students in making academic progress. As one principal shared:

> I think we've been very fortunate to have really amazing leaders. They really do set the tone for the district…The Superintendent always tells us it's not just the numbers you need to know about a kid. That's important, but you need to know their whole story. And you see a lot of his beliefs shine through…I think because of our leaders, their beliefs and what they stand for really comes through and it trickles all the way down. I think we've just been really fortunate to have really amazing leaders. Because they've built such a great environment for teachers to work and kids to learn. They always focused on the kids, but then the teachers really felt like they were being a part of something special as we kept hearing how amazing [we were] doing and we were such a turnaround.

In addition, leaders in these four districts led from the perspective of support. While they each set high expectations, they also provided numerous methods of support to assist teachers in improving student outcomes. Support was provided in a way that encouraged a philosophy of continuous improvement.

Strong leadership in the four districts directly impacted the other five themes encountered in the findings. The leadership from superintendents allowed for new systems and structures to be developed, implemented, and accepted in order to meet the districts' visions and goals. Leadership set the tone for how the district would function and what it would believe, and it articulated this to the point that all members of the district believed in working towards the vision and goals of the district.

**Defined Autonomy**

According to Marzano and Waters (2009), districts that provide clear goals and assist schools in meeting these goals, while allowing schools to adjust within the parameters of district-wide goals to meet the needs of its students, can improve student academic achievement. The four districts demonstrated a clear use of defined autonomy that allowed its schools to readily identify district goals and meet these goals in a variety of ways that met each school or classroom's student population or needs. These districts used clearly defined systems and structures; yet, allowed each school to implement these structures in a variety of ways as long as teachers, teams, and schools could demonstrate progress towards meeting district goals.

**Systems and Structures**

Formal and informal systems and structures were present in all four of the school districts studied. Intentional systems and structures for collaboration; monitoring of data; provision of services and interventions; and planning for the alignment of curriculum, instruction, and assessment were present in previous research on school district effectiveness (Cawelti & Protheroe, 2001; Murphy & Hallinger, 1988; Skrla et al., 2000; Snipes et al., 2002; Supovitz, 2006; Togneri & Anderson, 2003; Zavadsky, 2009).

**Structures for Collaboration.** These districts engaged in structures for collaboration to help schools improve student academic achievement. In all four districts, time was intentionally set aside through common prep periods, early release, or late start for teachers to collaborate. The high school and mid-sized K-12 districts engaged in formal PLC structures weekly and used this time purposefully for analyzing student data, sharing instructional practices, and identifying supports for students in need. While the small K-12 district provided time for collaboration on a daily basis, teachers were not expected to use this time in any particular way; however, it was evident that teachers collaborated around assessment data after each district benchmark. The single-school K-8 district also provided time on a weekly basis, but structured collaboration with and between grade-levels occurred only once a month.

**Systems for Monitoring Data and Provision of Support.** These districts engaged in frequent monitoring of data and provided targeted systems of support for students and teachers to improve student achievement. Previous research on district effectiveness noted the importance of frequent monitoring and the use of data to employ data-based decision-making (Anderson et al., 2012; Bottoms & Schmidt-Davis, 2010; Cawelti & Protheroe, 2001; Elmore & Burney, 1997; Massell & Goertz, 2002; McLaughlin & Talbert, 2003; Murphy & Hallinger, 1988; Skrla et al., 2000; Snipes et al., 2002; Supovitz, 2006; Togneri & Anderson, 2003; Zavadsky, 2009).

The four districts engaged in both formal and informal systems of data monitoring and provision of services and interventions for students in need of additional support. Three districts engaged in frequent monitoring of student progress through the use of district benchmark and common assessment data and used this data to adjust curriculum, instructional practices, and identify services or interventions for students in need of additional support. These districts also engaged in frequent data conversations between principals, teachers, and departments to evaluate the effectiveness of instructional practices based on student performance data and student work.

**Systems for Aligning Curriculum, Instruction, and Assessment.** These districts improved student achievement by developing a system of planning for the alignment of curriculum, instruction, and assessment. Three of the districts engaged in backward design to formally align curriculum, instruction, and assessment to standards. Each of these three districts designed curriculum standards maps which outlined the standards to be taught during each assessment period. District benchmarks were developed based on the standards taught during each assessment period so teachers and administrators could measure student learning of the standards taught.

This system provided all teachers with clearly defined expectations for what will be taught and monitored, how it will be assessed, and what is expected in regards to student learning. This system ensured clarity in these districts, which contributed to teachers' understanding of what is expected in regards to curriculum, instruction, and assessment.

## Hiring and Retention Practices

Hiring and retention practices emerged as an important component within each district's shared beliefs and culture. This component was one that was not specifically addressed in previous research, as most studies reported on developing the capacity of employees and placing them effectively once they were already employed by the district (Leithwood, 2010; Skrla et al., 2000; Supovitz, 2006; Zavadsky, 2009). These districts have taken an intentional position to hire candidates that fit into the district's culture or agree to conform to the district's practices in order to provide the best education for its students. Once hired into these districts, multiple supports were provided to these new hires, but if they were found to not fit into the culture of the district, they would inevitably leave. The culture of each district was so firmly ingrained, that new employees either acculturated to the systems, structures, and practices of the district, or they willingly left to find employment elsewhere. One example that demonstrated this was shared by a teacher who said:

> Well, and there's some people it doesn't work for. We have people leave after a year because either they don't want to do this or admin doesn't feel like they've fed into what [we do]…I mean you see it and they leave, and it happens because it is. But, you know what? Those of us that are here, we work really, really, hard, and we push each other really hard. It's a hard place to work, it really is, but we take a lot of pride and we love our kids.

For those new employees who chose to remain in the district, yet did not acculturate, administration was active in releasing these employees in order to maintain the district's beliefs and culture.

## Stakeholder Support

These districts engaged their stakeholders to collaborate in the district's vision of high expectations in order to improve student achievement. Several studies acknowledged the importance of stakeholder collaboration in improving district effectiveness (Anderson & Young, 2014; Bottoms & Schmidt-Davis, 2010; Leithwood, 2010; McLaughlin & Talbert, 2003; Murphy & Hallinger, 1988; Skrla et al., 2000). All four districts engaged district stakeholders in the district's mission and vision. As one central office administrator shared:

> A key piece is really the people that we have - from our board, our parent community, to our teachers, to our classified staff. It really has been a whole collaborative effort. It is the culture that we are going to work together for the benefit of student achievement and our kids so that they can succeed…It's just us here…We are all stakeholders in [our district]. And it is that approach that really has helped foster the conversations.

In three of the districts, teachers engaged directly with frequent monitoring, data-based decision-making, and the alignment of curriculum, instruction, and assessment. Depending on the district, teachers designed standards curriculum maps or scope and sequences, common and/or district benchmark assessments to monitor student learning, and were given the opportunity to provide input regarding curriculum and instructional changes based on student performance data. This allowed teachers to take ownership of their students and the district's practices.

It is important to note that each of the districts studied had developed a strong identity for itself and used this identity to engage in these organizational practices differently. The six organizational practices identified in the findings are not new or unheard of. Many school districts may report they employ these same practices within their own districts, yet don't demonstrate the same levels of high-achievement as the four districts in this study. The findings from this study demonstrate the complex interrelatedness of organizational practices and the variables that attribute to internal coherence within a district. It appears that when districts develop a strong sense of internal coherence through the use of organizational practices, the impact of the organizational practices results in higher levels of student achievement. As rural school district leaders plan for and engage in these practices, it will be important to understand the impact of certain practices on others in order to develop a comprehensive plan for district improvement.

## Recommendations

Rural school districts must provide the same educational opportunities for students as districts in more urbanized areas. The limited amount of research addressing rural school district effectiveness, especially those districts with high-poverty and minority students, makes it difficult for districts to learn how to attain high levels of academic achievement within this context. Based on the findings from this study, the following recommendations are presented for implementation into future practice by rural school district leaders:

- Develop a clear district vision and goals that focus on high expectations for student achievement.
- Communicate the district's vision and goals frequently and align all district programs, practices, and initiatives to the vision and goals.
- Develop school leaders' understanding of the district's vision and goals so they communicate both frequently to school staff and align all school programs, practices, and initiatives to these goals.
- Engage all stakeholders in the pursuit of the district's vision in order to promote and develop ownership of the district's students and practices.
- Develop a district culture that embodies a philosophy of learning. This culture should promote collaborative learning that supports continuous improvement towards the district's vision and goals.
- Identify expectations for systems and structures that assist all stakeholders in meeting the high expectations identified in the district's vision and goals.
- Develop formal systems for monitoring student learning. This should occur through district-wide benchmarks as well as through grade-level common assessments.
- Develop formal systems of intervention to provide additional, targeted support to students in need. Systems should have clearly defined entrance and exit criteria.
- Develop a practice of frequent data and instructional conversations to continuously evaluate how instruction is impacting student learning. These conversations should be designed in a way that encourages a philosophy of continuous improvement for the purpose of developing the capacity of teachers and administrators.
- Develop a system for planning for the alignment of curriculum, instruction, and assessment that uses backward design to clearly define expectations for what will be

taught and monitored, how it will be assessed, and what is expected in regards to student learning.

- Develop formal structures for collaboration and monitor these structures for effectiveness until collaboration becomes ingrained in the culture of the district. Formal collaboration should focus on student achievement. Time should be used purposefully for analyzing student data and work, sharing instructional practices, and identifying supports for students in need.
- Develop recruitment and retention strategies for hiring on which the district's vision and beliefs are clearly defined, so candidates are aware of the expectations in the district.

The recommendations listed above are a result of the findings from this study. It is important to note that each of the districts studied had developed a strong identity for itself and used this identity to engage in these organizational practices differently. As rural school district leaders plan for and engage in these practices, it will be important to understand the impact of certain practices on others in order to develop a comprehensive plan for district improvement.

## Recommendations for Future Research

Several areas for further research emerged from this study. First, it would be valuable to conduct additional case studies of rural school districts. In order to determine whether the organizational practices identified in this study are generalizable, it is important to determine whether these organizational practices are similarly employed in other rural contexts.

Additionally, it would be valuable to look deeper into how rural districts of varying size and grade-span employ organizational practices. None of the four districts in this study were similar in size or grade-span; however, each of the districts employed the identified organizational practices, albeit in different ways. It would prove beneficial to compare how multiple rural school districts of similar size and grade-span employ these practices in order to provide more specific recommendations to particular types of rural school districts.

Finally, it would be particularly valuable to reexamine these four school districts after several years of implementation of the Common Core State Standards (CCSS) and new state testing. It would be important to examine whether these organizational practices continue to be utilized, are used in the same way, and identify any adjustments made to these practices due to CCSS and new state testing.

## Conclusion

School districts face enormous challenges in increasing student achievement and achieving equity for every student. The four districts in this study demonstrated their ability to improve student achievement for all schools in their districts through the use of organizational practices and internal coherence. Each district's use of organizational practices was influenced by the internal coherence within the district, demonstrating the complexity of school district improvement. However, the development of a strong sense of internal coherence through the use of organizational practices has the potential to impact levels of student academic achievement and improve school district effectiveness.

This study filled a void in the research of school district effectiveness by focusing on small, rural school districts. Based on the findings, it was possible to determine whether the

participating rural school districts employed the same strategies as other previously studied districts. While the findings and conclusions from these four school districts may not necessarily be generalizable to other rural school districts, they can provide educators with a greater understanding of organizational practices that may support the development of high-achieving rural school districts with high populations of high-poverty and minority students. These four school districts from California's San Joaquin Valley demonstrate the ability school districts have in improving the outcomes for all students and provide educational leaders with actionable steps for future improvement.

## References


Anderson, E., & Young, M.D. (2014). If they knew then what we know now, why haven't things changed? Unpublished manuscript, University of Virginia, Charlottesville, Virginia.

Anderson, S.E. (2003). The school district role in educational change: A review of the literature. ICEC Working Paper #2. Ontario Institute for Studies in Education, University of Toronto.

Anderson, S., Mascall, B., Stiegelbauer, S., & Park, J. (2012). No one way: Differentiating school district leadership and support for school improvement. *Journal of Educational Change, 13*(4), 403-430. doi: 10.1007/s10833-012-9189-y

Bottoms, G., & Schmidt-Davis, J. (2010). The three essentials: Improving schools requires district vision, district and state support, and principal leadership. Southern Regional Education Board (SREB).

Burd-Sharps, S. & Lewis, K. (2011). A portrait of California: California human development report 2011. American Human Development Project of the Social Science Research Council. Retrieved from www.measureofamerica.org

California Department of Education (2013). DataQuest. Retrieved from www.cde.ca.gov

Cawelti, G., & Protheroe, N. (2001). *High student achievement: How six school districts changed into high-performance systems*. Educational Research Service.

Chubb, J. E., & Moe, T. M. (1990). America's public schools: Choice is a panacea. *The Brookings Review*, 4-12.

City, E. A., Elmore, R. F., Fiarman, S. E., & Teitel, L. (2009). *Instructional rounds in education: A network approach to improving teaching and learning.* Cambridge, MA: Harvard Education Publishing Group.

Cowan, T. (2005). California's San Joaquin Valley: A region in transition. Congressional Research Service, Library of Congress.

Creswell, J. (2007). Qualitative inquiry and research design: Choosing among five approaches (2nd ed.). Thousand Oaks, CA: Sage Publications.

Darling-Hammond, L., Hightower, A. M., Husbands, J. L., LaFors, J. R., Young, V. M., & Christopher, C. (2006). Building instructional quality: 'Inside-out' and 'outside-in'. Perspectives on San Diego's school reform. In Harris, A., & Chrispeels, J.H. (Eds.), *Improving schools and educational systems: International perspectives* (pp. 129-185). Routledge: Taylor & Francis Group.

Elmore, R. F., & Burney, D. (1997). Investing in teacher learning: Staff development and instructional improvement in Community School District # 2, New York City. National Commission on Teaching & America's Future. New York, NY: Teachers College Press.

Great Valley Center (2008). The state of the great Central Valley of California - Assessing the region via indicators: Education and youth preparedness (2nd ed.). Retrieved from www.greatvalleycenter.org

Hightower, A. M. (2002). San Diego's big boom: Systemic instructional change in the central office and schools. In Hightower, A. M., Knapp, M. S., Marsh, J.A., & McLaughlin, M. W. (Eds.), *School districts and instructional renewal* (pp. 76-93). New York, NY: Teachers College Press.

Johnson, J., & Strange, M. (2007). Why rural matters 2007: The realities of rural education growth. Rural School and Community Trust.

Leithwood, K. (2010). Characteristics of school districts that are exceptionally effective in closing the achievement gap. *Leadership & Policy in Schools, 9*(3), 245-291. doi:10.1080/15700761003731500

Marzano, R. J., & Waters, T. (2009). *District leadership that works*. Bloomington, IN: Solution Tree Press.

Marzano, R. J., Waters, T., & McNulty, B. A. (2005). *School leadership that works: From research to results*. Alexandria, VA: ASCD.

Massell, D., & Goertz, M. (2002). Direct strategies for building instructional capacity. In Hightower, A. M., Knapp, M. S., Marsh, J. A., & McLaughlin, M. W. (Eds.), *School districts and instructional renewal* (pp. 43-60). New York, NY: Teachers College Press.

McLaughlin, M., & Talbert, J. (2003). Reforming districts: How districts support school reform. Seattle, WA: Center for the Study of Teaching and Policy.

Murphy, J., & Hallinger, P. (1988). Characteristics of instructionally effective school districts. *The Journal of Educational Research, 81*(3), 175-181.

National Center for Education Statistics. (2013). The condition of education: The state of rural education. Retrieved from www.nces.ed.gov

Patton, M. Q. (2001). Evaluation, knowledge management, best practices, and high quality lessons learned. *The American Journal of Evaluation*, *22*(3), 329-336.

Skrla, L., Scheurich, J. J., & Johnson, J. F. (2000). Equity-driven achievement-focused school districts: A report on systemic school success in four Texas school districts serving diverse student populations. Austin, TX: Charles A. Dana Center.

Snipes, J., Doolittle, F., & Herlihy, C. (2002). Foundations for success: Case studies of how urban school systems improve student achievement. Washington, DC: Council of the Great City Schools.

Snyder, J. (2001). The new haven unified school district: A teaching quality system for excellence and equity. *Journal of Personnel Evaluation in Education 15*(1), 61-81.

Supovitz, J. A. (2006). *The case for district-based reform: Leading, building and sustaining school improvement*. Cambridge, MA: Harvard Education Press.

Teddlie, C., & Stringfield, S. (1993). *Schools make a difference: Lessons learned from a 10-year study of school effects*. New York, NY: Teachers College Press.

Togneri, W., & Anderson, S. E. (2003). Beyond islands of excellence: What districts can do to improve instruction and achievement in all schools: A leadership brief. Learning First Alliance.

U.S. Census Bureau. (December 11, 2013). Small Area Income and Poverty Estimates. Retrieved from www.census.gov

Webb, M.L. (2007). Rural school districts struggle to meet the demands of no child left behind. *San Joaquin Agricultural Law Review*, *16*, 191-218.

Winston, J. A. (2003). Rural schools in America: Will no child be left behind? The elusive quest for equal educational opportunities. *Nebraska Law Review, 82,* 190-210.

Zavadsky, H. (2009). *Bringing school reform to scale: Five award-winning urban districts. Educational Innovations.* Cambridge, MA: Harvard Education Press.

