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

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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 Focus on students as individuals Tiered intervention to support every student's academic success	Articulation of district vision, mission, and goals: expectation for high student achievement and excellence Provision of services and programs for students in need Remediation process to address student needs	High expectations for staff and students Goal to make a year's growth for each student Focus on students as individuals Focus on meeting state proficiency criteria	High expectations for student learning Focus on students demonstrating their learning Focus on students as individuals Interventions provided throughout the day

Frequent Monitoring and Data-Driven Decision-Making	Analysis and monitoring of state assessment data Use of multiple measures of data: district benchmarks, common assessments by grade-level within schools, evaluation of student work Use of PLCs to analyze common assessments, share instructional practices, and determine next steps Analysis of data by subgroups Use of Summits to report school data, share practices, and determine next steps	Analysis and monitoring of state assessment data Use of multiple measures of data: district benchmarks, common formative and summative assessments by department Evaluation of common assessment data to inform instruction Analysis of data by subgroups	Analysis and monitoring of state assessment data Targeting areas of need based on state assessment data Teachers monitor own students' progress using student work, teacher-created assessments, Lexile levels Analysis of data by subgroups	Analysis and monitoring of state assessment data Use of multiple measures of data: district benchmarks, teacher formative and summative assessments, student work Evaluation of district benchmark data and instructional/data conversations regarding local assessment data 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 Core Beliefs: all students can learn; it's about the students, not the adults; hope is not a strategy Belief that student success is a personal responsibility Belief in reciprocal accountability (provision of support to meet expectations) Supportive community Tight-loose philosophy Hiring people to fit into culture	Collaborative culture Belief in building relationships between teachers and students Belief in doing whatever it takes to make students successful Belief in teacher professionalism and autonomy Supportive community Hiring people who can build relationships with students	Stable and consistent staff from site and community Small school where everyone knows the students and families Belief in students as individuals Belief in teacher professionalism and autonomy Strong community and parental support; stable community Belief in developing students to become productive members of society	Belief in providing the best/well-rounded education and offering access to opportunities Belief that student success is a personal responsibility Belief in teacher professionalism and autonomy Stringent hiring of the best people to fit into the culture

Alignment of Curriculum, Instruction, and Assessment	Standards-based instruction and assessment Use of backwards design to align curriculum, instruction, and assessment to standards Common language for instruction; all teachers trained in effective instruction practices Use of district benchmarks and grade-level common assessments	Standards-based instruction and assessment Use of backwards design to align curriculum, instruction, and assessment to standards Modified use of Explicit Direct Instruction Autonomy of teaching while following scope and sequence Use of district benchmarks and cohort common assessments	Standards-based instruction Teachers use own instructional practices to meet the needs of students	Standards-based instruction and assessment Use of backwards design to align instruction and assessments to standards No specific curricular programs or instructional pedagogy adopted; teachers choose own instructional practices to meet the needs of students 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 Setting, monitoring, and holding people accountable for expectations Continuous evaluation of data and schools Instructional leaders learn alongside teachers Provision of support to meet expectations Validation of stakeholders and building of relationships	Outside-the-box leadership; encourages others to take risks and try new things/strategies Belief in viewing people's strengths and assets as something to contribute to the larger group Dynamic administrators acting as instructional leaders; previous teacher leaders Provision of support by district and school leaders	Sets high expectations for staff and students Supportive Empowers teachers to know what is best for students and to try new instructional strategies, programs, technology Provides feedback on instruction	Maintains belief in treating teachers as professionals Instills belief for teachers to provide the best education for students and take responsibility for their success Use of instructional/data conversations to ensure all students learn, instructional practices lead to results, and build capacity Value placed on teachers and relationships between administration and teachers

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