Does Organizational Size Impact the Leadership Practices of School Leaders?

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With the changing face of educational leadership, and the changes in programing for preparation programs, the question of the importance of developing specific leadership practices based on the size of districts served by the program arises. By looking at the relationship between leadership practices and the demographics of current leaders in school districts, programs can decide if a specific focus is required, or if there is a common need across various sized school districts. Two studies were conducted. One examined the leadership practices of 82 superintendents in Texas to determine if the size of their school district revealed any differentiation in how these superintendents behaved as leaders. The second study, utilizing a national sample, involved 646 school leaders, 1,581 of their direct reports, and 592 of their managers. Results from both studies tended to indicate that the leadership practices of school leaders do not vary systematically on the basis of any implicit contextual factors which might be associated with the size of the district or school system, although some differences by school size are noted by direct reports. The results have significance for designing programs that prepare secondary education leaders for leadership challenges. They also suggest that while leadership practices may be affected by scale and scope, the requirements for successful school leadership are fairly ubiquitous. Implications for transferring from systems of various sizes, larger or smaller, and for effectively recruiting school leaders are also considered.

Leadership practices of school leaders determine the effectiveness of the learning environment and the culture and climate of the institution. As the guiding force of a school, principals and superintendents provide the overarching atmosphere of the entire school and district. In preparing future principals and superintendents for leadership it is important to understand and appreciate whether there are behaviors that may vary across different size school campuses and districts. This study sought to first identify and benchmark the leadership practices of principals and superintendents and secondly to investigate the extent to which organizational size, among many possible demographic and institutional factors, has a significant influence on how secondary educational leaders behave.

The leadership practices of principals and superintendents can vary according to the various contexts in which they operate. As Louis, Leithwood, Wahlstrom, and Anderson (2010) explain: "Leadership success depends greatly on the skill with which leaders adapt their practices to the circumstances in which they find themselves, their understanding of the underlying causes of the problems they encounter, and how they respond to those problems (94)." The types of problems faced by school leaders can vary greatly and may be acerbated by the size of their school system. Different leadership behaviors and actions may be required to meet those varied needs.

Little research has been conducted regarding leadership practices within specific contexts. Leithwood, Harris, and Hopkins (2008), for example, identified a core set of leadership practices for "turnaround schools," although they did not look at specific context characteristics. According to Leithwood et al. (2008), "The ways in which leaders apply these leadership practices, not the practices themselves, demonstrate responsiveness to, rather than dictation by, the contexts in which they work (31)." Therefore, the question remains, are there specific leadership practices found to be more evident in districts of various sizes or does leadership simply reflect the skill of individual leaders, in spite of context?

Most scholars and practitioners alike would agree that how well principals and superintendents lead matters (Posner, 2015). For example, researchers have reported significantly relationships between the leadership behavior of school principals and superintendents and teacher retention and morale (Branch, 2013; Rosenberg, 2013; Rowland, 2008; Steward, 2015), student performance (Dimke, 2011; Lambert-Knowles, 2013; Pringle, 2004; Merritt, 2016), school reform efforts, (Gaborik, 2011), school achievement (Groves, 1996; Hale, 2009; Hardoin, 2009; Hickey, 1995), parental involvement (Long, 1994), organizational culture (Howard, 2004; Quin, 2014; Stone, 2003), and, turnover (Forner, 2010; Kamrath, 2015). The principals of schools that received a state "distinguished" award were reported by their teachers to have engaged in significantly more leadership behaviors than did those from a comparable group of "non-distinguished" schools; and this relationship was independent of both gender and years of experience by the teachers Cavaliere (1995).

Still the question remains about how the school context might influence the specific and/or pattern of leadership behaviors employed. Moreover, the research findings provide mixed perspectives on these issues. For example, Bredeson, Klar, and Johansson (2011) found that superintendents indicate that the size of their district is the greatest contextual factor that impacts their leadership behaviors. For example, they found that in smaller districts that superintendents perform a variety of operational duties, interact directly with school community members, and develop personal relationships and trust with all community members. In contrast, superintendents in larger districts perform strategic roles, interact indirectly with school community members, and work through principals and leadership teams to establish trust. Howard (2004) found that teachers

in smaller sized schools viewed their principals as behaving less frequently as leaders than did their counterparts in medium or larger-sized schools.