# Appendix

Table 1

*Comparison of Organizational Practices Related to School District Effectiveness*

| | High-Performing Districts | | | | Improving Districts | | | Urban Districts | | | Reforming Districts | | | | Meta-analysis | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Practice | Murphy & Hallinger (1988) | Cawelti & Protheroe (2001) | Supovitz (2006) | Elmore & Burney (1997) | Skrla et al. (2000) | Togneri & Anderson (2003) | Bottoms & Schmidt-Davis (2010) | Snipes et al. (2002) | Zavadsky (2009) | Anderson et al. (2012) | Hightower (2002) | Darling-Hammond et al. (2006) | McLaughlin & Talbert (2003) | Masselll & Goertz (2002) | Marzano & Waters (2009) | Leithwood (2010) | Anderson & Young (2014) |
| System-wide focus on instruction and achievement | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ |
| Frequent monitoring and data driven decision-making | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ |
| Shared beliefs and district culture | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ |
| Alignment of curriculum | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| and instructional practices | | | | | | | | | | | | | | | | | | |
| Restructuring of district practices, operations, & resources aligned to district goals | ✓ | ✓ | ✓ | | ✓ | | | ✓ | ✓ | | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ |
| Strong instructional leadership | ✓ | ✓ | | | ✓ | ✓ | | | ✓ | | ✓ | ✓ | | | | ✓ | ✓ | ✓ |
| Coherent professional development aligned to district goals | | | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | | | | ✓ | ✓ | | | ✓ | ✓ |
| Focus on continuous improvement | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | ✓ | | | | ✓ | ✓ |
| Collaborative learning communities | | | ✓ | ✓ | | | ✓ | | | ✓ | | ✓ | ✓ | | | | ✓ | |

Table 1 continued

| | High-Performing Districts | | | | Improving Districts | | | Urban Districts | | | Reforming Districts | | | | Meta-analysis | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Practice | Murphy & Hallinger (1988) | Caweltii & Protheroe (2001) | Supovitz (2006) | Elmore & Burney (1997) | Sklarla et al. (2000) | Togneri & Anderson (2003) | Bottoms & Schmidt-Davis (2010) | Snipes et al. (2002) | Zavadsky (2009) | Anderson et al. (2012) | Hightower (2002) | Darling-Hammond et al. (2006) | McLaughlin & Talbert (2003) | Masselll & Goertz (2002) | Marzano & Waters (2009) | Leithwood (2010) | Anderson & Young (2014) |
| District as instructional support | | | | | | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ | | | | |
| Balance of district-level coherence & school autonomy | ✓ | | | ✓ | | | ✓ | | | | | | ✓ | | ✓ | | ✓ |
| Targeted investment in lowest performing schools & students | | | | | | | ✓ | ✓ | ✓ | | | ✓ | | | | ✓ | ✓ |
| Sense of urgency | | | ✓ | | ✓ | ✓ | | | | | ✓ | ✓ | | | | | |
| Stakeholder collaboration | ✓ | | | | ✓ | | ✓ | | | | | | ✓ | | ✓ | | |
| Strategic | | | | | ✓ | | | | | | | | ✓ | | | ✓ | ✓ |

| |
|---|
| engagement with government policy |

Table 10

*Specific Elements from Each Theme in Districts Studied*

| | Mid-sized K-12 District | Small 9-12 High School District | Single-school K-8 District | Small K-12 District |
|---|---|---|---|---|
| Focus on Instruction and Student Achievement | Articulation of district vision, mission, goals and initiatives: expectation for high student achievement<br><br>Focus on students as individuals<br><br>Tiered intervention to support every student's academic success | Articulation of district vision, mission, and goals: expectation for high student achievement and excellence<br><br>Provision of services and programs for students in need<br><br>Remediation process to address student needs | High expectations for staff and students<br><br>Goal to make a year's growth for each student<br><br>Focus on students as individuals<br><br>Focus on meeting state proficiency criteria | High expectations for student learning<br><br>Focus on students demonstrating their learning<br><br>Focus on students as individuals<br><br>Interventions provided throughout the day |

| | | | | |
|---|---|---|---|---|
| Frequent Monitoring and Data-Driven Decision-Making | Analysis and monitoring of state assessment data<br><br>Use of multiple measures of data: district benchmarks, common assessments by grade-level within schools, evaluation of student work<br><br>Use of PLCs to analyze common assessments, share instructional practices, and determine next steps<br><br>Analysis of data by subgroups<br><br>Use of Summits to report school data, share practices, and determine next steps | Analysis and monitoring of state assessment data<br><br>Use of multiple measures of data: district benchmarks, common formative and summative assessments by department<br><br>Evaluation of common assessment data to inform instruction<br><br>Analysis of data by subgroups | Analysis and monitoring of state assessment data<br><br>Targeting areas of need based on state assessment data<br><br>Teachers monitor own students' progress using student work, teacher-created assessments, Lexile levels<br><br>Analysis of data by subgroups | Analysis and monitoring of state assessment data<br><br>Use of multiple measures of data: district benchmarks, teacher formative and summative assessments, student work<br><br>Evaluation of district benchmark data and instructional/data conversations regarding local assessment data<br><br>Analysis of data by subgroups |

Table 10 continued

| | Sanger Unified | Delano Joint Union High | Pacific Union Elementary | Riverdale Joint Unified |
|---|---|---|---|---|
| Shared Beliefs and District Culture | Collaborative culture<br><br>Core Beliefs: all students can learn; it's about the students, not the adults; hope is not a strategy<br><br>Belief that student success is a personal responsibility<br><br>Belief in reciprocal accountability (provision of support to meet expectations)<br><br>Supportive community<br><br>Tight-loose philosophy<br><br>Hiring people to fit into culture | Collaborative culture<br><br>Belief in building relationships between teachers and students<br><br>Belief in doing whatever it takes to make students successful<br><br>Belief in teacher professionalism and autonomy<br><br>Supportive community<br><br>Hiring people who can build relationships with students | Stable and consistent staff from site and community<br><br>Small school where everyone knows the students and families<br><br>Belief in students as individuals<br><br>Belief in teacher professionalism and autonomy<br><br>Strong community and parental support; stable community<br><br>Belief in developing students to become productive members of society | Belief in providing the best/well-rounded education and offering access to opportunities<br><br>Belief that student success is a personal responsibility<br><br>Belief in teacher professionalism and autonomy<br><br>Stringent hiring of the best people to fit into the culture |

| | | | | |
|---|---|---|---|---|
| Alignment of Curriculum, Instruction, and Assessment | Standards-based instruction and assessment<br><br>Use of backwards design to align curriculum, instruction, and assessment to standards<br><br>Common language for instruction; all teachers trained in effective instruction practices<br><br>Use of district benchmarks and grade-level common assessments | Standards-based instruction and assessment<br><br>Use of backwards design to align curriculum, instruction, and assessment to standards<br><br>Modified use of Explicit Direct Instruction<br><br>Autonomy of teaching while following scope and sequence<br><br>Use of district benchmarks and cohort common assessments | Standards-based instruction<br><br>Teachers use own instructional practices to meet the needs of students | Standards-based instruction and assessment<br><br>Use of backwards design to align instruction and assessments to standards<br><br>No specific curricular programs or instructional pedagogy adopted; teachers choose own instructional practices to meet the needs of students<br><br>Use of district benchmarks and individual teacher assessments |

Table 10 continued

| | Sanger Unified | Delano Joint Union High | Pacific Union Elementary | Riverdale Joint Unified |
|---|---|---|---|---|
| Strong Instructional Leadership | Continuous communication of core beliefs and district goals and initiatives<br><br>Setting, monitoring, and holding people accountable for expectations<br><br>Continuous evaluation of data and schools<br><br>Instructional leaders learn alongside teachers<br><br>Provision of support to meet expectations<br><br>Validation of stakeholders and building of relationships | Outside-the-box leadership; encourages others to take risks and try new things/strategies<br><br>Belief in viewing people's strengths and assets as something to contribute to the larger group<br><br>Dynamic administrators acting as instructional leaders; previous teacher leaders<br><br>Provision of support by district and school leaders | Sets high expectations for staff and students<br><br>Supportive<br><br>Empowers teachers to know what is best for students and to try new instructional strategies, programs, technology<br><br>Provides feedback on instruction | Maintains belief in treating teachers as professionals<br><br>Instills belief for teachers to provide the best education for students and take responsibility for their success<br><br>Use of instructional/data conversations to ensure all students learn, instructional practices lead to results, and build capacity<br><br>Value placed on teachers and relationships between administration and teachers |

| | | | | |
|---|---|---|---|---|
| Collaborative Learning Communities | Use of Professional Learning Community practices (PLC)<br><br>Grade levels/grade-level departments meet each week to evaluate assessment data; discuss instructional strategies; identify additional time, resources, and interventions for students<br><br>Collaboration occurs across schools in the district (teachers and administrators) | Use of Professional Learning Community practices (PLC)<br><br>Cohorts meet each week to identify expectations, evaluate assessment data, and discuss instructional strategies<br><br>Collaboration between cohorts and departments<br><br>Teacher release time (late start) provided for cohort collaboration | No formal structure for collaboration<br><br>Grade-level and cross grade-level collaboration once a month to share strategies<br><br>Curriculum committees | No formal structure for collaboration<br><br>Cross-curricular conversations between departments<br><br>Analysis of assessment data to identify areas of need and discuss students as individuals<br><br>Grade level designing of curriculum standards maps and district benchmarks<br><br>Common prep time provided |

# A Phenomenological Narrative Study: Elementary Charter School Principals' Managerial Roles

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


**Ahmet Cetinkaya**
*Lamar University*

*This study was a phenomenological narrative research investigating the managerial roles of elementary charter school principals. Managerial leadership practices were investigated under three categories personnel management, student management, and finance management. Elementary charter school principals provided positive feedback for having small size schools.*


**ISSN: 1532-0723** 

## Introduction

The first charter school, City Academy in St. Paul, began operation in 1992 after Minnesota passed the first charter school law in 1991 as noted by the Minnesota Legislative Reference Library (2014). In the subsequent years, the number of states passing charter school laws grew and according to The Center for Education Reform (2015) only eight states, Alabama, Kentucky, Montana, Nebraska, North Dakota, South Dakota, Vermont, and West Virginia, were left without a charter law as of 2015. Maloney, Sheehan, and Rainey (2011) reported that the first charter school legislation in Texas was passed in 1995 and the first charter schools were opened in 1996. According to a report posted on the Texas Education Agency (TEA) website, the number of charter school districts in operation as of the 2015-2016 school year was 182 (TEA, 2015).

Charter schools are a school of choice and a part of school reform that has grown substantially with a greater demand every year, according to The National Alliance for Public Charter Schools (NAPCS) dashboard (2014). The number of charter schools has reached 6,440 nationwide, with a growth rate of 7.3%, serving more than two million (2,513,634) students in the United States during the 2013-14 school year. In Texas, 689 charter campuses were in operation during the 2013-14 school year along with a growth rate of 7.9%. Texas charter schools served 238,091 students with 71.1% low socioeconomic status and 58.2% Hispanic population.

Since demand for charter schools was linked to charter school growth new roles were defined for charter school principals. Robenstine (2000) discussed the role of a charter school principal as manager within a school choice context and added that managerial roles of charter schools principals would require them to be customer focused. Thus, charter school principals make decisions responsive to parents and the needs of the community for the survival of their schools and their managerial decisions are driven by efficiency and cost effectiveness due to competitiveness. Therefore the purpose of this study is to explore elementary charter school principal's perceptions of their managerial roles.

## Literature Review

A report by Alberta Education (2009) indicated that as schools have become larger, the roles of principals have been transformed regarding leadership and managerial duties. These new roles of school principals have included being more involved in developing the school mission and goal, setting priorities, managing human resources and school finances, developing and managing school improvement plans, reporting system requirements, maintaining public and community relations, being accountable for educational outcomes, gathering information, and making data-based decisions. Principal's managerial roles are a part of the leadership dimension of a school principal.

Lunenburg (2010) investigated leadership functions of principals in general. He classified management skills into three categories, technical, human, and conceptual. He noted that effective principals designed their actions to build managerial and cultural linkages for instance time management and interpersonal relationships were required for coordinating school activities and developing budgets and mathematical skills were required for finance management. He emphasized the importance of having management skills in order to become an effective principal.

Allen and Gawlik (2009) studied roles of charter school principals in comparison with their counterparts in districts. They noted that charter school principals were responsible for additional managerial duties such as finding and maintaining school facilities, handling finances, recruiting and retaining quality staff, negotiating with school boards, and recruiting students. The researchers also added that charter school principals tackle the most with personnel issues and limited budgets in addition to facilities.

More recently, Germeten (2011) conducted a study investigating the changes in the roles of principals in Norway. The study surveyed and interviewed elementary principals located in small towns in the region of Finnmark, in the arctic zone. Study results provided increased understanding of the global roles of principals and the hardship of school management. For instance, lacking qualified staff, high teacher turnover rates, having inadequate time to cooperate and plan, and increasing workloads were among the problems mentioned by principals. Principals expressed concerns regarding receiving little or no support from school owners during implementation of a new curriculum after the curriculum was launched based on reform efforts. Germeten suggested that principals undergo extra mentoring and curriculum training to support school reform. Maloney, Sheehan, and Rainey (2011) evaluated charter school programs in Texas focusing on the experiences and outcomes of new charter schools. The charter schools included in the study were the schools authorized to start serving students between 2006 and 2009. The results of the study revealed that parents and students were satisfied with their charter schools. Parents chose charter schools for their children because charter schools were small in size and specialized in their educational programs. However, open enrollment charter schools struggled with locating and furnishing facilities and recruiting and retaining qualified teachers.

## Methodology

The current study was part of a larger qualitative narrative study utilizing a phenomenological narrative research design to explore

ranged from prekindergarten to 8$^{th}$ grade. Additionally, all schools were rated as Met Standard in 2013 based on the Texas accountability system. Principals had one to five years of experience as charter school principals and from two to 14 years as principals in traditional public schools. Collective demographic information of the schools which had participating principals is shown in Table 1. Pseudonyms have been used for each principal.

Table 1
*Collective Information of Charter Schools*

| Principal's Name | Grade | Enrollment | African American | Hispanic | White | Asian | Other | Econ. Disadv. |
|---|---|---|---|---|---|---|---|---|
| Mr. James | PK-6 | 440 | 17.7% | 16.4% | 61.6% | 2.5% | 1.8% | 55.9% |
| Mr. Carter | K-8 | 271 | 6.6% | 18.1% | 64.2% | 6.3% | 4.4% | 16.2% |
| Ms. Hopkins | K-5 | 435 | 11.1% | 85.6% | 2.2% | 0,8% | - | 97% |
| Ms. Jackson | PK-8 | 658 | 0.2% | 97.9% | 1.2% | 0.8% | - | 98.6% |
| Dr. Marshall | PK-8 | 617 | 82.8% | 16.5% | 0.3% | - | - | 65.2% |
| Dr. Spears | K-7 | 153 | 36.6% | 27.5% | 18.3% | 15.7% | - | 40.5% |

The data were gathered through face-to-face or telephone interviews. The interview prompt included questions which addressed specific research questions. Open ended interviews were audio-recorded and notes were taken during the interview. Although interviewing was the main data collection tool, artifacts, documents, and field notes were also gathered to enhance data collection procedures. The content gleaned from the interviews was transcribed and the resulting data were analyzed by identifying emerging themes. The stories of the participants were revealed, retold, and rewritten in a chronological sequence to thematically analyze their content for textual and structural descriptions based on a thematic approach. To demonstrate credibility, the researcher triangulated data sources, implemented peer review, conducted member checking, and wrote in thick, rich, detailed description.

## Findings

This study investigated managerial leadership practices of elementary charter school principals under three categories personnel management, student management, and finance management.

### Personnel Management

All principals shared their experiences regarding personnel management and voiced their concerns around teacher support, high teacher turnover rate and hiring practices, and shared responsibilities.

**Teacher support.** Mr. Carter was the only principal without a concern regarding personnel management. His school had the lowest economically disadvantaged percentage, 16.2%, compared to others. He was so confident with his teachers' skills that he did not like to micromanage teachers' duties unless needed. Instead, he chose to see the teachers as caring professionals who took care of what they needed in the classrooms. He described himself as a "team leader and team player" who was always ready to help when needed and did not find personnel management to be an issue nor difficult to handle. Mr. Carter pointed out that he chose to trust his teachers' skills and qualifications to do their jobs.

In addition, Dr. Spears was the only participant who talked about termination practices. She defined herself as tough when she needed to terminate the teachers. She had not found it

easy to talk to teachers about something they have not done correctly when she had been an assistant principal. She added that school administrators had to develop a skill of "saying tough things to nice people with grace" and be comfortable about it for the benefit of students. She said, "I understand that I do not help this teacher with this particular area that the damage to the students will continue. And I cannot have that."

Dr. Spears listed the ways she supported her teachers such as providing resources, supporting with mentors, identifying areas of weakness, making action plans with them, and asking the teachers how to support them. She was organized and structured in working with struggling teachers for whom she made growth plans, planned follow up meetings, scheduled each meeting on the calendar to have enough documentation, and followed the process. If things did not get better then she would tell the teacher:

> You know what, I cannot let you continue that you not met any of our goals that we had for you, and I do not see you working hard to meet those goals. I really feel like you are sending me a message but this is not the place for you. Here is your letter and you are being terminated.

**High teacher turnover rate and hiring practices.** Dr. Spears experienced many personnel issues including high teacher turnover. She said that her new teachers often left for other schools after getting wonderful and very expensive professional development at her school. In response to high teacher turnover, Dr. Spears listed her hiring efforts such as hosting job fairs, putting ads in the newspapers, and hiring her friends from the community.

Sharing his practices, Mr. James mentioned that he hired experienced and successful teachers with at least five years of experience in an independent school district with an assumption that "those teachers have already had trainings and learned to develop good instructional practices in their classrooms" and would require little mentoring support since his school did not have an established support systems for teachers. However, recently he shifted from this model and hired a couple of brand new teachers, and trusted that his dean of instruction and current experienced teachers could serve as mentors for these new teachers.

Mr. James commented that most charter schools simply hire inexperienced teachers because they were "cheaper to hire." He talked about the cycle of teacher turnover when an inexperienced teacher has been hired without a support system in place that the new teacher typically struggles, becomes frustrated, and then leaves. Afterwards, another new and inexperienced teacher will be hired, and the cycle continues. He added that schools and instruction would suffer because of this teacher turnover cycle simply because there was nobody at schools long enough to maintain effective instructional practices.

Ms. Jackson's approach was different in that she mentioned the lack of personnel in her school and listed charter school principal duties, such as monitoring attendance, dealing with personnel matters, performing parent-teacher conferences, and conducting conferences with teachers. She also added that charter school principals not only have been the instructional leader but also the manager of the attendance on the campus. Her concerns were around lack of resources and personnel.

**Shared responsibilities.** Personnel management responsibilities were shared between Ms. Hopkins's charter school and her charter district central office. She managed school level personnel issues, such as tardiness and attendance, and the human resources (HR) department managed hiring from the central office. She found this "real supportive in that aspect."

Dr. Marshall's school operated under a charter management company, so he followed policies, procedures, and protocols mandated by his management company in regards to

personnel management including hiring. He listed hiring process steps as follows: screening, initial interview with the candidate, and the candidate present a model lesson. The model lesson was viewed by a panel of teachers and then an offer letter was extended for a qualifying candidate.

**Student Management**

All principals addressed discipline within their schools and support structures to maintain a safe environment for learning. In addition, principals emphasized their managerial role in developing and sustaining an appropriate school culture.

**Principal's role in discipline.** Mr. Carter was happy with the discipline at his school. He praised his teachers for having great instructional and relationship skills toward handling disruptive situations in the classrooms. According to Mr. Carter, these skills helped them deescalate and disarm disruptive situations. When a discipline referral arose which he needed to address, he preferred to take care of the issue quickly "to show that teachers feel that they're being supported in their efforts."

Mr. Carter pointed out that all students were held accountable for their actions and those individual situations were examined carefully so they could be managed properly. He used "What if" questions when he noticed an overreaction on the part of the teacher concerning a discipline issue. He asked teachers in these situations: "What if you just said, 'Well, why do you not just get back on that page and have a seat, and then we'll talk about this afterwards?'" His intent was for teachers to better analyze "what they could have done instead of what they actually did." Mr. Carter acknowledged that his role in student management involved disposing student referrals in a quick and proper way.

Student management of discipline was one of Dr. Marshall's strengths because he had an experience dealing with management of students when he was an assistant principal in the traditional public school. Although he was not dealing with day to day discipline issues within his charter school campus, he still had the final say over serious discipline consequences such as expulsions and suspensions.

Dr. Spears linked to classroom management issues of new teachers at her charter school. She worked on this "huge issue" by having behavior plans in place and continually revisiting the plans with teachers. They talk about best practices around discipline management plans and how things needed to be handled within the classroom. She has not been supportive of sending students to the principal for minor infractions such as not having a pencil or being loud in class. She provided strategies to handle those classroom issues such as calling home, meeting with parents when they come for pick up, and logging conversations with parents. She said, "90% of the time the stupid stuff stops when you are in communication with the parent." She also talked about what happens when a child was sent to her for discipline issues. She said:

> Remember what the deal is when you say to me "I can no longer handle this child, I put them in your hands," you are in essence saying that you are giving up the responsibility of that child to me. So then I get to say and you don't get to complain about what I chose to do as a consequence.

She added that when teachers sent a student out of the classroom they are sending a message to all the other students that they have lost control over that particular child and have no control of the class at all. Other than sending those messages she preferred teachers to tap into resources and handle the discipline in classroom.

Dr. Spears sometimes intervened to minimize personality conflicts between parents and teachers as a negotiator to support her teachers. She works with teachers who provided a good education for students and she did not want to lose them for having a gruff voice and "sometimes being mean to students."

For student management and discipline Ms. Jackson's school has been using a program called grade book. This program has been used locally by teachers for posting grades and attendance. In addition, there has been a Public Education Information Management System (PEIMS) department in her campus that has been managing attendance and discipline records.

**Establishing a positive school culture.** Ms. Hopkins's school used a school-wide classroom management program to establish a positive school culture called "CHAMPS." "CHAMPS" stands for Conversation, Help, Activity, Movement, Participation, and Success. They outsourced the training for this program to a third party company which has been providing the training for students and staff members. In describing her school's discipline issues regarding building a positive school culture, Ms. Hopkins said:

> I have fewer discipline issues in this school then any school I've ever been engaged. And I think part of it is because there is a sort of a self-selection process. Because we are a small school, we are really on top of parents who don't get their kids here on time at the school. So, I think their parents get tired from us and decided to select themselves out. Same thing with picking them up late. Same thing with not being supportive. No one ever comes to school out of uniform. Or we call the parent and they have to pick them up or bring them a change of clothes. So, we are very consistent, and I think pretty demanding in those kinds of commitments from parents.

She added that they meet with parents of students before the student's enrollment in the school. The discussions focused on parent expectations. An agreement was signed as an outcome of that meeting. She said, regarding the agreement, "We don't hesitate to pull that out, show it to them again if we don't get the support we need." She provided an example regarding discipline issues within the school that she recently had to break the first fist-fight in three years.

Ms. Hopkins repeated several times throughout the interview that the reason behind good discipline and positive school culture at her school was a result of classes being fairly small. She said, "We never go over 22 kids in class, and normally they're less than that." Besides being small, Ms. Hopkins added that the school is in an old grocery store building converted into school with only two areas of access—the front door and the door to the cafeteria. This feature makes the school an "enclosed environment." She noted that her assistant principal has been at the school since the beginning of school, and "she knows every child, and every parent in the school. Actually, she knows every child, every parent who has ever had children in the school." Ms. Hopkins added that her office ladies know every child and parent as well. She said, "So there is never a time when someone thinks that they can get away with something that their parents will not find out about because everybody knows everyone." In addition, she touched on another practice in her school that she called "data meeting." In those meetings her administrative team, including office staff, discussed data pertaining to enrollment as well as student and staff attendance.

Students in Dr. Marshall's charter school are called "scholars." In explaining the role of students in his charter school in regards to establishing a positive school culture regarding student management, he said, "Scholar is responsible for the culture building within the building." He added that the expectations, discipline issues, and culture within the building are clearly articulated within their parent and scholar handbook as well. School wide expectations

and rules including hallway, cafeteria, and classroom expectations have been enforced by the Dean. In addition Dr. Marshall said, "Teachers have rules and requirements that are consistent across the school."

Treating kids with respect has been Dr. Spear's school motto regarding discipline management and a positive culture. She said, "So it is about treating kids with respect, it is about really implementing practices that we have asked you to do. All of that speaks to whether you are going to have good classroom management in your classroom or not."

Mr. James mentioned that trainings were available to support his teachers in becoming better disciplinarians and added that systems in his school have been updated "to help a kid to behave" while supporting the teachers at the same time. He also noted that his school's student management system was very traditional, with specific procedures in place.

**Financial Management**

Financial management practices differed somewhat for each charter school. All principals identified their internal policies and procedures for purchasing within their tight budgets and emergent themes included transparency and limited responsibilities.

**Transparency.** Dr. Spears said that they have been very transparent in financial management practices. Her school has a committee, board of control, including the office manager, several teachers, and the principal that meet once a month and review bank statements and expenditures. The committee oversees spending. The students and teachers raise funds for student and teacher activities which must have been approved by the board of control. There are restrictions on spending including federal funds. She said, "Any money raised by students can only be spent on students." She also added that no funds could be spent on teachers and they have been compliant with federal funds. She said, "We pick tax payer money so we have to be very respectful of that." She mentioned that they have been very careful about spending because of limited funds and high costs.

Dr. Spears pointed out several internal procedures regarding safety, for example money could never be left overnight in teacher's classrooms. The school has a safe in the closet for lunch money and the office manager has to deposit money at least three times a week because she did not want any money to stay in the safe. Each school has a credit card for purchases. No tax could be paid with the card. While she makes purchases she tries to buy things at half price from the Internet. She buys used dictionaries and used curriculum books. She is careful in not paying tax while shopping online as well. She concluded, "We do not play with the money here."

Mr. James's charter school board was very involved in finance management. He said that any expense greater than $2,500 required board approval and added that his school had a budget committee which reviews expenditures, revenues, checks and balances. He proudly talked about an additional school building project which has begun worth 4.8 million dollars. His school is working with the United States Department of Agriculture (USDA) for a loan guarantee for this new building project. He sounded happy that he would have a new building for his campus.

Mr. Carter mentioned that principals have been granted more rights over the school finance than ever before. He admitted, however, that there was not any room for control over the salaries portion of the budget since this was all pre-determined. He said that there was a tendency for charter school principals to conserve the money in their budgets as long as they could. However, he supported the idea of spending the budget for instructional materials during the current year rather than saving them for the following year. He also discussed district purchasing

practices for schools as a means to secure the best price for the item considering their limited budgets via checking catalogs, exploring Amazon, as well as other locations that might offer better prices. He concluded by saying that there was not a lot he could do as a principal in terms of financial management of the school.

**Limited responsibilities.** Principal Hopkins discussed her school's financial management practices and mentioned that principals have been "given control over a good part of general budget." Although she had control over the general budget, it is not the case for title budgets. Title I, Title II, and Title III were held centrally. She pointed out that schools were required to contact central office personnel to access those funds.

Two principals, Ms. Jackson and Dr. Marshall, mentioned that their financial management responsibilities were limited. Ms. Jackson explained her financial management involvement by saying "You know what, in this charter I don't have to do anything with finance." Then she elaborated on her point that finance has been handled by the Superintendent and business office. She talked about requisition process that purchasing requests should be approved by the Superintendent and purchasing manager. Ms. Jackson mentioned that she convinced the Superintendent to streamline the process and he agreed that each campus would get an allotted budget next year for teacher and student driven activities. This new process would provide principals some control over their school's budget.

Dr. Marshall's role in finance management of his charter school has been limited to certain responsibilities as mandated by charter management company such as assisting with the development of campus wide and district wide budget and "making predictions as far as staffing patterns." He also assisted with projecting the budget "based upon number of student enrollment" and allocating funds for various pilot programs within the charter district.

## Implications for Practice

A limitation of this research was that it included only six participants. The findings of this study provided increased understanding of the elementary charter school principals' roles and the hardship of school management and added some new perspectives on the need for guidance, training, and funding resources in charter schools. Addressing the needs for teacher support, high teacher turnover rates, effective hiring practices, better discipline, building a school culture, increasing transparency and autonomy in finance management must be a top priority for charter holders. Thus, charter school principals would benefit from having additional support, additional funding for school buildings, and additional professional development opportunities tailored to the specific needs of charter schools.

From policy point of view the findings suggest that providing equity in funding for charter schools including funding for facilities could be a smart way to support school choice. Providing funding for rent and maintenance expenses for charter schools will increase charter schools' financial power to retain talent and be competitive at the market. Charter school principals would benefit from providing better incentives and comparable salaries for their teachers in managing high teacher turnover rates (Nawab, 2011).

For policy importance Allen and Gawlik (2009) noted that there was a synergetic relationship potential between charter and district schools. Hence, more collaboration among school leaders might provide solutions to charter school problems such as limited resources and building capacity. This kind of a collaboration and network would help charter school principals evaluate the effectiveness of their programs in order to be more efficient in their managerial

duties and increase public awareness about their schools. Charter school principals must consider ways to increase dialogue with traditional public school principals since this type of professional network have the potential to benefit all relevant parties.

Findings also suggested that elementary charter school principals provided positive feedback for having small size schools. The benefits of being small in size included having good discipline in classes, having a private school atmosphere where parents and educators can work together, being more collaborative with the teachers, and being more structured. Ultimately, this could lead to revisiting class size requirements at public schools since the findings report benefits of small size schools. Overall, charter school principals were outspoken and confident regarding their managerial roles including managing student discipline, budgets, and resources. Grissom and Loeb (2009) indicated that managerial tasks were positively related to school performance and they were among the highest ratings based on self-assessed effectiveness. Lunenburg (2010) reported that high performance would require managerial skills such as using organizational resources through effective planning, organizing, leading, and monitoring. The findings of this study support previous research that managerial skills play a vital role in outcomes and charter schools would benefit from having principals with great managerial skills.

In addition, Allen and Gawlik (2009) argued that choice should be an integral part of public education system at large, not specific to only charter schools. The researchers pointed out the necessity of broadening principal preparation programs to address unique challenges of charter school principals.

## Future Research

This study raises a number of opportunities for future research that it could be extended in longitudinal way. The changes in managerial duties of charter school principals can be investigated using a similar design with more participants for over a longer period of time up to four years. This might provide us a better picture of the evolving role of charter school principals. Another possible research opportunity could be exploring the ways of collaboration among charter and traditional public schools as suggested by Allen and Gawlik (2009). Possible research questions include:

- What are the ways charter schools and traditional public schools work together? Any promising practices?
- What are the barriers for collaboration among charter schools and traditional public schools?

Finally, this study investigated charter school principals' perceptions regarding their managerial roles. Further research is needed to define common problems at charter schools and explore managerial skills needed to provide solutions to those common problems. In addition a correlational study regarding job satisfaction and managerial skills that could provide a systematic analysis of principals' skills and their impact on operational effectiveness.

## References


Alberta Education. (2009). *The principal quality practice guideline: Promoting successful school leadership in Alberta*. Retrieved from http://education.alberta.ca/media/949129/principal-quality-practice-guideline-english-12feb09.pdf

Allen, A., & Gawlik, M. (2009). Preparing district and charter school leaders: A systems perspective. *NCPEA Educational Leadership Review*, *10*(2), 21-30.

Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches (3rd ed.)*. Thousand Oaks, CA US: Sage Publications, Inc.

Germeten, S. (2011). The new national curriculum in Norway: A change in the role of the principals? *Australian Journal of Education, 55*(1), 14-23.

Grissom, J., & Loeb, S. (2009, December). *Triangulating Principal Effectiveness: How Perspectives of Parents, Teachers, and Assistant Principals Identify the Central Importance of Managerial Skills* (Working Paper 35). Retrieved from http://www.caldercenter.org/sites/default/files/Working-paper-35_FINAL-2.pdf

Lunenburg, F. C. (2010, September). The principal and the school: What do principals do. *National Forum of Educational Administration and Supervision Journal*, *27*(4), 1-13.

Maloney, C., Sheehan, D., & Rainey, K. (2011). *Evaluation of New Texas Charter Schools: Final Report (2007-10)*. Austin, TX: Texas Center for Educational Research. Retrieved from http://eric.ed.gov/?id=ED538563

Minnesota Legislative Reference Library. (2014). *Resources on Minnesota issues: Charter schools.* Saint Paul, MN: Minnesota Legislative Reference Library. Retrieved from http://www.leg.state.mn.us/lrl/issues/issues.aspx?issue=charter

National Alliance for Public Charter Schools. (2014). *Public charter school dashboard.* Retrieved from http://dashboard.publiccharters.org/dashboard/schools/year/2014

Nawab, A. (2011). Exploring leadership practices in rural context of a developing country. *International Journal of Academic Research in Business & Social Sciences, 1*(3), 181-189.

Robenstine, C. (2000). How School Choice Can Change the Culture of Educational Leadership. *Contemporary Education*, *71*(2), 26.

Texas Education Agency (2015). *Summary of charter awards and closures*. Retrieved from http://tea.texas.gov/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=2147485098&libID=2147485097

The Center for Education Reform (2015). *Charter school laws across the States: 2015 rankings and scorecard.* Washington, DC: The Center for Education Reform. Retrieved from https://www.edreform.com/wp-content/uploads/2015/07/CharterLaws2015.pdf

# Principals' Supervision and Evaluation Cycles: Perspectives from Principals

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


**David J. Hvidston**
*University of Wyoming*

**Courtney Ann McKim**
*University of Wyoming*

**Ian M. Mette**
*University of Maine*

*The goals for this quantitative study were to examine principals' perceptions regarding supervision and evaluation within their own evaluations. Three research questions guided the inquiry: (1) What are the perceptions of principals' regarding their own supervision?; (2) What are the perceptions of principals' regarding their own evaluation?; and (3) What are the perceptions of novice and experienced principals' regarding formative supervision? This study followed a descriptive format and used a 20 item on-line survey to measure principals' perceptions. Participants solicited included 275 principals in a Mountain West state. Overall, principals were in agreement with 19 out of 20 statements describing their own supervision and evaluation, and principals with three or less years of experience believed superintendents used classroom walk-throughs as a way to monitor classroom instruction more than experienced principals. In addition, principals with three or less years of experience viewed the feedback in their evaluations as more valuable than experienced principals.*


**ISSN: 1532-0723** 

The leadership of principals is aligned with gains in student performance (Branch, Hanushek, & Rivkin, 2013; Marzano, Waters, & McNulty, 2005) and is second only to classroom instruction as a significant factor influencing student achievement (Leithwood, Louis, Anderson, & Whalstrom, 2004). Clearly, the leadership of principals is critical in creating and maintaining effective schools. Arne Duncan, Secretary of Education, stated he has "yet to see a great school without a great principal" (Superville, 2014, p. 10). Strong leadership from the principal is essential when maintaining a trusting climate and culture supporting effective teaching and student achievement (Leithwood, Louis, Anderson, & Whalstrom, 2004; Louis, Leithwood, Whalstrom, & Anderson, 2010). Despite the emphasis on the importance of principals to the functioning of successful schools, past principal evaluation models have been overlooked as important and many appear superficial (Murphy, Hallinger, & Peterson, 1985; Stronge, 2013), often leading to ambiguity regarding performance expectations and standards (Reeves, 2008).

Similar to teachers, principals require accurate feedback from evaluation systems to meet district expectations and student improvement goals (Goldring, Cravens, Murphy, Elliot, & Carson, 2009; Range, Young, & Hvidston, 2012). However, researchers have long critiqued the variety of state and district principal evaluation systems, the haphazard manner by which evaluation systems are implemented, and the inconsistency of evaluation systems (Davis & Hensley, 1999; Ginsberg & Berry, 1990; Harrison & Peterson, 1988; Reeves, 2008). In an analysis of 68 scholarly and descriptive publications considering principal evaluation, Sanders and Kearney (2011) found practices by principal evaluators lack any consistency for both schools and districts with only 20 primary source publications in peer reviewed journals from 1980 – 2010 (Davis, Kearney, Sanders, Thomas, & Leon, 2011). This number of peer-reviewed publications provides additional evidence of the scarcity of research regarding the supervision and evaluation of principals.

In sum, a better understanding of how principals perceive the effectiveness of a principal supervision and evaluation system might ultimately improve the performance of principals and possibly increase student achievement. Practicing superintendents could benefit from principals' perspectives regarding their own supervision and evaluation as superintendents consider current instructional leadership practices. In addition, university administrator preparation programs would also benefit from research regarding the effectiveness of principal supervision and evaluation when planning instruction for prospective superintendents or principal evaluators.

## Principal Evaluation Systems

In most states, the evaluation of principals is driven by state statutes and supported by district policies. To support these mandates, many states have either created principal evaluation systems or tools to evaluate principals. One of the major factors in the creation of principal performance evaluation systems is a federal requirement for principal evaluation as included in the School Improvement Grants (SIG) for turnaround schools (USDoE, 2014), Race to the Top (RTTT) (USDoE, 2009), and No Child Left Behind (NCLB, 2002). The critical element in all these initiatives is the improvement in the performance of the principals as evidenced by student growth. Thirty-four states have adopted new principal evaluation systems following the authorization of RTTT in 2009 (Jacques, Clifford, & Hornung, 2012). More recently, Anderson and Turnbull (2016), described districts' developing evaluation support systems for novice principals. Specifically, improving the academic performance of the students as principals

engage in instructional leadership, and thus improving the teaching capabilities of the schools' teachers, is a focal point for principal evaluation systems.

The National Association of Elementary Principals (NAESP) and the National Association of Secondary School Principals (NASSP) support the involvement of principals as critical partners in the creation of principal evaluation systems (Clifford & Ross, 2011). In contrast, Clifford, Berhrstock-Sharratt, & Fetters (2012) describe the current reality for the involvement of principals as, "[their] voices, at times have been lost in efforts to create better performance evaluation systems" (p. 1). For the first time, the United States Department of Education (USDoE) is supporting school improvement initiatives and professional development for principals based on the research detailing the importance of the principal in successful schools. In the past, principal involvement in these initiatives had often been disregarded and cursory (Superville, 2014).

Typically, the superintendent is tasked with the responsibility for supervising and evaluating principals. In larger districts, the superintendent delegates these responsibilities to assistant superintendents or to district instructional leaders (Casserly, Lewis, Simon, Uzzell, & Palacios, 2013). Murphy, Hallinger, and Peterson (1985), in a study of districts with excellent student achievement scores, found superintendents were actively involved in the supervision and evaluation of principals. These superintendents or principal evaluators also need to be trained and provided with support to effectively supervise and evaluate principals (Jacques, Clifford, & Hornung, 2012).

There is variability in how states approach the creation and implementation of a principal evaluation system as evidenced by South Carolina, Delaware, North Carolina, and New Mexico with a mandated system for all school districts, and Iowa who requires districts to align the local district system with the state system of standards (Amsterdam, Johnson, Monrad, & Tonnsen, 2003; Mattson, Sanders, & Kearney, 2011). Regardless of the state creating a principal performance evaluation system with the same requirements for all principals or system supported by local control where the district decides the principal evaluation system (Jacques, Clifford, & Hornung, 2012), these systems include two perspectives: 1) practice involving principal's leadership and effectiveness, and 2) impact defined by the growth of student outcomes (Clifford, Berhrstock-Sharratt & Fetters, 2012). Davis and Hensley (1999) describe the principal evaluation process as varying from district to district, with political agenda as opposed to a profession system of performance improvement.

In 2006, 46 states adopted or modified the Interstate School Leadership Consortium (ISLLC) standards (Canole & Young, 2013), and 43 of these states use some form of the ISLLC standards to license principals (Derrington & Sharrat, 2008). It is less clear regarding how many states or districts are using standards in their evaluation systems, and as seen in Washington state, only 45% of the superintendents were "familiar" with the ISLLC standards (Derrington & Sharrat, 2008). In Virginia, on the other hand, Catano and Stronge (2006) found a strong alignment between ISLLC standards and leadership in their review of 100 evaluation instruments.

The reliability of principal evaluation is even less clear. Condon and Clifford (2009) found only eight valid and reliable principal performance instruments out of 20 instruments. Goldring and colleagues (2008) analyzed 65 instruments used by urban districts and states and reported that most of the instruments were not aligned with the effective leadership research supporting the improvement of student learning. Although the evaluation of principals appears to be a critical factor for states and school districts, one study found the process of evaluation does

not support a connection between evaluation and student achievement (McMahon, Peters, & Schumaker, 2014). Thus, there is a need to further understand the impact of principal evaluation systems.

## Principal Supervision and Evaluation Cycle

Principal supervision parallels teacher supervision as more formative with observations, feedback, and opportunities for professional development as well as a cycle of continuous improvement, "more a process, not an event" (Oksana, Zepeda, & Bengtson, 2012, p. 224). In contrast, principal evaluation is a summative process occurring at the end of the year and is used for employment decisions such as reemployment and termination (Portin, Feldman, & Knapp, 2006). Supervision of principals is described by frequent random and planned visits to schools, meeting with principals between three and six times a year, generally using an oral process (Murphy, Hallinger, & Peterson, 1985). Conversely, the evaluation process is more formal with a "beginning of the year conference to select objectives and set specific performance indicators or criteria", mid-year review meetings and an end of the year written evaluation (Murphy, Hallinger, & Peterson, 1985, p. 81). Several models detailed steps for supervision and evaluation of principals, including a positive supervisory relationship built on trust, the determination of desired competencies, a multi-dimensional approach with goal setting and data gathering, and determining performance by reviewing supporting data (Derrington & Sanders, 2011). New Leaders (2012) describes the process as a continuous improvement cycle with data analysis and ongoing-self reflection, goal-setting and strategic practice, implementation and the collection of evidence, a mid-year review, a formal self-assessment, and summative rating at the end of the year. Although many principal evaluation systems include data and artifact collecting throughout the evaluation cycle along with pre and post conferences based on a direct observation of principals (Thomas & Vornberg, 1991), in actual practice principals report inconsistencies in processes used to evaluate principals (Davis & Hensley, 1999).