Hentschke, Nayfack, and Wohlstetter (2009) determined that there was a relationship between the district size and leadership, and also that the size of the district had more impact on leadership practices than did the geographical location. Although the districts evaluated in the study were all urban, the practices of the superintendents in the smaller urban districts varied greatly from those of large urban superintendents. The leaders in the smaller districts were more hands-on and personally invested in the performance of faculty and students, resulting in a different skill set and different leadership practices than those in the larger districts. Fellows (2009) also found no relationship between leadership practices among superintendents in urban, rural, and suburban school divisions. Research with AASA superintendent of the year finalists and winners from 1988-2013 revealed no statistical significance between superintendents of various district sizes (Crawford, 2014).

The existing research does not clarify if, or to what extent, a relationship exists between leadership practices and school system size. Two studies were conducted to investigate this matter, varying along several sample characteristics. The first one involved only school superintendents (N= 66) and only from one state (Texas). The second involved a sample of school principals (N=xxx), from across the United States.

Superintendents Study

Study One: Participants and Instruments

The population represented in this study comprised all superintendents in Texas, which totaled 1102 districts. From a listing of superintendents on the Texas Education Agency website, leading traditional K-12 school districts, a random stratified sampling technique (based on the size of the district) was used to invite 918 superintendents. Sixty-six superintendents elected to participate and completed all of the survey instruments. In the sample there were nine females and 57 males. Nearly two-thirds of the sample were over the age of fifty, and almost all Caucasian (90%). District size was determined on the basis of the University Interscholastic League conference assignments, since this was a familiar designation for Texas superintendents, rather than assigning arbitrary numerical groupings. Thirty-three of the districts were small-sized (designation 1A), 12 were medium (designation 2A), and the remainder were considered large size districts (designations 3A, 4A; part of the reason for placing the latter two designations with 3A is because there provided only 10 cases). For the purposes of analysis, the 1A schools were compared to the 2A, 3A, and 4A groups.

Leadership was measured using the Leadership Practices Inventory (Kouzes & Posner, xxx). Based on both qualitative and quantitative research Kouzes and Posner (2017) identified five practices (sets of behaviors and actions) taken by people when they were at their personal-best as leaders and their achievements were exceptional. The focus of this framework is on the behavior of leaders, not their intentions nor their attributes, and scores of studies with school leaders have been conducted using the LPI (Posner, 2015).

This is a brief summary of each leadership practice. *Model the Way* depends on the ability of the leader to clarify values and set an example for others to emulate. *Inspire a Shared Vision* depends on the ability of the leader to envision an uplifting future and enlist others in common aspiration. Leaders *Challenge the Process* by actively search for opportunities to improve, experiment, achieve small wins, and learn from experiences. Leaders *Enable Others to Act* by

empowering their followers through fostering collaboration, building trust, increasing self-determination, and development competence. *Encourage the Heart* involves the leaders tapping into the motivational power of reinforcement by genuine recognition of individual contributions and creating a spirit of community by celebrating the group's accomplishments.

The LPI contains 30 behavioral statements, six for each of the five leadership practices. Using a ten-point Likert scale, respondents indicate how frequently they typically engage in each behavior, with "1" indicating that "I almost never" engage in this particular behavior and "10" indicating that "I almost always" engage in the behavior. Previous studies have found that the internal reliability (Cronbach alpha) coefficients for the LPI are consistently above 0.75 (Posner, 2015).

Study One: Results and Discussion

Table 1 shows the average score for each of the five leadership practices for superintendents by district size. ANOVA revealed no statistically significant differences for any of the five leadership practices based upon the size of the district, as measured by intercollegiate scholastic conference designations.

Table 1
Leadership Practices and District Size in Texas

	Small	Medium	Large
Model	8.45	8.39	8.34
Inspire	7.85	8.10	7.98
Challenge	7.89	7.89	7.69
Enable	8.75	8.81	8.79
Encourage	8.21	8.03	7.89

It is possible that this result may be due to the relatively small overall sample size, and especially the small sample sizes in the medium and large-size school districts. Another reason could be the lack of diversity in the characteristics of the school superintendents themselves (which was outside the scope of the current study); although if it were true that school superintendents are more similar in background than different it would argue that at least the contextual variable of district size is relatively unimportant in their selection and/or performance.