A critical factor in the evaluation of principals is for the evaluator and principal to understand the components of the evaluation process (Harrison & Peterson, 1988). Stronge (1996), in his improvement-oriented model for performance evaluation, makes a connection between formative evaluation and improvement as compared to summative evaluation paired with accountability. He further discusses the balance between accountability and improvement, "When evaluation is viewed as more than…[a] process, it gets in the way of progress and thus becomes irrelevant. When evaluation is treated as less than it deserves, the organization, its employees, and the public in charge are deprived of opportunities for improvement and the benefits that accountability afford" (Stronge, 1996, p. 145). Although summative and formative evaluation both have a need for inclusion in to the evaluation cycle, Popham (2013) delineates the difference between the two evaluative roles and describes how "contamination" occurs when one person is responsible for accomplishing both roles. This tension between formative and summative assessment occurs when supporting the improvement of principals' performance while using the same assessments to make employment decisions such as the renewal of a contract (Portin, Feldman, & Knapp, 2006).

## Research Design and Methods

This study examined principals' perceptions in a Mountain West state regarding supervision and evaluation within their own evaluation cycle. Three research questions guided the inquiry: (1) What are the perceptions of principals' regarding their own supervision?; (2) What are the perceptions of principals' regarding their own evaluation?; and (3) What are the perceptions of novice and experienced principals' regarding formative supervision? This study followed a descriptive format and used a 20 item on-line survey to measure principals' perceptions regarding critical elements in their own supervision and evaluation cycle.

### Study Participants

Participants solicited included 275 principals from elementary schools, middle schools, high schools, or schools including kindergarten through eighth grade and/or twelfth grade in a Mountain West state. All principals were invited to participate regardless of gender, experience, or educational degree. Out of the participants solicited, 102 principals agreed to participate (37% response rate). Principals were asked 20 questions regarding their own supervision and evaluation. The survey was sent electronically during the spring semester to all participants with one follow up reminder.

### Instrument

The instrument used to collect data was a survey constructed by the researchers based on the supervision and evaluation of teachers and adapted to represent the supervision and evaluation of principals. The first section of the survey consisted of 9 Likert scaled statements (1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree), all focused on *supervision*. Items measured concepts such as meeting at least once a year to establish goals, discussing the principals' performance based on student achievement, and observing the principals in a leadership responsibility. The second section consisted of eleven Likert scale measuring *evaluation*. Items assessed concepts such as articulating a set of performance standards, using feedback to improve principals' performance, and identifying performance strengths. Cronbach's alpha coefficient for the entire survey was 0.96. Reliability for each subscale was also adequate (supervision: 0.93 and evaluation: 0.92). The final section of the survey collected demographic information from the sample, which consisted of (a) gender of participant, (b) size of district, (c) years of experience as a principal, and (d) gender of supervisor.

### Data Analysis and Findings

Data were analyzed descriptively and inferentially. Descriptive analysis included means and standard deviations for the entire sample. Data were also broken down by subscale and years of experience. Principals' experience was formed into two groups, novice (three years or less) compared to experienced principals (more than three years). This grouping was used to conduct an independent *t*-test examining differences between novice and experienced principals' perceptions of supervision and evaluation.

**Research Question One**

Research question one asked, "What are the perceptions of principals' regarding their own supervision?" Nine items on the survey addressed this question. Means and standard deviations were calculated. Results are presented below (see Table 1).

Table 1
*Principals' Perceptions regarding their own Supervision*

| Statement | *M (SD)* |
|---|---|
| I meet at least once each year with my superintendent (evaluator) to establish goals for my professional growth. | 3.20 (0.87) |
| My superintendent (evaluator) observes me in a leadership responsibility at least once a year. | 2.88 (0.94) |
| During this conference, my superintendent (evaluator) and I discuss student achievement. | 2.84 (0.85) |
| I believe I improve my performance based on my superintendent's feedback and supervision. | 2.76 (0.82) |
| My superintendent (evaluator) meets with me to discuss how my performance will be assessed. | 2.75 (0.86) |
| My superintendent (evaluator) provides me with meaningful feedback during the school year. | 2.69 (0.87) |
| During this conference, my superintendent (evaluator) and I discuss remediation for marginal teachers. | 2.68 (0.85) |
| During this conference, my superintendent (evaluator) and I discuss how the school's faculty will actively engage students in learning. | 2.67 (0.87) |
| My superintendent (evaluator) routinely uses classroom walk-throughs to monitor classroom instruction in my school. | 2.32 (0.99) |
| *Total Supervision Subscale Score* | 2.75 (0.71) |

*Note*. Scale ranges from 1 (strongly disagree) to 4 (strongly agree).

Overall, principals agreed with all of the nine statements regarding principal supervision as all statements had means higher than 2.50. Principals agreed most regarding meeting at least once each year with their superintendent to establish goals for their professional growth ($M$ = 3.20, $SD$ = 0.87) and agreed least with their superintendent routinely using classroom walk-throughs to monitor classroom instruction in their school ($M$ = 2.32, $SD$ = 0.99). With the exception of the first statement, principals had limited levels of agreement for the remaining seven statements as all had means less than 3.00. The total evaluation subscale score average was 2.75 ($SD$ = 0.71).

**Research Question Two**

Research question two asked, "What are the perceptions of principals' regarding their own evaluation?" Eleven items on the survey addressed principals' perceptions of their evaluation. Again, means and standard deviations were calculated. Results are presented below (see Table 2).

Table 2
*Principals' Perceptions regarding their own Evaluation*

| Statement | *M* (*SD*) |
|---|---|
| My performance is evaluated at least once a year. | 3.22 (0.67) |
| During a summative evaluation conference, I am expected to reflect about my performance. | 3.08 (0.71) |
| My input is sought concerning my evaluation. | 3.04 (0.77) |
| My principal evaluation system clearly articulates a set of standards to rate my performance. | 3.02 (0.70) |
| During a summative evaluation conference, my superintendent and I identify my performance strengths. | 2.90 (0.85) |
| During a summative evaluation conference, my superintendent and I identify areas in which I can improve. | 2.90 (0.80) |
| I view my evaluation as valuable feedback. | 2.90 (0.84) |
| My evaluation accurately reflects my performance. | 2.84 (0.76) |
| At a summative evaluation conference, my superintendent and I discuss the things we agreed to focus upon during an earlier goal setting conference. | 2.81 (0.82) |
| A variety of information (teacher evaluations, budget, student achievement) is used to evaluate me. | 2.74 (0.86) |
| During a summative evaluation conference, my superintendent and I analyze the data he/she collected during school year. | 2.47 (0.86) |
| Total Evaluation Subscale Score | 2.91 (0.58) |

*Note*. Scale ranges from 1 (strongly disagree) to 4 (strongly agree).

Overall, principals agreed with ten of the 11 statements regarding principal evaluation as eight statements had means higher than 2.50. Principals agreed most regarding their input is sought concerning their evaluations ($M$ = 3.04, $SD$ = 0.77) and agreed least with during a summative evaluation conference, "my superintendent and I analyze the data he/she collected during school year" ($M$ = 2.47, $SD$ = 0.86). With the exception of the first four highest rated statements, principals had limited levels of agreement for the remaining seven statements as all had means less than 3.00. The total evaluation subscale average score was 2.91 ($SD$ = 0.58).

**Research Question 3**

Research question three asked, "What are the perceptions of novice and experienced principals' regarding formative supervision?" Principals with three years or less of experience were compared to principals with more than three years of experience using an independent $t$-test. Only two significant differences were found between novice and experienced principals. Significant results are presented in Table 3 below.

Table 3
*Perceptions of Principals regarding their own supervision based on years of experience*

| *Statement* | *0 – 3 years of experience n = 25* | *More than 3 years of experience n = 79* | *Effect Size* |
|---|---|---|---|
| My superintendent routinely uses classroom walk-throughs to monitor classroom instruction in my school. | 2.76 (1.01) * | 2.24 (0.95) | 0.47 |
| I view my evaluation as valuable feedback. | 3.24 (0.93)* | 2.80 (0.79) | 0.46 |

*Note.* Scale ranges from 1 (strongly disagree) to 4 (strongly agree); * denotes significance at the $p < 0.05$ level.

Results of the independent *t*-test indicated there was a significant difference in how novice principals viewed the use of classroom walkthroughs in monitoring classroom instruction when compared to more experienced principals, $t$ (102) = 2.35, $p < 0.05$. Specifically, novice principals believed superintendents use classroom walk-throughs as a way to monitor classroom instruction (*M = 2.76, SD = 1.01*) than more experienced principals (*M = 2.24, SD = 0.95*). Cohen's d effect sizes were calculated. The interpretation for Cohen's d is defined as "small, d = 0.20," "medium, d = 0.50," and "large, d = 0.80" (Cohen, 1988). The effect size for this significant difference was approaching a medium effect size (d = 0.47). There was also a significant difference between novice and experienced principals perception of the feedback received in an evaluation, $t$ (102) = 2.34, $p < 0.05$. Novice principals viewed the evaluation as more valuable ($M$ = 3.24, $SD$ = 0.93) than experienced principals ($M$ = 2.79, $SD$ = 0.79). The effect size for the significant difference between experienced and novice principals was also approaching a medium effect size (d = 0.46).

## Discussion

This quantitative study was conducted to examine principals' perceptions regarding their own supervision and evaluation. The results are limited to the method employed and also to the perceptions of principals in a Mountain West state. The results of the study can be summarized as follows: overall principals were in agreement with 19 out of 20 statements describing their own supervision and evaluation, and principals with three or less years of experience believed superintendents used classroom walk-throughs as a way to monitor classroom instruction more than experienced principals. In addition, principals with three or less years of experience viewed the feedback in their evaluations as more valuable than experienced principals.

Principals identified meeting at least once each year with a superintendent to establish goals for professional growth, a conclusion supported by Thomas and Vornberg (1991). Analysis shows principals reported superintendents were conferencing with them and discussing how their performance will be assessed. During formative conferences, superintendents were discussing student achievement, how faculty actively engaged students in learning (Oksana, Zepeda, & Bengtson, 2012; Schlecty, 2001), remediation for marginal teachers, and how principals support effective instruction by developing and retaining teachers (Stronge, 2013). The informal and more formative process practices of supervision were supported by Vitcov (2011).

Superintendents were observing principals in a leadership role at least once a year but were not routinely using walk-throughs to monitor classroom instructions at schools. Vitcov (2011) recommended weekly contacts as a means to improve instructional leadership. Most principals were in agreement regarding receiving meaningful feedback during the school year and improving principal performance based on the superintendents' supervision. Informal feedback from the superintendent that occured during the formative supervision appears to be more important to principals than feedback from the summative evaluation (Hvidston, Range, & McKim, 2015; Oksana, Zepeda, & Bengtson, 2012; Viramontez, 2012).

Principals perceived their evaluation system as being clearly articulated with standards, which need to be specific and clear (Kaplan, Owings, & Nunnery, 2005). These standards should be defined as "driver" behaviors (The Wallace Foundation, 2008), identifying "what should be, not just what is" (p.4, 5). Principals' agreed that their performance is evaluated at least once a year. This finding is in contrast to 12% of principals who were evaluated once every two or three years, eight percent of principals were rarely evaluated or not at all, and 80% of principals reported they were evaluated at least once a year (Protheroe, 2009). In addition, principals' input was sought concerning their evaluations**,** while Oksana, Zepeda, and Bengtson (2012) described this input as providing transparency and dialogue as a means to engage principals regarding their own evaluations. During summative evaluative conferences, principals reported their superintendents identified principals' performance strengths, areas for improvement, and expected principals to reflect about their performance (Reeves, 1998). Principals did not agree that superintendents and principals analyzed data collected from the school year during the evaluation conference. Principals believed their evaluations accurately reflected their performance and viewed the evaluation as valuable feedback. This perception regarding feedback is critical regarding effective evaluation (Jacques, Clifford, & Hornung, 2012; Hattie & Timperley, 2007; Hvidston, Range, & McKim, 2015; Oksana, Zepeda, & Bengtson, 2012; Viramontez, 2012). A limitation of feedback from principals' evaluations is the lack of principals' ability to select appropriate professional development (McMahon, Peters, & Schumaker, 2014). A variety of information including teacher evaluations, budget, and student achievement were used in principals' evaluations. This principal perception is supported by Sanders, Kearney, and Vince (2012), who detailed using multiple forms of data including student learning, teacher effectiveness, and the performance of the principal as evidenced by the achievement of specific goals in evaluation.

Novice principals, those with three years of experience or less, perceived superintendents routinely utilizing classroom walkthroughs when compared to the perceptions of principals with more experience. There was also a significant difference between novice and experienced principals' perceptions of the feedback received in an evaluation. Novice principals viewed the evaluation feedback as more valuable than experienced principals, these perceptions of evaluation between novice and experienced principals is supported by previous research (Hvidston, Range, McKim, & Mette, 2015). As first year principals are frequently found to have deficient educational leadership skills including leading effective change, creating a shared vision, and collaborative communities (Cray & Weiler, 2011), it is possible superintendents increased their frequency of school visits and feedback because of novice principals' need for differentiated supervision (Anderson & Turnbull, 2016). Also novice principals struggle with the transition to the principalship due to the complexities of the position (Nelson, de le Colina, & Boone, 2008). Formative evaluations for novice principals could contribute to their performance (Ginsberg & Berry, 1990). Approximately 50% of principals leave the profession within the first

five years of practice and many of these principals leave within their first three years (Briggs, Davis, & Cheney, 2012). Superintendents should spend more time in novice principals' buildings visiting classrooms and giving feedback to improve the performance of these novice principals and to create a trusting relationship, possibly resulting in the retention of effective principals.

**Implications**

Overall, principals were in agreement regarding important practices in the cycle of the supervision and evaluation of principals. These findings could be supported by several reasons. First, within the emergence of the importance of the principals' performance in the functioning of the school (Branch, Hanushek, & Rivkin, 2013; Leithwood, Louis, Anderson, & Whalstrom, 2004; Marzano, Waters, & McNulty, 2005), there is an increased emphasis on the supervision and evaluation of principals (Clifford & Ross, 2012: Connelly & Bartoletti, 2012). Second, as with novice teachers who require more instructional support (Zepeda, 2007), perhaps novice or inexperienced principals might require higher levels of supervision and feedback (Kearney, 2010) as compared to experienced principals.

Results from this study provide implications for those who supervise and evaluate principals, as well as for principals and those programs preparing both principals and superintendents. Principal and superintendent preparation programs need to emphasize these responsibilities in their instruction and coursework. Superintendents could refine their current practices engage in a continuous improvement focusing on instructional leadership from the perspective of the central office (Honig, 2012).

This study suggests principals are being supervised and evaluated – a claim limited to principals in a Mountain West state. However, the existing body of research is still limited (Sanders & Kearney, 2011) regarding principal evaluation. Future research might examine the processes for effectiveness of principal supervision and evaluation and ties to principal professional development. Researchers could also examine the discrepancy in responses in a more exploratory manner. Standard deviations in this study were fairly large for a 4-point scale and that was not explored. Another limitation is the low response rate. Due to the demands faced by principals during the school year researchers could consider targeting the months of January through March as researchers have experienced participants are more likely to respond during that time frame (Dillman, 2007).

When looking to the future, principal supervision and evaluation will continue to be important to the performance of principals. Principals need to be supervised in a differentiated manner based on experience and identified need. The focal point for the supervision and evaluation for principals will be a cycle of continuous improvement as evidenced by increased student achievement.

## References


Anderson, L. M., & Turnbull, B. J. (2016). Evaluating and supporting principals. The Wallace Foundation, Building a Stronger Principalship (Volume 4). Retrieved from http://www.wallacefoundation.org/knowledge-center/school-leadership/district-policy-and-practice/Pages/Building-a-Stronger-Principalship-Vol-4-Evaluating-and-Supporting-Principals.aspx

Amsterdam, C. E., Johnson, R. L., Monrad, D. M., & Tonnsen, S. L. (2003). A collaborative approach to the development and validation of a principal evaluation system: A case study. *Journal of Personnel Evaluation in Education, 17*, 221-242. doi: 10.1007/s11092-005-2981-y

Branch, G., Hanushek, E., & Rivkin, S. (2013). School leaders matter: Measuring the impact of effective principals. *Education Next*, *13*(1) 62-69. Retrieved from http://educationnext.org/school-leaders-matter/

Briggs, K., Davis, J., & Cheney, G. R. (2012). Teacher effectiveness, yes. but what about principals? *Education Week, 31,* 28-36.

Canole, M., & Young, M. (2013). *Standards for educational leaders: An analysis*. Washington: DC: Council of Chief State School Officers.

Casserly, M., Lewis, S., Simon, C., Uzzell, R., & Palacios, M. (2013). *Principal evaluations and the principal supervisor: Survey results from the great city schools*. Washington: DC: Council of Great City Schools.

Catano, N., & Stronge, J. H. (2006). What are principals supposed to do? Congruence between principal evaluation and performance standards. *NASSP Bulletin*, *90*, 221-237. doi: 10.1177/0192636506292211

Clifford, M., Berhrstock-Sharratt, E., & Fetters, J. (2012). *The ripple effect: A synthesis of research on principal influence to inform performance evaluation design*. American Institutes for Research.

Clifford, M., & Ross, S. (2011). *Designing principal evaluation: Research to guide decision making*. Washington, DC: National Association of Elementary School Principals.

Clifford, M., & Ross, S. (2012). *Rethinking principal evaluation: A new paradigm informed by research and practice.* Washington, DC: National Association of Elementary School Principals and National Association of Secondary Principals.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). New Jersey: Lawrence Erlbaum.

Condon, C., & Clifford, M. (2009). *Measuring principal performance; How rigorous are commonly used principal performance assessment instruments?* Naperville, IL; Learning Point Associates

Connelly, G., & Bartoletti, J. (2012). Rethinking principal evaluation. *Education Week, 32,* 20-21, 23. Retrived from http://www.edweek.org/ew/articles/2012/10/31/10connelly.h32.html?qs=rethinking+principal+evaluation

Cray, M., & Weiler, S. C. (2011). Principal preparedness: Superintendent perceptions of new principals. *Journal of School Leadership, 21*, 927-945.

Davis, S. H., & Hensley, P, A. (1999). The politics of principal evaluation. *Journal of Personnel Evaluation in Education, 13*, 383-403. doi: 10.1023/A:1008161417522

Davis, S., Kearney, K., Sanders, N., Thomas, C., & Leon, R. (2011). *The policies and practices*

*of principal evaluation: A review of the literature.* San Francisco, CA: WestEd.
Derrington, M. L., & Sanders, K. (2011). Conceptualizing a system for principal evaluation. *AASA Journal of Scholarship and Practice, 7*(4), 32-38. Retrieved from http://www.aasa.org/jsp.aspx
Derrington, M. L., & Sharratt, G. (2008). Evaluation of school principals using interstate school leaders licensure consortiums standards. *AASA Journal of Scholarship and Practice, 5*(3), 19-27. Retrieved from http://www.aasa.org/jsp.aspx
Dillman, D. A. (2007). *Mail and internet surveys: The tailored design method* (2nd ed.). New Jersey: John Wiley & Sons.
Ginsberg, R., & Berry, B. (1990). The folklore of principal evaluation. *Journal of Personnel Evaluation in Education*, *3*, 205-230. doi: 10.1007/BF00131485
Goldring, E., Cravens, X. C., Murphy, J., Elliot, S. N., & Carson, B. (2009). The evaluation of principals: What and how do states and urban districts assess leadership? *Elementary School Journal, 110*, 19-39. Retrieved from https://www.researchgate.net/publication/228337322_The_evaluation_of_principals_What_and_how_do_states_and_districts_assess_leadership
Harrison, W. C., & Peterson, K. D. (1988). Evaluation of principals: The process can be improved. *NASSP Bulletin, 72*(508), 1-4. Retrieved from http://bul.sagepub.com/content/72/508/1.short
Hattie, J., & Timperley, H., (2007). The power of feedback. *Review of Educational Research, 77*, 81-112. doi: 10.3102/003465430298487
Honig, M. I. (2012). District central office leadership as teaching: How central office administrators support principals; development as instructional leaders. *Education Administration Quarterly, 48*, 733-774. doi: 10.1177/0013161X12443258
Hvidston, D. J., Range, B. G., & McKim, C. A. (2015). Principals' perceptions regarding their supervision and evaluation. *The American Association of School Administrators (AASA) Journal of Scholarship and Practice*. *12*(2), 20-33. Retrieved from http://www.aasa.org/jsp.aspx
Hvidston, D. J., Range, B. G., McKim, C. A., & Mette, I. M. (2015). The views of novice and late career principals concerning instructional leadership and organizational leadership within their evaluation. *Planning and Changing, 46*(1/2), 109-126. Retrieved from http://libproxy.uwyo.edu/login/?url=http://search.proquest.com/docview/1719448921?accountid=14793
Jacques, C., Clifford, M., & Hornung, K. (2012). *State policies on principal evaluation: Trends in a changing landscape*. Washington, DC: National Comprehensive Center for Teacher Quality.
Kaplan, L. S., Owings, W. A., & Nunnery, J. (2005). Principal quality: A virginia study connecting Interstate school leaders licensure consortium standards with student achievement. *NASSP Bulletin, 89*(643), 28-48. doi: 10.1177/019263650508964304
Kearney, K. (2010). *Effective principals for California schools: Building a coherent leadership development system*. San Francisco: WestEd.
Leithwood, K., Louis, K. S., Anderson, S., & Whalstrom, K. (2004). *Review of research: How leadership influences student learning*. New York: The Wallace Foundation.
Louis, K. S., Leithwood, K., Whalstrom, K. L., & Anderson, S. E. (2010). *Learning from leadership: Investigating the links to improved student learning.* New York: The Wallace Foundation.

Marzano, R. J., Waters, T., & McNulty, B. (2005). *School leadership that works: From research to results.* Alexandria, VA: Association for Supervision and Curriculum Development.

Mattson, H., Sanders, N., and Kearney, K. (2011). *How six states are implementing principal evaluation systems*. San Francisco: WestEd.

McMahon, M., Peters, M. L., & Schumacher, G. (2014). The principal evaluation process and its relationship to student achievement. *AASA Journal of Scholarship and Practice, 11*(3), 34-48. Retrieved from http://www.aasa.org/jsp.aspx

Murphy, J., Hallinger, P., & Peterson, K. D. (1985). Supervising and evaluating principals: Lessons from effective districts. *Educational Leadership*, *43*(2), 78-82. Retrieved from http://www.ascd.org/publications/educational-leadership/archived-issues.aspx

Nelson, S. W., de le Colina, M. G., & Boone, M. D. (2008). Lifeworld or systemsworld: What guides novice principals? *Journal of Educational Administration, 46*(6), 690-701. doi: 10.1108/09578230810908280

New Leaders. (2012). *New leaders principal evaluation handbook*. New York: Author.

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

Oksana, P., Zepeda, S., & Bengtson, E. (2012). Principals' experiences of being evaluated: A phenomenological study. *Educational Assessment, Evaluation and Accountability*, *24*(3), 215-238. doi: 10.1007/s11092-012-9150-x

Popham, J. W. (2013). On serving two masters: Formative and summative teacher evaluation. *Principal Leadership, 13*(3), 18-22.

Portin, B. S., Feldman, S., & Knapp, M. S. (2006). *Purposes, uses, and practices of leadership assessment in education.* Seattle, WA: Center for the Study of Teaching and Policy, University of Washington.

Protheroe, N. (2009). *The k-8 principal in 2008: a ten year study, eighth in a series of research studies launched in 1928*. Alexandria, VA: National Association of Elementary School Principals.

Range, B. G., Young, S., & Hvidston, D. (2012). Teacher perceptions about observation conferences: what do teachers think about their formative supervision in one US school district? *School Leadership & Management, 33*, 61-77. doi: 10.1080/13632434.2012.724670

Reeves, D. B. (1998). Holding principals accountable: Seven considerations for effectively evaluating your site administrators. *The School Administrator, 55*(9), 1-6. Retrieved from http://www.aasa.org/SchoolAdministratorArticle.aspx?id=15362

Reeves, D. B. (2008). *Assessing educational leaders: Evaluating performance for improved individual and organizational results*. Thousand Oaks, CA: Corwin Press.

Sanders, N., & Kearney, K. (2011). *A brief overview of principal evaluation literature: Implications for selecting evaluation models*. San Francisco, CA: WestEd.

Sanders, N., Kearney, K., & Vince, S. (2012). *Using multiple forms of data in principal evaluations: An overview with examples*. San Francisco, CA: WestEd.

Schlecty, P. (2001). *Shaking up the schoolhouse: How to support and sustain educational innovation*. San Francisco, CA: Jossey-Bass.

Stronge, J. H. (2013). Principal evaluation from the ground up. *Educational Leadership, 70*(7), 60-65. Retrieved from http://www.ascd.org/publications/educational-leadership/archived-issues.aspx

Stronge, J. H. (1996). Balancing individual and institutional goals in education personnel evaluation: A conceptual framework. *Studies in Educational Evaluation, 21*, 131-151. Retrieved from http://www.journals.elsevier.com/studies-in-educational-evaluation/

Superville, D. R. (2014). Ed. department puts a spotlight on principal's central role. *Education Week, 34*(13), 1,10-11. Retrieved from http://www.edweek.org/ew/articles/2014/12/01/13principals.h34.html

Thomas, C., & Vornberg, J. A. (1991). Evaluating principals: Directions for the '90s. *NASSP Bulletin, 75*(539), 59-64. Retrieved from http://bul.sagepub.com/content/75/539/59

U.S. Department of Education (USDoE) (2009). *Race to the top program executive summary*. Washington, DC: Author. Retrieved from http://www2.ed.gov/programs/racetothetop/executive-summary.pdf

U.S. Department of Education (USDoE) (2014). *School improvement grants (SIG) webinar series*. Washington, DC: Author. Retrieved from http://www2.ed.gov/programs/sif/pptwebinar12192015.pdf

Viramontez, S. (2012). *An exploration of the perceptions of elementary principals on the process and benefits of the principal evaluation*. University of San Francisco, California.

Vitcov, B. (2011). Managing principals. *The American School Board Journal, 198*(2), 26-28. Retrieved from http://www.asbj.com/MainMenuCategory/Archive

The Wallace Foundation. (2008). *Becoming a leader: Preparing school principals for today's schools*. New York: Author.

Zepeda, S. J. (2007). *Instructional supervision: Applying tools and concepts* (2nd ed.). Larchmont, NY: Eye On Education.

# Investigating the Role of Collective Trust, Collective Efficacy, and Enabling School Structures on Overall School Effectiveness

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


**Julie Gray**
*University of West Florida*

*This study investigated the role of collective trust, collective efficacy, and enabling school structures on overall school effectiveness. While the concept of organizational effectiveness can be complex and difficult to measure, the results of this research demonstrated a connection of these variables to school effectiveness. Collective trust had a strong influence on organizational effectiveness, controlling for all the other variables including SES. This finding was consistent with earlier work of Tarter and Hoy (2004), which also indicated the significance of trust in teachers' perceptions of school effectiveness.*


**ISSN: 1532-0723** 

Over the last four decades many studies have been conducted about organizational effectiveness, even more recently in context to overall school effectiveness. It is widely accepted as a complex, multifaceted concept, one that warrants further investigation (Hoy & Ferguson, 1985; Mott, 1072). This study explores the role of collective trust (CT) which is comprised of teacher trust in principal, colleagues, and clients (students and parents), collective efficacy (CE), and enabling school structures (ESS) in relation to overall school effectiveness (SE). In order to determine the degree of school effectiveness, teachers assess the "general level of productivity, flexibility, adaptability, and efficiency in their schools" (Tarter & Hoy, 2004, p. 541).

When analyzing overall school effectiveness, it is important to consider inputs (personnel, facilities, financial and instructional resources), processes (curriculum, policies, parental involvement, and learning opportunities for all), and outcomes (student achievement, test results, graduation and attendance rates, and completion rates) of schools (NEA, 2013). We can better determine the level of effectiveness when we analyze teachers' perceptions about each aspect of the school environment. Therefore, this study examined the role of teachers' perceptions of trust, efficacy, and enabling structures in relationship to overall school effectiveness.

## Theoretical Framework

This study hypothesizes that collective trust, collective efficacy, and enabling school structures will individually and jointly contribute to overall school effectiveness. The framework is based upon organizational theory and research related to school culture and climate. Much of the business literature lends itself to what has become organizational theory. This study asserts that collective trust, collective efficacy, and enabling school structures provide a foundation upon which a school can become more effective, meet goals, work efficiently, and improve teaching and learning, which this paper purports to be the goal of all schools. Forsyth, Adams, and Hoy (2011) described enabling structure, organizational mindfulness, and collective efficacy as "antecedents of collective trust" (p. 60). Hoy and Sweetland (2001) further surmised enabling school structures promote trusting relationships among faculty, which in turn affect school effectiveness and support this framework.

### Collective Trust

Forsyth et al. (2011) developed the notion of collective trust, which builds upon previous literature about trust in the workplace. Trust is defined as "a faculty's willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, reliable, competent, honest, and open" (p. 35). For the sake of this study, collective trust is comprised of teacher trust in principal, colleagues, and clients, including students and parents (Adams & Forsyth, 2010). Trust is considered an essential ingredient in the work of schools (Bryk & Schneider, 2002; Hoy & Tschannen-Moran, 1999). A healthy school culture must be built upon trusting, collegial relationships among teachers, principal, colleagues, students, and parents (Tarter & Hoy, 2004). A recent meta-analytic review of research about school effectiveness "demonstrated that teacher trust was the most powerful predictor of school effectiveness" (Mitchell, Sun, Zhang, & Mendiola, 2015, p. 168).

Forsyth et al (2011) noted that as a collective property with different references to relationships, collective trust represents teachers' perceptions of trust of their colleagues, clients,

and their principal. If faculty members trust the principal, then they tend to have confidence that the principal will keep his word and act in their best interest. In regard to trusting their colleagues, teachers are more likely to believe that they can depend upon their coworkers, especially in challenging circumstances, and rely upon them to act with integrity. In fact, Hoy, Tarter, and Kottkamp (1991) found that faculty trust in principal and colleagues were both positively correlated with student achievement, which is often associated with overall school effectiveness.

Forsyth et al (2000) argued that in contrast to interpersonal trust, that which one person has with an individual, collective trust is defined by a group's willingness to be vulnerable to another group or even an individual. Collective trust can be developed from social and nonverbal interactions amongst group members. Further, teachers' perceptions of trust in the principal and their colleagues depend greatly upon the actions of each. Finally, the cultivation of trust within the organization is supported by optimistic faculty perceptions of their colleagues' instructional abilities and the enabling structure of the school (Hoy & Miskel, 2008; Tschannen-Moran, 2004). Collective trust and collective efficacy have been linked together as school properties that promote learning and facilitate student achievement (Goddard et al, 2000; Hoy, 2003).

**Collective Efficacy**

Collective efficacy is defined as "the groups' shared belief in its conjoint capabilities to organize and execute courses of action required to produce given levels of attainments" (Bandura, 1997, p. 477). In schools collective efficacy is represented by teachers' perceptions of the ability of their colleagues to educate students successfully (Goddard, Hoy, & Hoy, 2000). There is an assumption that the "more efficacious the teachers are as a group, the more likely they will sustain the efforts needed to develop and enhance student achievement" (Gray & Tarter, 2012). When collective efficacy is high, teachers believe that they can make a difference with their students and be effective in overcoming negative external influences because of their collective efforts (Forsyth et al., 2011).

Collective efficacy is also considered to be a strong determinant of teacher trust in colleagues and clients, including students and parents (Forsyth et al., 2011) and a strong predictor of student achievement despite socioeconomic status of the student population (Bandura, 1986; Goddard et al., 2000). Collective efficacy has also been linked to student achievement and overall school effectiveness (Tarter & Hoy, 2004). Thus, "collective efficacy should give teachers purpose, encourage them to plan, and take responsibility for student achievement" (Hoy & Sweetland, 2001, p. 317). Efficacious teachers tend to be resilient and overcome challenges rather than allowing obstacles to hinder their success in meeting their shared academic goals for their students (Forsyth et al. 2011).

Goddard, Hoy, and Hoy (2004) concluded "for schools, perceived collective efficacy refers to judgment of teachers in a school that the faculty as a whole can organize and execute the courses of action required to have a positive effect on students" (p. 4). When collective efficacy is perceived by teachers as high, they are more likely to have faith in the ability of their students and colleagues (Forsyth et al, 2011; Hoy, 2003). These teachers are often able to overcome external factors, such as low socioeconomic status of students and the community members (Bandura, 1986; Forsyth et al., 2011; Hoy, 2003).

As teachers' perceptions of collective efficacy increase so do their levels of trust in

clients, represented by students and parents (Forsyth et al., 2011; Hoy, 2003). Therefore, "high collective efficacy, in turn, stimulates teachers to set challenging student goals, to work harder, to persist longer in their teaching, to be resilient when they confront difficulties, and to seek and use constructive feedback" (Forsyth et al, 2011, p. 89). In other words, higher collective efficacy leads to more satisfied teachers and improved student achievement. Goddard et al. (2000) found collective teacher efficacy had "the potential to contribute to our understanding of how schools differ in the attainment of their most important objective – the education of students" (p. 483). Finally, for teachers' beliefs in one another's ability to be altered significantly, a major change would have to occur within the school structure or organization.

**Enabling School Structures**

Enabling school structures (ESS) represent the teachers' belief that the administration and rules of the school help them in their work (Hoy & Sweetland, 2000, 2007). School organizations are centralized and formalized with varying degrees of decision making, policies, regulations, and rules (Gray, Kruse & Tarter, 2015; Hoy 2003). The formalization of the school ranges from hindering to enabling along a continuum (Hoy, 2003). Enabling school structure is established upon a "hierarchy of authority and a system of rules and regulations that help rather than hinder the teaching learning mission of the school" (Hoy, 2003, p. 91). This structure allows teachers to resolve issues and problems with the support of the principal who promotes professionalism and openness within the organization (Hoy & Sweetland, 2007). In contrast, hindering structures are more closely managed or controlled by the leader (Hoy, 2003). Hoy and Sweetland (2007) found that schools need a "structure that enables participants to do their jobs more creatively, cooperatively, and professionally" (pp. 362-363). There tends to be less conflict, more trust, and more professional autonomy in schools with enabling structures (Hoy, 2003; Hoy & Sweetland, 2001).

Teachers who described their school as effective were "characterized by (a) more participative organizational processes, (b) less centralized decision making structures, (c) more formalized general rules, and (d) more complexity or high professional activity" (Miskel, Fevurly, & Stewart, 1985, p. 114). Principals who support teachers in doing their jobs well, rather than hindering their work, are characterized by enabling school structures (Hoy & Sweetland, 2007). Schools with enabling structures "develop an atmosphere of trust and teacher commitment to the school and its mission" (Hoy, 2007, p. 372). Enabling school structures should allow teachers to do their jobs more effectively, professionally, and cooperatively (Hoy & Sweetland, 2001). Therefore, faculty in schools with enabling structures "view problems as opportunities, foster trust, value differences, learn from mistakes, anticipate the unexpected, facilitate problem solving, enable cooperation, encourage innovation, and [are] flexible" (Hoy, 2003, p. 92). These factors contribute to enabling school structures, as well as to the overall organizational effectiveness of the school.

**Organizational Effectiveness**

Organizational effectiveness is a general condition that determines the extent to which teachers perceive their school to be effective in achieving established goals, maintaining efficiency in operations, and an ability to adapt to changes within the organization (Hoy & Ferguson, 1985; Miskel et al., 1985). Based upon the original measure, Mott (1972) originally conceptualized

this multifaceted construct in a study conducted for NASA and in hospitals. Forsyth et al (2011) argued that if organizations are to survive and be effective, they must accommodate their environments, achieve their goals, maintain solidarity among their parts, and create and maintain a successful motivational system" (p. 84).

Mott's (1972) instrument was reformulated by Miskel et al. (1985) as a measure of school effectiveness in five dimensions: quantity and quality of the product, efficiency, adaptability, and flexibility. The quantity and quality of the product in school environments generally refers to student achievement and other standards measures of school effectiveness (Hoy & Ferguson, 1985). Miskel et al (1985) defined adaptability as the ability to anticipate problems, develop solutions promptly, and to utilize new processes and resources as appropriate. In contrast, flexibility is described as the ability to make quick adjustments especially in emergency circumstances.

Forsyth et al (2011) noted that school effectiveness is used as "an umbrella term for an approach to evaluating schools" (p. 82). Forsyth et al. found theoretical and conceptual issues related to the link between trust and school effectiveness. Many concern themselves with the internal aspects of the organization while others consider the external factors, the outputs. In most cases schools are evaluated by student achievement data and determined to be effective or ineffective by supervising entities, usually the state board of education and accreditation boards. Forsyth et al. noted, "Admittedly, these are not perfect indicators of academic performance, but they are reliable measures of student achievement, and they have been used by states to measure academic progress" (p. 84).

Hoy and Ferguson (1985) later refined, improved, and validated the school effectiveness scale in order to be used in context to the school environment. Bailes (2015) noted, "Despite its continued reliability, the definition of organizational effectiveness remained controversial, especially when researchers used the measure to examine schools" (p. 149). School effectiveness has been further investigated by several researchers (Hoy, Tarter, & Kottkamp, 1991; Hoy & Miskel, 2008) and linked to school structures as well (Miskel et al., 1985; Miskel, McDonald, & Bloom 1983). Teachers who viewed their school as effective were "characterized by (a) more participative organizational processes, (b) less centralized decision making structures, (c) more formalized general rules, and (d) more complexity or high professional activity" (Miskel et al., 1985, p. 114).

While there has been much discussion about the complexities of school effectiveness, most researchers agree that effective schools prioritize student achievement and learning (Lezotte, 1989; Reynolds, Teddlie, Chapman, & Stringfield, 2015; Sweetland & Hoy, 2000). Hoy and Ferguson (1985) surmised "organizations were considered effective to the extent that they accomplished their goals" (Mitchell et al., 2015, p. 163). In this age of high stakes accountability, many view school effectiveness in terms of student achievement and test results, however for this study the focus is on teachers' perceptions of the school's effectiveness based upon the School Effectiveness measure (Hoy & Ferguson, 1985). Teddlie, Stringfield, and Reynolds (2000) emphasized the importance of contextual differences in schools that should be considered when analyzing school effectiveness. Specifically, they concluded that the socioeconomic status of student body, type of community, grade levels (elementary, middle or high), and governance of the school structure all contribute to the overall effectiveness of the school.

## Research Questions and Hypotheses

This quantitative study investigated teachers' perceptions about school effectiveness, various types of trust, collective efficacy, and enabling school structures. The dependent variable for this study was overall school effectiveness, while the independent variables were collective trust, collective efficacy, and enabling school structures. The control variable was socioeconomic status, as measured by the proxy of the percentage of students eligible for free and reduced lunch services at each school. Figure 1 represents a conceptual diagram of the hypothesized relationships of the variables of this study. These research questions guided this study:

Q1: To what extent do collective trust, collective efficacy and enabling school structures explain school effectiveness?

Q2: To what extent are collective trust, collective efficacy, enabling school structures and school effectiveness related?

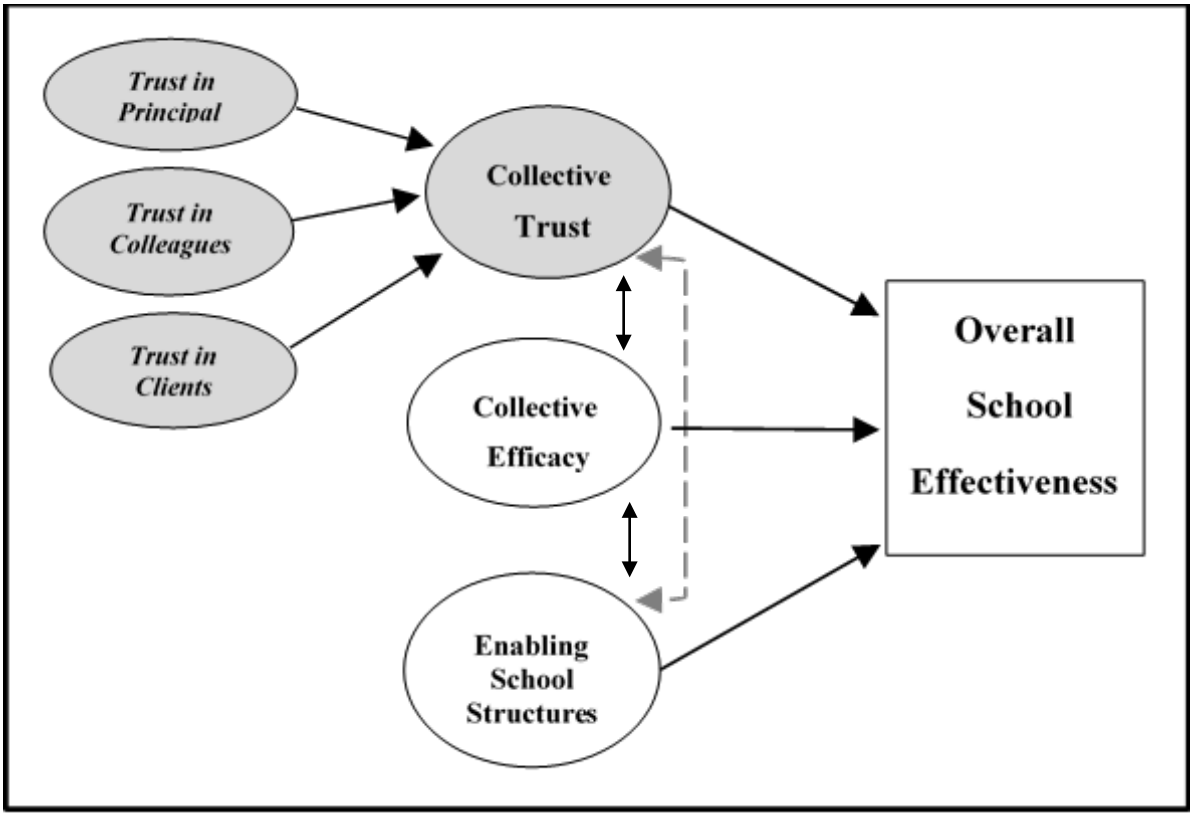


Figure 1. Conceptual Diagram Hypothesized Relationships

### Hypotheses

Trust, efficacy, and enabling school structures should correlate with each other and school effectiveness. Therefore, the researcher in this study hypothesized:

H1: Collective trust, collective efficacy, enabling school structures, and overall school effectiveness will be correlated with each other.

Each of the independent variables should logically contribute to the effectiveness of the school, although there was guiding literature to support such thinking. Furthermore, the

variables were investigated through statistical regression and it was hypothesized that:

H2: Collective trust, collective efficacy, and enabling school structures will individually and jointly contribute to an explanation of overall school effectiveness**.**

## Methodology

### Sample

For this study a sample of Alabama elementary schools was identified, data were collected from the faculty in each school, and then the data were analyzed. The schools were randomly selected from all elementary schools in the state of Alabama and the school was the unit of analysis. In the following section the specifics of the sample of the study, reliability and variability of the measures, data collection process, and the statistical analyses will be described.

Teachers from 83 elementary schools from ten urban southeastern school districts made up the sample for this study. The public school districts had student enrollment that ranged from 1,600 to 17,000 students. The mean percentages of students who were eligible for free or reduced lunch services were 51% of the students enrolled. The ethnic make-up of the students enrolled in the schools in the sample was: 59% Caucasian, 34% African American, Hispanic (non-white) 4.3% and Asian/Pacific Islander 1%. Of the teachers from the district who participated in the study 39% had earned a bachelor's degree, 52% had a Master's degree, and 7.5% had a doctoral degree.

### Data Collection

An existing database from an elementary school study in the state of Alabama provided the data for this study of 83 public schools. This quantitative study investigated teachers' perceptions about school effectiveness, various types of trust, collective efficacy, and enabling school structures. Surveys were completed during regularly schedule faculty meetings, participation was voluntary, and all schools were randomly selected throughout the state. Data were entered into Excel and imported into SPSS for statistical analysis.

At each school either the principal or secretary acted as the liaison for the school and encouraged teacher participation in the study. Hard copies of the trust, collective efficacy, enabling school structures, and school effectiveness instruments were provided and completed during regularly scheduled faculty meetings and gathered by a researcher. School visits occurred throughout the state of Alabama over two months. The results of the surveys were gathered, scored, and aggregated to the school level using Excel and SPSS software.

### Instrumentation

Collective trust was measured as a combined variable to include: trust in principal, trust in colleagues, and trust in clients (students and parents) using the Omnibus Trust Scale, a 26-item Likert scale (Hoy & Tschannen-Moran, 2003). Sample items are "the principal doesn't tell teachers what is really going on (reverse scored)" and "teachers in this school trust each other." Each of the trust subscales has a history of reliabilities in the .8-.9 range (Hoy & Tschannen-Moran, 2003) and .96 for this study (Gray & Tarter, 2012). Trust in principal (8 items), trust in colleagues (8 items), and trust in clients (10 items) are subscales of the Omnibus Trust Scale.

Collective efficacy was measured using the short version of the Collective Efficacy (CE) Scale, a 12-item Likert-type scale which was developed by Goddard, Hoy, and Hoy in 2000. The Cronbach's alpha for the short form was .96 (Goddard et al., 2000) and .90 for this study. Sample items are "teachers here are confident they will be able to motivate their students" and "teachers in this school believe that every child can learn" (Goddard et al., 2000).

The Enabling School Structures (ESS) scale was used to measure enabling school structures. This scale is a 12-item, five point Likert-type scale that ranges from "never" to "always" which was developed by Hoy and Sweetland (2001). The Cronbach's alpha for the instrument was in the high .8 and .9 (Hoy & Sweetland, 2001) and .92 for this study (Gray & Tarter, 2012). Sample items are "administrative rules help rather than hinder" and "the administrative hierarchy of this school enables teachers to do their job" (Hoy, 2003).

School effectiveness was measured by the SE-Index, School Effectiveness Scale, an eight-item, six-point Likert-type scale that was developed by Hoy (2009). Sample items include "most everyone in the school accepts and adjusts to changes" and "teachers in this school anticipate problems and prevent them" (Miskel et al., 1985). The alpha coefficient of reliability for this measure was .94 for this study (Gray & Tarter, 2012).

Socioeconomic status (SES) was measured by the percentage of students qualifying for free and reduced lunch, a commonly accepted proxy for SES. The more students who qualify for lunch services, the lower the SES of the school tended to be, as expected.

## Data Analysis

The descriptive data of the study are summarized by the means, standard deviations, and ranges for each of the variables reported (see Table 1). Next, the intercorrelations among the variables of the study are reported after statistical analysis was conducted (see Table 2). Finally, the results of the multiple regression analyses predicting overall school effectiveness are shared (see Table 3).

The independent variables for this study were collective trust, collective efficacy, and enabling school structures, while the dependent variable was overall school effectiveness. The components of collective trust are comprised of teacher trust in principal, trust in colleagues, and trust in clients (students and parents). While teacher perceptions were being measured, the school was the unit of analysis; therefore, the individual responses were aggregated to the school level for all variables.

Table 1
*Descriptive Statistics of Sample*

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Collective Trust | 83 | 3.41 | 5.68 | 4.8008 | .48149 |
| Trust in Principal | 83 | 3.04 | 5.98 | 5.2182 | .57712 |
| Trust in Colleagues | 83 | 3.71 | 5.88 | 5.0088 | .49230 |
| Trust in Clients | 83 | 3.09 | 5.79 | 4.1755 | .62961 |
| Collective Efficacy | 83 | 3.62 | 5.55 | 4.6346 | .49667 |
| Enabling Structures | 83 | 3.53 | 4.88 | 4.2577 | .33849 |
| Overall Effectiveness | 83 | 6.19 | 8.82 | 7.6417 | .60904 |
| SES | 83 | 9.30 | 99.00 | 55.0420 | 22.7266 |

The Pearson Correlation Coefficient was used to consider the relationship between each of the independent variables (collective trust, collective efficacy, and enabling school structures) with the dependent variable, overall school effectiveness. Multiple regression analysis was used to determine the individual and collective relationships between the independent variables to the dependent variable. The control variable was SES which was measured by a proxy indicator, the percentage of students eligible for free or reduced lunch services.

Figure 2 demonstrates the configuration of the hypothesized relationships between collective trust, collective efficacy, and enabling school structures as regressed on overall school effectiveness with the results of the statistical analysis. Multiple regression analysis was used to test the relationships of collective trust, collective efficacy, enabling school structures, and overall school effectiveness, controlling for SES (see Table 3).

## Results

Hypothesis 1 was supported because all the variables were significantly correlated with one another (Table 2). Collective trust, collective efficacy, and enabling school structures had significant correlations with school effectiveness. Organizational effectiveness and collective trust shared the strongest and significant relationship with a .78 ($\rho < .01$) correlation. Collective efficacy and organizational effectiveness had a strong correlation of .65 correlation ($\rho < .01$), while enabling school structure and organizational effectiveness also had a moderate and significant correlation of .51 ($\rho < .01$).

Table 2
*Pearson Correlations of All Variables (N=83)*

| | Collective Trust | Collective Efficacy | Enabling Structures | Free/Reduced Lunch (SES) |
|---|---|---|---|---|
| School Effectiveness (SE) | .78** | .65** | .51** | -.34** |
| Collective Trust (CT) | 1 | .81** | .58** | -.55** |
| Collective Efficacy (CE) | | 1 | .43** | -.76* |
| Enabling Structures (ESS) | | | 1 | -.27* |

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

As demonstrated in Figure 2, collective trust, collective efficacy, and enabling school structure explained 60% of the variance of school effectiveness while controlling for socioeconomic status. Collective trust had a significant effect on school effectiveness ($\beta = .55$, $\rho < .01$), while collective efficacy had a less significant effect on school effectiveness ($\beta = .37$, $\rho < .05$) (see Figure 2, Table 3).

Table 3
*Regression of Effectiveness on ESS, Collective Trust, Collective Efficacy and SES*

Coefficients[a]

| Model | | Unstandardized Coefficients *B* | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | *t* | Sig. |
|---|---|---|---|---|---|---|
| 1 | (Constant) | 1.223 | .831 | | 1.472 | .145 |
| | Collective Trust (CT) | .685 | .183 | .551 | 3.749 | .000 |
| | Collective Efficacy (CE) | .445 | .205 | .372 | 2.172 | .033 |
| | Enabling Structures (ESS) | .165 | .155 | .095 | 1.066 | .290 |
| | FRL (SES) | .007 | .003 | .270 | 2.355 | .021 |

a. Dependent Variable: Effectiveness

## Discussion

Collective trust (faculty trust in students, parents, colleagues, and the principal) had a strong influence on organizational effectiveness, controlling for all the other variables including SES. This finding was consistent Tarter and Hoy (2004) and Mitchell et al. (2015), who reported the significance of trust in creating effectiveness. Therefore, it was not surprising that collective

efficacy had a substantial and significant relationship with organizational effectiveness controlling for all the other variables in the regression. As Goddard (2002) noted, "Past school successes tend to raise a faculty's belief in its collective capabilities" (p. 171). So, as teachers continue to experience success within the school organization their level of collective efficacy increases, as well as their confidence and self-efficacy. As hypothesized each of the variables in this study contributed to overall school effectiveness.

For this study the most significant predictor of overall school effectiveness was collective trust, as evidenced in other studies (Tarter & Hoy, 2004; Mitchell et al., 2015). Each of the dependent variables, collective trust, collective efficacy, and enabling school structures, had a moderate correlation with overall school effectiveness, with collective trust being the strongest.

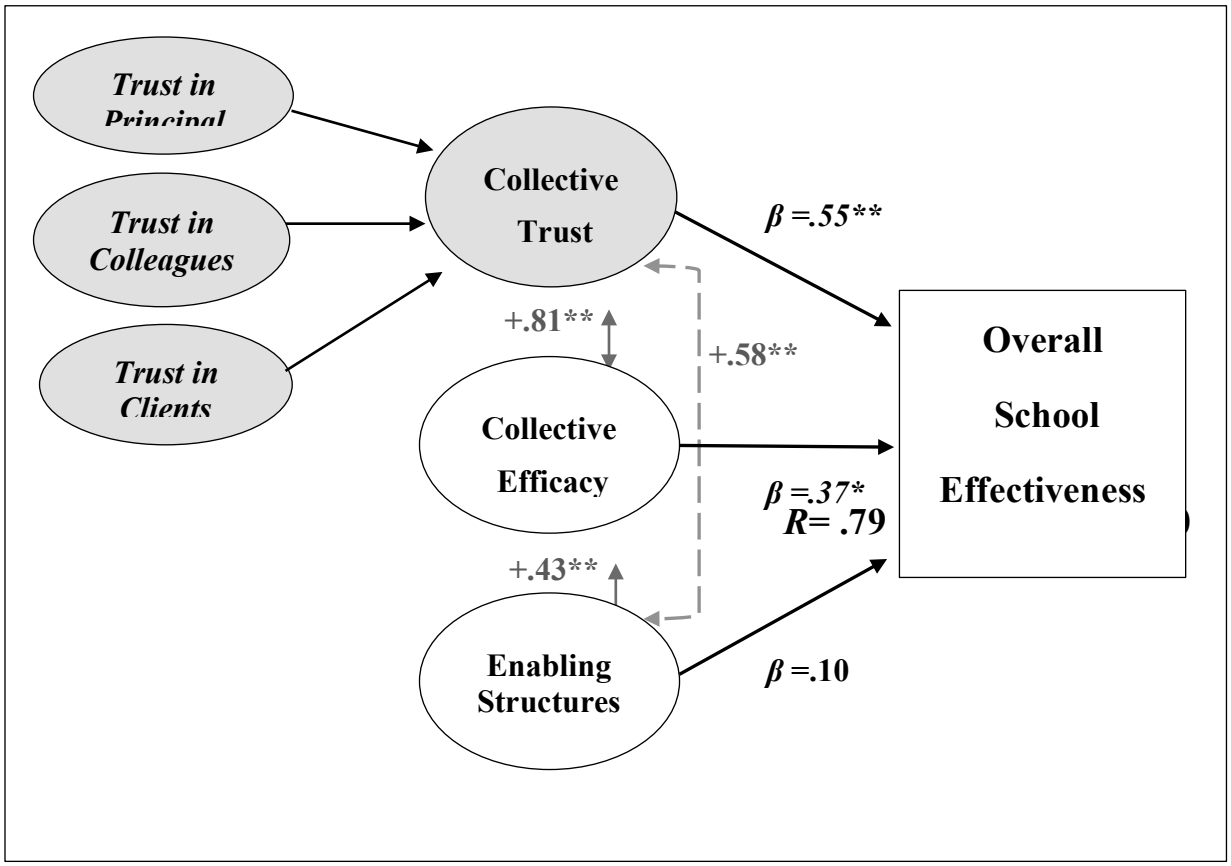


*Figure 2.* Conceptual Diagram Hypothesized Relationships with Results. ** Significant at 0.01 level * Significant at 0.05 level

There is also evidence that enabling school structures facilitate rather than hinder the teaching-learning process (McGuigan & Hoy, 2006). Further, enabling school structures "encourage trusting relationships among teachers and between teachers and the principal" (Hoy, 2003, p. 91). Collective teacher efficacy has a positive effect on students, and thus student achievement (Goddard et al., 2000).

## Implications for Practice and Future Research Recommendations

In summary, this study demonstrates the necessity and importance of collective trust and collective efficacy in the establishment of overall school effectiveness. While correlated to school effectiveness, the regression showed that enabling school structures did not have as much of an effect as the other two independent variables did in explaining the variance. The reciprocal relationship of school effectiveness and collective trust confirms the hypotheses. These research findings can guide the practitioners in the field while extending the field of literature about school effectiveness, trust, efficacy, and school structures.

Hoy and Sweetland (2007) "hypothesize[d] that enabling school structures are important to the development of effective learning organizations . . . and to the creation of enabling knowledge" (p. 361). Schools with enabling structures should promote professional communication and relationships that are collegial, supportive, open and empowering. These schools also tend to have teachers with high collective efficacy which leads to shared responsibility of student success and academic achievement. As Goddard et al (2007) noted, "Collective teacher efficacy, therefore, has the potential to contribute to our understanding of how schools differ in the attainment of their most important objective – the education of students" (p. 143).

Forsyth et al. (2011) offered four general guidelines for practitioners: "establish trust in the principal by being trustworthy; be mostly a leader, sometimes a manager; expect, respect, and model organizational citizenship; and develop and nurture a culture of trust and optimism" (pp. 166-170). Establishing faculty trust in the principal should be a priority for school leaders, one that leads to healthier professional relationships and school climate (Calman, 2011; Forsyth et al., 2011; Hoy & Sabo, 1998).

Bryk and Schneider (2002) asserted that principals should promote a trusting school culture by believing in the ability of their teachers, sharing responsibilities, reaching out to parents, encouraging collaborative work practices, and maintaining high expectations for academics. School leaders must function as the drivers of change and improvement by encouraging collaboration and cooperation among all stakeholders, including students, parents, community members, and the faculty (Bryk & Schneider, 2002; Calman, 2011). Collective trust, collective efficacy, and enabling school structures contribute to overall school effectiveness based upon the findings of this study. Future studies could further investigate the roles of collective trust and efficacy in relationship to school effectiveness.

## References


Adams, C. M., & Forsyth, P. B. (2010). The nature and function of trust in schools. *Journal of School Leadership, 19*(2), 126-152.

Bailes, L. (2015). Predictors of school effectiveness. In M. DiPaola, & W. Hoy (Eds.), *Leadership and school quality* (12th Volume in Research and Theory in Educational Administration series, pp. 147-160). Charlotte, NC: Information Age Publishing.

Bandura, A. (1986). *Social foundations of thought and action.* Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman.

Bryk, A., & Schneider, B. (2002). *Trust in schools: A core resource for improvement*. New York, New York: Sage Foundation.

Calman, R. C. (2011). School Effectiveness: Eight Key Factors. *Education Quality and Accountability Office Connects*, Retrieved from: http://www.eqao.com/en/Our_Data_in_Action/articles/Pages/school-effectiveness-eigh-key-factors.aspx

Forsyth, P. B., Adams, C. M., & Hoy, W. K. (2011). *Collective trust: Why schools can't improve without it*. New York, NY: Teachers College, Columbia University.

Goddard, R. D. (2002). Collective efficacy and school organization: A multilevel analysis of teacher influence in schools. In W. Hoy, & M. DiPaola (Eds.), *Theory and research in educational administration* (pp. 169-184). Charlotte, NC: Information Age Publishing.

Goddard, R. G., Hoy, W. K., & Hoy, A. W. (2004). Collective efficacy: Theoretical development, empirical evidence, and future directions. *Educational Researcher, 33*, 2-13.

Goddard, R. D., Hoy, W. K., & Hoy, A. W. (2000). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. *American Educational Research Journal*, *37* (2), 479-507.

Gray, J., Kruse, S., & Tarter, C. J. (2015). Enabling school structures, collegial trust, and academic emphasis: Antecedents of professional learning communities. *Educational Management Administration & Leadership*. Advance online publication. doi: 10.1177/1741143215574505

Gray, J., & Tarter, C. J. (2012). Collective efficacy, collegial leadership, and a culture of trust: Predicting academic optimism and overall effectiveness. In M. DiPaola, & P. Forsyth (Eds.), *Contemporary challenges confronting school leaders* (pp. 93-110). Charlotte, NC: Information Age Publishing.

Hoy, W. K. (2007). An analysis of enabling and mindful school structures: Some theoretical, research, and practical considerations. In W. Hoy, & M. DiPaola (Eds.), *Essential ideas for the reform of American schools* (pp. 372-392). Charlotte, NC: Information Age Publishing.

Hoy, W. K. (2003). An analysis of enabling and mindful school structures: Some theoretical, research, and practical considerations. *Journal of Educational Administration*, *41*(1), 87-108.

Hoy, W. K., & Ferguson, J. (1985). A theoretical framework and exploration of organizational effectiveness in schools. *Educational Administration Quarterly*, *21*, 117-134.

Hoy, W. K., & Miskel, C. G. (2008). *Educational administration: Theory, research, and practice* (8th ed.). New York: McGraw-Hill.

Hoy, W. K., & Sabo, D. J. (1998). *Quality middle schools*. Thousand Oaks, CA: Sage.

Hoy, W. K., & Sweetland, S. R. (2000). School bureaucracies that work: Enabling, not coercive. *Journal of School Leadership*, *10*(6), 525-541.
Hoy, W. K., & Sweetland, S. R. (2001). Designing better schools: The meaning and measure of enabling school structures. *Educational Administrative Quarterly*, *37*, 296-321.
Hoy, W. K., & Sweetland, S. R. (2007). Designing better schools: The meaning and nature of enabling school structures. In W. Hoy, & M. DiPaola (Eds.), *Essential ideas for the reform of American schools* (pp. 339-366). Charlotte, NC: Information Age Publishing.
Hoy, W. K. & Tschannen-Moran, M. (1999). The five faces of trust: An empirical confirmation in urban elementary schools. *Journal of School Leadership, 9*, 184-208.
Hoy, W. K., Tarter, C. J., & Kottkamp, R. B. (1991). *Open schools/healthy schools: Measuring organizational climate*. Beverly Hills, CA: Sage.
Hoy, W. K., & Tschannen-Moran, M. (2003). The conceptualization and measurement of faculty trust in schools: The omnibus T-scale. In W. K. Hoy & C. G. Miskel, *Studies in leading and organizing schools* (pp. 181-208). Greenwich, CT: Information Age Publishing.
Lezotte, L. (1989). Based school improvement on what we knew about effective schools. *American School Board Journal, 176*(6), 18-20.
McGuigan, L., & Hoy, W.K. (2006), Principal leadership: creating a culture of academic optimism to improve achievement for all students, *Leadership and Policy in Schools, 5*(3), 203-29.
Miskel, C., Fevurly, R., & Stewart, J. (1985). Organizational structures and processes, perceived school effectiveness, loyalty, and job satisfaction. *Educational Administration Quarterly*, *15*(3), 97-118.
Miskel, C., McDonald, D., & Bloom, S. (1983). Structural and expectancy linkages within schools and organizational effectiveness. *Educational Administration Quarterly*, *19*(1), 49-82.
Mitchell, R. M., Sun, J., Zhang, S., Mendiola, B., & Tarter, C. J. (2015). School effectiveness: A meta-analytic review of published research. In M. DiPaola, & W. Hoy (Eds.), *Leadership and school quality* (12th Volume in Research and Theory in Educational Administration series, pp. 161-169). Charlotte, NC: Information Age Publishing.
Mott, P. (1972). *The characteristics of effective organizations*. New York: Harper and Row.
National Educator Association (2013). *Multiple Indicators of School Effectiveness*. A Policy Brief for the National Educator Association, Center for Great Public Schools, Retrieved from: http://www.nea.org/assets/docs/NEAPolicyBriefMultipleMeasures.pdf
Reynolds, D., Teddlie, C., Chapman, C., & Stringfield, S. (2015, Aug.). Effective school processes. In C. Chapman, D. Muijs, D. Reynolds, P. Sammons, & C. Teddlie (Eds.), *The Routledge international handbook of educational effectiveness and improvement research, policy, and practice* (pp. 77- 99). Retrieved from https://www.routledgehandbooks.com/doi/10.4324/9781315679488.ch3
Sweetland, S. R., & Hoy, W. K. (2000). School characteristics and educational outcomes: Toward an organizational model of student achievement in middle schools. *Educational Administration Quarterly, 36*(5), 703-729.
Tarter, C. J., & Hoy, W. K. (2004). A systems approach to quality in elementary schools: A theoretical and empirical analysis. *Journal of Educational Administration, 42*, 539-554.
Teddlie, C., Stringfield, S., & Reynolds, D. (2000). Context issues within school effectiveness research. In C. Teddlie & Reynolds, D. (Eds.), *The international handbook of school*

*effectiveness research* (160-185). London, UK: Falmer Press.
Tschannen-Moran, M. (2004). *Trust Matters: Leadership for Successful Schools*. San Francisco: Jossey-Bass
Ulrich, D., & Smallwood, N. (2004). Tangling with learning intangibles. In M. Goldsmith, H. J. Morgan, & A. J. Ogg (Eds.), *Learning organizational learning: Harnessing the power of knowledge* (pp. 65-78). San Francisco: CA: Jossey-Bass.

# Social Justice Alert: Future Innovators and Leaders Fall Behind in Academic Achievement

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

**JoHyun Kim**
*Texas A&M University-Commerce*

**Sandra Watkins**
*Western Illinois University*

**Seung Won Yoon**
*Texas A&M University-Commerce*

*This study examined the achievement trends of advanced learners and the relationship between Illinois' school district characteristics and student performance using Illinois Standards Achievement Test (ISAT) scores. The 3rd grade students scoring in the Exceeds category in ISAT reading and math within 707 Illinois school districts during the school year 2006-2007 formed the cohort groups and were followed longitudinally through the 8th grade. On ISAT reading and math, the pattern of losing advanced learners occurred. For science, increasing proportion of Exceeds students was observed. Significant differences were found by gender, ethnicity, and district socioeconomic status. This study shed many remarkable findings that merit further discussion of policy making and future research.*


**ISSN: 1532-0723** 

## Introduction

One uncomfortable truth in the American education system is beginning to unfold. The accountability movement for at least one population of students, the high ability learners, has misled the nation and compromised the achievement of millions of these students. These future leaders and innovators have been compromised by the *No Child Left Behind Act of 2001* (NCLB). There are no provisions in the law to ensure high ability students make adequate achievement gains on an annual basis. Moreover, high ability students of color and those living in poverty are especially compromised as they fall further behind as they advance through school (Education Trust, 2014; Loveless, 2008; Olsewski-Kubilius & Clarenbach, 2014; Plucker, Burrough, & Song, 2010; Wyner, Bridgeland, & Diiulio, 2007).

The focus in school districts across this country, for over a decade, has been on the struggling learners, the students on the bubble, and the students in the middle (Education Trust, 2013). Olszewski-Kubilius and Clarenbach (2012) suggest, "the focus on minimum levels of competency and raising the lowest achieving students may indirectly negatively affect the growth of higher achieving students because the most important resource -- a teacher's time and attention -- has been singularly focused on the struggling students" (p. 8). In addition, most school districts fail to disaggregate standardized achievement data by focusing only on the "meets standard" metric for reporting results and ignore the trend data on the gains and losses of the high ability learner.

If schools make adequate yearly progress (AYP), districts are satisfied or recognized for their achievements. Moreover, most districts do not place a high priority on the identification of underachievement of high ability learners. According to many teachers and administrators, the majority of instructional time is spent delivering classroom instruction to ensure students currently in the middle stay in the middle on standardized assessments and they are also expected to help struggling learners meet the designated grade level standards. Farkas and Duffett (2008) found 60% of teachers stated low achievers were a top priority in their schools, while only 23% asserted high achievers were a top priority. Forty percent of teachers also suggested the content for honors and accelerated courses was watered down and lacked rigor. When asked which students were likely to get one-on-one attention from teachers, 80% said it would be the academically struggling students, with only 5%, alleging it would be the academically advanced students.

Watkins and Sheng (2008) utilized state cohort achievement data in Illinois to conduct a longitudinal investigation of high ability learners in Grades 3-8 from 2000-2005. The longitudinal investigation sought to explore the relationship between district characteristics and the losses or gains of the percentage of students who scored in the Exceeds (Advanced Learner) category on the state's reading and math assessment, the Illinois Standards Achievement Test (ISAT). District characteristics were examined and included socioeconomic status, district–per-pupil expenditures, district type, and enrollment size. Results in reading demonstrated a significant drop (13%) in achievement for these high ability learners from Grades 5-8, and even a larger drop (19%) in mathematics from Grades 3-5. Even though districts with a higher socioeconomic status initially had a higher number of students in the Exceeds (Advanced Learner) category than the lower socioeconomic status districts, the drops in achievement were similar.

The current longitudinal study (2006-2011) builds on the Watkins and Sheng's (2008) study, includes a longer period of cohort data on the revised 2006 state assessment and the ISAT,

examines a newly added subject (science), and further examines discrepancies in achievement trends of Advanced Learners across gender and ethnicities.

## Literature Review and Conceptual Framework

A groundbreaking study conducted by (Xiang, Dahlin, Cronin, Theaker, & Durant, 2011) utilized the *Measures of Academic Progress* (MAP) assessment, developed by the Northwest Evaluation Association (NWEA), to track the individual performance of 82,000 high performing students from Grade 3 to Grade 8. MAP is an adaptive computerized assessment that measures a student's learning level. Researchers investigated where the MAP assessment was used if high performers were adequately challenged and provided with appropriate instruction to enable them to perform at high levels over time. Students in the study were referred to as high achievers since they initially scored at the 90th percentile or above on this assessment. Findings from the study revealed a 42.7 % loss in their high performing math status from Grade 3 to 8 and a 44.1% loss in their reading status from Grade 3 to Grade 8. The researchers suggested " if these youngsters are left to fend for themselves while attention and resources are showered on their lower-achieving peers, one might expect them to drop closer to the average" (p. 1).

The term "Excellence Gap" grew out of a study conducted by Plucker et al. (2010). The researchers reviewed the national and state assessment data to ascertain the existence or non-existence of an excellence gap with those students performing at the highest levels of student achievement over time. Findings from the National Assessment of Educational Progress (NAEP) suggested the excellence gaps, especially for different racial groups, gender, and socioeconomic status, have widened during the NCLB era. The researchers stated "There has been little change in the percentage of students performing at the advanced level in reading, with particularly low performance across all subgroups in Grade 8" (p. 4). In Grade 4 mathematics, the White population increased 4.6% from 1996-2007, the African American students 0.7%, and Hispanic students 1.3%. In grade 8, the White students increased 4.5 %, the African American students 0.8%, and the Hispanic students 1%. Data on socio-economic status showed students at Grade 4, who were living in poverty or on the fringe of poverty and eligible for free and reduced lunch, and were performing at the advanced level, increased only 1.2 % while students not eligible for free and reduced lunch gained 5.6 %. At Grade 8, those enrolled in the free and reduced lunch increased 0.8%, while those not enrolled in the free and reduced lunch program gained 5.7 %. In Grade 4 mathematics, the percentage of male students scoring at the advanced level increased by 3.9 %. Females increased by only 2.7 %. In Grade 8, males scoring in the advanced level increased by 3.8% and females by 2.9 %. In reading, there was a slight discrepancy between males and females at grade 4 with reading scores increasing by approximately 1% with males at 0.8% and females at 0.9%. At Grade 8, from 1998-2007, the percentage scoring at the advanced level showed slight gains with 0.2% for males and no change for females. According to Plucker et al. (2010), the underprivileged minorities, the economically disadvantaged, as well as the English Language learners, constitute a smaller proportion of students scoring at the highest levels. The researchers concluded, "focusing only on minimum competency gaps is not a sound strategy for reducing excellence gaps" (p. 22). The researchers' conclusion suggests progress had been slow in reducing the excellence gaps since the passage of NCLB.

Loveless (2008) analyzed the 2005 NAEP data of those students scoring at the 90th percentile on the Grade 8 math assessment and found most of the students came from more privileged socioeconomic backgrounds. Among the high math achievers, only 10.2% qualified

for free or reduce lunch, 81.5% were White, 21.6% African American, and 4.4% Hispanic. Over 64% of these students came from backgrounds where mothers had graduated from college. In addition, the high achievers were more likely to attend suburban schools; only 10.6% attended high poverty schools. "High achievement students are more likely to attend schools that assign students to math classes on the basis of ability (i.e. tracking)" (p. 29). Over 78% of these students attended a school that tracked eighth-grade mathematics with 86.6% of teachers having majored or minored in mathematics in college.

Moore, Ford, and Miller (2005) asserted "despite decades of efforts (e.g., preschool programs, afterschool programs, summer programs, academic supports, etc.), many students of color still lag behind their White counterparts academically" (p. 168). The researchers recommended students of color who lag behind need to be identified as underachievers by school personnel (teachers, administrators, or school counselors), and these educators must be knowledgeable about the achievement and ability of these students and the fact they are performing below their ability. According to the researchers, if deficit thinking regarding students of color exists, the underachievement will go unrecognized and necessary interventions will not be employed. Ford (2011) contends that school policies, practices, and overall procedures play a very important role in the underrepresentation of racially and culturally different students and stated this is an area of much needed research.

The underachievement of high ability learners from low-income homes has emerged as another national concern. Wyner, Bridgeland, and Diiulio (2007) investigated the achievement of high achieving students (scored in the top 25%) from low income (family income below the national median) families. The researchers alerted the public to the fact that attention on how these students disproportionately fall out of the high achieving groups during elementary and high school needs to be addressed. Findings from these researchers indicated there were about 3.4 million students residing in low income households, with more than one million K-12 children who qualified for free and reduced lunch and ranked in the top quartile academically. According to the researchers, only 56% percent of these capable students from lower income backgrounds maintain their status as high achievers in reading by fifth grade. Together, these studies were used as the framework of this study, as they focused on achievement gap of advanced learners across gender, ethnicity, and socioeconomic status. They signal to national and state public policy makers that more focus needs to be placed on monitoring the progress of advanced learners to stem the underachievement of these future innovators and country leaders.

## Purpose of the Study

The purpose of this study was to identify the academic progress and trends of high achieving students. Using the Illinois Standards Achievement Tests (ISAT) scores over the six-year period, researchers formulated the following research questions:

1. What are the achievement trends for advanced learners in Illinois school districts?
2. How do the achievement trends compare in terms of gender and ethnicities?
3. How do the achievement trends compare in terms of districts' socioeconomic status?

## Methods

This study used a secondary data set analysis to examine the yearly progress of high achieving students at the school-district level. Secondary data set analysis is an analysis of data that is

collected by someone else for another primary purpose (Smith, 2008). The method provides access to large samples, and if longitudinal data are used, the researcher can answer questions that are relevant to population trends over time. The ISAT data set is an example of a secondary data set. The ISAT is a criterion-referenced test aligned with Illinois Learning Standards that examines students' knowledge and skills in three subject areas: reading, mathematics, and science. Based on the performance on the ISAT, students are divided into four categories using cutoff scores: Exceeds, Meets, Below Standards, and Academic Warning. According to the ISAT performance-level descriptions, Exceeds Standards is defined as student work that demonstrates advanced knowledge and skills in the subject. Variables in this study include:

- District percent scoring in the Exceeds category in reading, math, and science for a given grade level.
- Socioeconomic status -- The proportion of students receiving free and reduced lunch in a school district was obtained from 2006 to 2011. Higher percentage means there are more socioeconomically disadvantaged students in the school district. Because these percentages do not vary much from year to year (correlations for district percent of low income between these years range from 0.927 to 0.969), these percentages were averaged over the six years to obtain a single number to index district socioeconomic status.
- Gender -- Males and females scoring in the Exceeds categories.
- Ethnicity -- White, African American, Asian, Hispanic, and Multiracial students scoring in the Exceeds categories.

**Population and Sample**

Because states tend to apply different criteria to identify high achieving students, due to the accessibility, objectivity, and representativeness of the chosen sample, elementary and unit schools districts in Illinois were examined in the study. Among 771 school districts (376 elementary and 395 unit school districts) in 2006, only 707 school districts with valid ISAT reading, math, and science scores from 2006 to 2011 were selected for this study. Altogether, the sample consisted of 707 school districts with 338 elementary school districts and 369 unit school districts. The third grade students scoring in the Exceeds category in reading and math within these school districts during the school year 2006-2007 formed the cohort groups and were followed longitudinally through the eighth grade. The percentage of students scoring in the Exceeds category in science was obtained at the fourth- and seventh-grade levels for the cohort groups in 2007 and 2010 respectively.

**Analysis**

Descriptive analyses were conducted with the purpose of describing the data rather than to generalize the findings to the whole population. The district percent of Exceeds data were examined for the overall achievement trends of advanced learners, and then were disaggregated according to gender, ethnicity, and district socioeconomic status.

This study is not without limitations. This study used Illinois Standards Achievement Tests (ISAT) scores and demographic characteristics and socioeconomic status data in Illinois. Using single state data limits generalizability of findings to other states. Caution is warranted if attempting to generalize results from this study to other states.

## Results

### Question 1: District Achievement Trends for Advance Learners

An earlier study by Watkins and Sheng (2008) examined score changes for Illinois' advanced learners in ISAT reading and math at three grade levels: Grades 3, 5, and 8. In their study, the proportion of Exceeds students at the three grade levels were 25.79%, 25.47%, and 12.11% for reading and 26.71%, 7.76%, and 17.79% for math. Between the earlier and the current study, the average enrollment size of Illinois school districts slightly increased from 2,356.14 to 2,533.43 and the percentage of students receiving free and reduced lunch increased from 26.45 to 33.64 percent.

**ISAT Reading.** The percentage of students scoring in the Exceeds category in reading slightly increased from Grade 3 (24.69%) to Grade 6 (28.87%), but from Grade 6 to Grade 7 (19.45%) and Grade 7 to Grade 8 (9.74%), it declined dramatically (Table 1). More strikingly, in an earlier study, during the period of 2002 to 2005, the state observed a loss of about 1.25 standard deviation units in the percentage of students scoring in the Exceeds category between Grades 5 and 8. The drop was more significant during the period of 2008 to 2011 at 1.74 units, meaning that the percentage of students scoring in the Exceeds category in Grade 8 is on average about 1.74 standard deviation units below that in Grade 5. In other words, this was the difference between Grades 5 and 8 in average percentage of students scoring in the Exceeds category divided by the average variability of standard deviation in ISAT reading at the district level ((29.19-9.74)/ ((11.26+11.59+12.97+12.65+11.27+7.46)/6) = 1.74).

**ISAT Science.** Science test scores on the ISAT were mandated to be reported starting from 2006. The results for the ISAT Science score trend were more encouraging. In 2007, about 21.4% of students from Grade 4 performed in the Exceed category, and the percentage of advanced learners at Grade 7 increased to 25.55% in 2010 showing a 0.34 = ((25.55-21.41)/(11.24+13.30)) standard deviation unit gain between the two grade levels.

**ISAT Math.** Overall, ISAT Math scores seemed improved in terms of the proportion of Exceed students in Math when the results from the same grade level were compared to that in Watkins and Sheng's (2008) study. The proportion of Exceeds students at Grades 3, 5, and 8 was 40.59%, 16.56%, and 30.85% for the present study compared to 26.71%, 7.76%, and 17.79% from Watkins and Sheng's (2008) study. Similar to their study, ISAT Math scores displayed a rebounding pattern from the third-grade level to the eighth-grade level after observing the lowest point in the fifth grade. Illinois school districts experienced on average about 1.69 standard deviation unit reductions in the percentage of students scoring in the Exceeds category from Grade 3 to Grade 5 and about a 1.0 standard deviation unit gain from Grade 5 to Grade 8 (those numbers were 1.62 and 0.82 during 2000, 2002, and 2005).

Table 1
*Mean and Standard Deviation for District Percent Exceeds Students in ISAT Reading, Math, and Science for 707 Districts*

| | Read3 | Read4 | Read5 | Read6 | Read7 | Read8 | Sci4 | Sci7 |
|---|---|---|---|---|---|---|---|---|
| *Mean* | 24.69 | 26.34 | 29.19 | 28.87 | 19.45 | 9.74 | 21.41 | 25.55 |
| *S.D.* | 11.26 | 11.59 | 12.97 | 12.65 | 11.27 | 7.46 | 11.24 | 13.30 |

| | Math3 | Math4 | Math5 | Math6 | Math7 | Math8 | SES | Enrollment Size | Per pupil spending |
|---|---|---|---|---|---|---|---|---|---|
| *Mean* | 40.59 | 29.72 | 16.56 | 23.47 | 27.72 | 30.85 | 33.64 | 2,533.43 | 9,110.74 |
| *S.D.* | 15.50 | 14.88 | 11.58 | 12.94 | 14.75 | 15.69 | 20.19 | 15,275.68 | 1,969.50 |

**Question 2A: Gender and Achievement Trends**

As student demographics have been rapidly changing in Illinois (White population has been continuously decreasing while it was the opposite for the Hispanic group), how test scores compare between genders and among ethnicities or various socioeconomic backgrounds is a topic of growing interest. Few studies in the past systematically compared test scores across students' demographic backgrounds.

**ISAT Reading**. Overall, the proportion of Exceed students on the ISAT Reading was higher for girls, and this pattern was consistent across all grade levels (Table 2). For both genders, the same pattern of losing Exceeds students from Grade 6 to Grade 7 was noticeable. One interesting finding was that the proportion of Exceeds in reading increased slightly between the fifth (26.44%) and the sixth grade (27.52%) for boys; whereas that number slightly decreased for girls during the same time period (from 32.42% to 30.50%). This different trend between male and female students would have not been discovered if only aggregated data were analyzed.

**ISAT Science.** Examining the ISAT Science test scores by gender also provided a remarkable finding. Even though the same pattern of increasing proportion of Exceeds students was observed in both male and female students, male students' test scores were substantially higher than those from female students. The proportion of Exceed students was 5.20% higher for male students at the fourth-grade level and the gap slightly increased to 5.58% at Grade 7.

**ISAT Math.** The overall summary of ISAT Math scores across grade levels showed that after observing the lowest point at the fifth-grade level, the proportion of Exceeds students kept increasing for both male and female students. Examining students' math scores by gender also provided another important finding. At the sixth-grade level, the proportion of Exceeds students between males and females was similar (23.89% for males and 23.43% for females). The proportion of Exceeds students was slightly higher for male students in the seventh grade, but in the eighth grade, more female students scored in the Exceeds category than male students.

Table 2
*Test Score Comparisons between Male and Female Students*

| Gender | | Read3 | Read4 | Read5 | Read6 | Read7 | Read8 | Sci4 | Sci7 |
|---|---|---|---|---|---|---|---|---|---|
| *Male* | *Mean* | 21.22 | 24.55 | 26.44 | 27.52 | 16.85 | 8.42 | 24.02 | 28.22 |
| *(N=659)* | *S.D.* | 11.31 | 12.34 | 13.08 | 13.00 | 10.77 | 7.19 | 13.02 | 14.56 |
| *Female* | *Mean* | 28.37 | 28.50 | 32.42 | 30.50 | 22.63 | 11.24 | 18.82 | 22.60 |
| *(N=658)* | *S.D.* | 13.24 | 13.00 | 14.46 | 14.16 | 13.11 | 9.11 | 11.45 | 13.17 |
| | | Math3 | Math4 | Math5 | Math6 | Math7 | Math8 | | |
| *Male* | *Mean* | 42.52 | 30.39 | 17.53 | 23.89 | 28.15 | 30.20 | | |
| *(N=660)* | *S.D.* | 16.45 | 15.38 | 12.82 | 13.76 | 15.45 | 15.89 | | |
| *Female* | *Mean* | 39.32 | 29.14 | 16.05 | 23.43 | 27.46 | 31.55 | | |
| *(N=658)* | *S.D.* | 16.40 | 15.70 | 11.69 | 13.86 | 15.00 | 16.45 | | |

**Question 2B: Ethnicity and Achievement Trends**

Overall, Asian, White, and Multiracial ethnic groups scored better than Hispanic and African American students in the number of advanced learners on all ISAT subject areas (Table 3). The Asian group outnumbered other ethnic groups in the percentage being placed in the Exceed category across all grade levels and subjects. One remarkable finding was the Multiracial group's performance. The percentage of advanced learners from this group was higher than those from Hispanic and African American in all subject areas. When data were compared to the White group, the percentage of advanced learners in ISAT reading and math from the Multiracial group was generally lower, but at Grade 8, the gap became barely discernible. However, in science, the percentage of advanced learners was much higher for White students at both Grades 4 and 7 between those two groups.

**ISAT Reading.** Overall, the proportion of Exceed students on the ISAT reading was higher for White, Asian, and Multiracial groups than Hispanic and African American groups and percentage gaps across ethnicities were consistent across all grade levels. Asian students outperformed all ethnic groups at all grade levels.

**ISAT Science.** All ethnic groups demonstrated an increase in the percentage of advanced learners between the fourth and the seventh grade. There was an increase of about 8.68% for Asians, 5.02% for Whites, and 4.37% for Multiracial, and only 1.61% for Hispanics and 1.05% for African Americans.

**ISAT Math.** Across all ethnic groups, the percentage of Exceeds students kept decreasing from Grades 3 through 5, bounced back at Grade 6, and then increased through Grade 8. Similar to findings in reading, the proportion of Exceeds students on the ISAT Math was higher for White, Asian, and Multiracial students than for Hispanic and African Americans; this pattern was consistent across all grade levels. Asian students' performance was considerably higher than Whites with the proportion of Exceeds students 22.27% higher at Grade 3 and 27.89% higher at Grade 8.

Table 3
*Test Score Comparisons across Ethnicities*

| Ethnicity | | Read3 | Read4 | Read5 | Read6 | Read7 | Read8 | Sci4 | Sci7 |
|---|---|---|---|---|---|---|---|---|---|
| *White* | *Mean* | 27.38 | 29.12 | 32.50 | 32.03 | 21.96 | 11.21 | 24.14 | 29.16 |
| *(N=677)* | *S.D.* | 11.43 | 11.40 | 13.30 | 12.67 | 11.62 | 7.80 | 10.90 | 12.75 |
| *African American* | *Mean* | 10.37 | 10.55 | 13.71 | 12.33 | 8.11 | 2.49 | 5.22 | 6.27 |
| *(N=169)* | *S.D.* | 7.42 | 7.38 | 8.18 | 7.96 | 6.76 | 3.28 | 5.18 | 6.24 |
| *Hispanic* | *Mean* | 13.65 | 17.20 | 15.63 | 15.75 | 10.18 | 5.00 | 9.35 | 10.96 |
| *(N=180)* | *S.D.* | 9.16 | 10.20 | 9.11 | 8.88 | 7.56 | 5.41 | 8.22 | 7.60 |
| *Asian* | *Mean* | 39.66 | 43.05 | 45.31 | 48.74 | 38.84 | 24.42 | 30.24 | 38.92 |
| *(N=95)* | *S.D.* | 15.86 | 14.79 | 15.70 | 15.16 | 15.70 | 14.37 | 14.83 | 14.97 |
| *Multiracial* | *Mean* | 22.55 | 25.59 | 29.04 | 28.36 | 20.17 | 12.07 | 16.38 | 20.75 |
| *(N=70)* | *S.D.* | 14.44 | 13.67 | 15.71 | 15.42 | 14.29 | 11.76 | 11.15 | 13.69 |

| | | Math3 | Math4 | Math5 | Math6 | Math7 | Math8 |
|---|---|---|---|---|---|---|---|
| *White* | *Mean* | 43.97 | 32.44 | 18.61 | 26.31 | 31.04 | 34.32 |
| *(N=677)* | *S.D.* | 15.52 | 14.95 | 12.25 | 13.35 | 14.87 | 15.93 |
| *African American* | *Mean* | 19.57 | 12.34 | 6.18 | 8.91 | 10.99 | 12.76 |
| *(N=169)* | *S.D.* | 11.48 | 8.42 | 5.37 | 7.04 | 7.53 | 8.95 |
| *Hispanic* | *Mean* | 29.55 | 20.51 | 7.73 | 12.39 | 16.25 | 21.28 |
| *(N=180)* | *S.D.* | 12.47 | 10.61 | 5.84 | 8.45 | 9.69 | 11.24 |
| *Asian* | *Mean* | 66.24 | 58.13 | 40.94 | 52.14 | 57.48 | 62.21 |
| *(N=95)* | *S.D.* | 16.75 | 16.34 | 17.83 | 17.16 | 16.98 | 17.43 |
| *Multiracial* | *Mean* | 37.66 | 27.63 | 19.18 | 23.25 | 26.24 | 33.46 |
| *(N=70)* | *S.D.* | 15.94 | 15.00 | 13.75 | 14.69 | 16.00 | 17.91 |

**Question 3: District Socioeconomic Status and Achievement Trends**

To analyze the influence of district socioeconomic status on achievement trends of the Exceeds students, district socioeconomic status (SES) data were broken down by quartile. The top quartile consists of districts with less than 19% of the students receiving free and reduced lunch and those are considered high-SES districts. The bottom quartile consists of districts that have more than 46% students receiving free and reduced lunch and those that are low SES districts.

The middle two quartiles are districts that have more than 19% but less than 46% students receiving free and reduced lunch and those are the districts that have moderate SES status.

**ISAT Reading.** Achievement trends in reading, math, and science for districts with different levels of socioeconomic status show that the lower the district SES is, the lower the percentage of students scoring in the Exceeds category across the three ISAT test areas (Table 4). The sharp drop in the percentage of students who scored in the Exceeds category from Grade 6 through Grade 8 was seen across all SES levels in ISAT Reading. When analysis was made at the SES level, the dropping pattern started earlier in Grade 5 for low economic status districts, while the other two groups observed a slight gain between the fifth and the sixth grade.

**ISAT Math.** Another remarkable yet disturbing finding was that for low SES districts, both the middle and the high SES districts observed an increase in the percentage of advanced learners from Grade 7 to Grade 8, but the low SES districts experienced a continual drop in the percentage of advanced learners in ISAT Math. When Grades 4 and 8 were compared, both the high and middle SES districts saw the percentage of Exceeds category on ISAT Math at Grade 8 bounced back and slightly outnumbered that in Grade 4, but this pattern was not observed for the low SES districts.

**ISAT Science.** The gaining pattern in the proportion of Exceeds students on ISAT Science was similar. Although different SES school districts observed the same increasing pattern between Grades 4 and 7, the amount of increase was the least in the low SES districts: High SES (6.98%), Middle SES (4.18%), and Low SES (1.22%).

Table 4

*Means and Standard Deviations for District Percent Exceeds Students in ISAT Scores by District Socioeconomic Status (SES)*

| SES | | Read3 | Read4 | Read5 | Read6 | Read7 | Read8 | Sci4 | Sci7 |
|---|---|---|---|---|---|---|---|---|---|
| *High SES* | *Mean* | 34.20 | 37.21 | 41.41 | 41.63 | 30.74 | 16.83 | 29.67 | 36.65 |
| *(N=176)* | *S.D.* | 9.92 | 9.52 | 11.40 | 10.54 | 11.05 | 7.61 | 9.62 | 11.27 |
| *Middle SES* | *Mean* | 24.46 | 25.66 | 27.96 | 27.99 | 17.79 | 8.74 | 21.65 | 25.83 |
| *(N=354)* | *S.D.* | 9.14 | 8.79 | 10.06 | 9.22 | 8.29 | 5.88 | 9.43 | 10.60 |
| *Low SES* | *Mean* | 15.68 | 16.90 | 19.50 | 17.94 | 11.53 | 4.69 | 12.74 | 13.96 |
| *(N=177)* | *S.D.* | 8.40 | 9.23 | 9.78 | 8.75 | 7.36 | 4.27 | 9.62 | 9.95 |

| | | Math3 | Math4 | Math5 | Math6 | Math7 | Math8 |
|---|---|---|---|---|---|---|---|
| *High SES* | *Mean* | 52.65 | 42.53 | 26.36 | 34.56 | 41.97 | 46.34 |
| *(N=176)* | *S.D.* | 13.40 | 13.75 | 12.20 | 12.16 | 13.99 | 13.83 |
| *Middle SES* | *Mean* | 40.41 | 28.42 | 15.02 | 22.66 | 26.22 | 29.21 |
| *(N=354)* | *S.D.* | 13.36 | 12.06 | 9.39 | 10.59 | 11.10 | 11.98 |
| *Low SES* | *Mean* | 15.68 | 16.90 | 19.50 | 17.94 | 11.53 | 4.69 |
| *(N=177)* | *S.D.* | 8.40 | 9.23 | 9.78 | 8.75 | 7.36 | 4.27 |

## Conclusions, Implications, and Recommendations

Since ISAT implemented the annual reporting requirements and added science as another subject for mandatory reporting in 2006, no studies systematically examined the achievement trends of advanced learners in Illinois. Watkins and Sheng's (2008) study examined ISAT datasets in 2000, 2002, and 2005, and showed how the state was not addressing the academic needs of advanced learners by reporting the dropping proportion of advanced learners on ISAT reading and math. Findings from their study showed that ISAT reading dropped substantially from Grade 5 to 8, and for ISAT math, the initial drop from Grade 3 to Grade 5 was more radical. That study raised concerns about curriculum quality and student preparation, even though there was a rebounding pattern between Grades 5 and 8. The current study added gender, ethnicity, and socioeconomic status variables, and traced achievement trends of the cohort group of advanced learners from 2006 until 2011 on ISAT reading, math, and science to capture a more comprehensive picture of advanced learners' achievement progress in the state.

By tracking annual changes in the proportion of Exceeds students in reading, math, and science areas by demographic and socioeconomic status variables, this study shed many remarkable findings that merit further discussion of policymaking and future research. On ISAT Reading, the pattern of losing advanced learners occurred dramatically from Grade 6 to 7 and the same pattern continued through Grade 8. Further examination of ISAT Reading by gender, ethnicity, and socioeconomic status variables supported the Plucker et al. (2010) study that reported female students' higher performance in NAEP reading and male students' higher performance in math. This study also found the percentage of students in the Exceeds category on ISAT science was much higher among male students than female students. When gender was ignored, the proportion of advanced learners on ISAT reading slightly decreased between Grades 5 and 6, but when results were broken down into gender, male students' percentage of Exceeds slightly increased between Grades 5 and 6. Ignoring gender also masked a remarkable phenomenon in ISAT Math. Although the percentage of Exceeds was lower for female students than for males from Grade 3 until Grade 5, females started catching up in Grade 6, and at Grade 8, more female students scored in the Exceeds category than males.

Finally, yet importantly, results from this study confirmed the significant influence of socioeconomic status (SES) on achievement (Watkins & Sheng, 2008; Wyner, Bridgeland, & Diiulio, 2007). Higher SES districts experienced a higher percentage of advanced learners in all ISAT areas and at all grade levels. Tracking achievement trends each year provided new insights regarding patterns of gains and losses in the proportion of Exceeds category related to SES. On ISAT reading, low SES districts experienced a dropping pattern earlier, starting in Grade 5, while the same pattern seemed to start at Grade 6 for the high and the middle SES districts. After observing the lowest point on ISAT Math in Grade 5, districts started gaining more advanced learners every year, but the percentage and pace of increase was much lower in low SES districts, and the slower increase in numbers of advanced learners was also found on ISAT Science when district SES levels were compared.

Major findings from this study call for an important research agenda. First, a study needs to investigate the exact reasons for the substantial loss of advanced learners in reading in Grades 7 and 8 and investigate the same phenomenon observed in math from Grade 3 to 4. Analysis of standards and benchmarks at each grade level needs to be examined along with the articulation and coordination of a rigorous curriculum. If high ability students have mastered the grade level

standards, an accelerated curriculum needs to be employed. In addition, the early identification of high ability minority students and students living in poverty needs to be implemented in all Illinois school districts. School principals and superintendents need to monitor the achievement of these students and provide early interventions when underachievement begins to occur. School board members also need to become aware of this underachievement phenomenon and create school board policies to ensure the needs of these students are met. Xiang et al. (2011) claim, "every casualty among this group is a loss in human capital, and schools need to find and implement strategies that effectively stem performance losses among students who show early promise" (p. 16).

Data from this study indicate educational leaders in this country need to be aware of this pattern of underachievement of the high ability learners and encourage all school districts to disaggregate the data to ensure the achievement of high ability students are analyzed and studied and action is taken. Local school districts must address the instructional needs of high ability learners and curtail the achievement losses of this special population of students. These students are the innovators and the future leaders in our new global economy. The President of the United States, the Secretary of Education, State Department leaders, and school district officials must assume leadership in advocating and taking action to ensure this population of students is not left behind.

## References


Education Trust (2013). *Breaking the glass ceiling of achievement for low-income students and students of color.* Washington, D.C: Author.

Education Trust (2014). *Falling out of the lead -- Following high achievers through high school and beyond.* Washington, D.C: Author.

Farkas, S. & Duffett, A. (2008). *Results from a national teacher survey* (pp. 49-82). In High-Achieving Students in the Era of NCLB. Washington D.C: Thomas B. Fordham Institute.

Ford, D. Y., Grantham T.C., & Whiting, G. (2008). Culturally and linguistically diverse students in gifted education: Recruitment and retention issues. *Exceptional Children, 74*(3), 289-306.

Ford, D.Y. (2011). Multicultural gifted education (2nd ed.). Waco, TX: Prufrock Press Inc.

Loveless, T. (2008). An analysis of NAEP data In *High-achieving students in the era of NCLB* (pp. 13-48). Washington, D.C: Thomas B. Fordham Institute.

Moore, J.L., Ford, D.Y., & Milner, H.R. (2005). Underachievement among gifted students of color: Implications for educators. *Theory Into Practice, 44*(2) 167-177.

No Child Left Behind (NCLB) Act of 2001. Pub.L No. 107-110 (2002).

Olszewski-Kubilius,P. & Clarenbach, J. (2014). Closing the opportunity gap:-Program factors contributing to academic success in culturally different youth (pp. 103-109). *Gifted Child Today*, 37(2).

Olszewski-Kubilius P. & Clarenbach, J. (2012) Unlocking emergent talent: Supporting high achievement of low-income, high–ability students. National Association for Gifted Children: Washington, D.C.

Plucker, J.A., Burroughs, N., & Song, R. (2010). *Mind the (other) gap: the growing excellence gap in K-12 education*. Bloomington, IND: Center for Evaluation and Educational Policy.

Smith, E. (2008). Pitfalls and promises: The use of secondary data analysis in educational research. *British Journal of Educational Studies, 56*(3), 323–339.

Szymanski, T. & Shaff, T., (2013). Teacher perspectives regarding gifted diverse students. *Gifted Children, 6*(1), Article 1.

Yoon, S. & Gentry, M. Racial and ethnic representation in gifted programs: Current status of and implications for gifted Asian American students. *Gifted Child Quarterly, 53*(2), 121-136.

Watkins, S. & Sheng, X. (2008, Summer Edition). *Are state and national standards leaving the advanced leaners behind? The crisis ahead.* Retrieved from The Forum on Public Policy: http://forumonpublicpolicy.com/archive.sum08/sheng.pdf

Wyner, J., Bridgeland, J., & Diiulio, J. (2007). *Achievement trap: How America is failing millions of high achieving students from lower-income families.* Louden, VA: Retrieved from Jack Kent Cooke Foundation and Civic Enterprises: http://www.jke.org/news-knowledge/research-reports/

Xiang, Y., Dahlin, M., Cronin, J., Theaker, R., & Durant, S. (2011). *Do high fliers maintain their altitude?* (pp. 1-16). Performance Trends of Top Students. Washington, DC: Thomas Fordham Institute.