Principals Study

Study Two: Participants and Instruments

The sample population for this study came from an archival proprietary database generated from the online version of the Leadership Practices Inventory. There were 646 respondents, of which 359 were men and 283 were women, all with at least a college degree, and were mostly between 33-59 years of age (81%). More than one-third had been in their current position for ten years or more, with 22 percent having 5-10 years of tenure, 13 percent with 3-5 years, 19 percent with 1-3 years, and nine percent with less than one year in their current position. School size was categorized by their indication of how many employees there were in their organization: Small (less than 50 people, N = 120), medium (50 – 999 people, N = 99), large (100-499 people, N = 190), and very large (500 or more people, N = 237). Chi-square analysis revealed no significant differences between

organizational size and any respondent demographic characteristic (age, gender, education, or tenure).

In addition, this database provided access to the direct reports and supervisors of these school leaders. There were 2,438 direct reports, of which 1,581 were men and 809 were women, all with at least some college education. The age distribution was fairly flat with about 20 percent (plus or minus 2-3%) between the ages of 24-32, 33-40, 41-49, and 50-59 years of age. Tenure with their current employer was roughly equivalent to that of their school leaders: More than one-third had been in their current position for ten years or more, with 21 percent having 5-10 years of tenure, 12 percent with 3-5 years, 19 percent with 1-3 years, and 12 percent with less than one year. There were 592 respondents who indicated they were the "manager" of the individual initiating the survey, of which 284 were men and 296 were women, all with at least a college degree. These respondents tended to be older than either the school leaders in this sample or their direct reports, with nearly 46 percent aged 50 years or older and another 34 percent between 41-49 years of age. Similarly, they tended to have long tenure with their current employer, with 49 percent having ten or more years and another 18 with 5-10 years.

Study Two: Results and Discussion

Table 2 shows the average score for each of the five leadership practices for school leaders by the size of their organization. ANOVA revealed no statistically significant differences for any of the five leadership practices based upon the size of the school system, as measured by number of employees.

Table 2
Leadership Practices and School Size

	Small	Medium	Large	Very Large
Model	45.61	46.05	45.77	46.19
Inspire	42.05	42.96	42.93	42.89
Challenge	43.08	44.27	43.91	44.70
Enable	49.83	49.48	49.67	50.59
Encourage	45.63	45.43	45.49	45.49

However, some significant differences in the leadership practices were observed by the direct reports of their school leaders on the basis of the size of their school system (Table 3). ANOVA revealed statistical differences in the leadership practices of both Inspire ($F = 2.67$, $p < .05$) and Enable ($F = 3.56$, $p < .05$), and some suggested differences in both Model ($F = 2.10$, $p < .10$) and Encourage (($F = 2.21$, $p < .10$). Post-hoc analysis, using least square difference (LSD) analysis revealed that for Inspire, most of these were between school leaders in the very large school systems compared with their counterparts in the other three sized school systems. On Enable, the differences were between those in the small size school system and those in the medium-sized, and those in the medium-sized school system compared with those in the very large system. The major difference in Model was between medium and large sized school systems, and the major difference in Encourage was between medium sized school systems and their counterparts in small and large systems. The analysis from the perspective of the managers of the school leaders revealed no statistically significant differences in leadership practices on the basis of school system size (results not shown).

Table 3
Leadership Practices as Observed by Direct Reports and School Size

	Small	Medium	Large	Very Large
Model	48.23	47.06	48.37	48.12
Inspire	47.37	47.20	47.83	46.10
Challenge	47.16	46.06	46.70	46.08
Enable	51.14	49.82	50.72	51.62
Encourage	48.31	46.97	48.26	47.28

Analysis of the leadership practices of principals on the basis of the size of the school system, as measured by number of employees, does not indicate any significant differences. This suggests that the contextual challenges created by more or less employees (school size) does not, in turn, require the use, more or less, of any particular leadership. Rather, school leaders appear to make use of all five leadership practices fairly often, and this is as true, and necessary, for those leading a school system of less than 50 people as it does for leading a school system with more than ten times that number of employees. This claim is consistent with the perspective of the managers of these school leaders. However, somewhat in counterpoint to these assertions are the findings from the perspective of the "constituents" (that is, the people who work directly with these leaders). This analysis revealed some statistically significant, and suggestive, differences in the frequency to which the leadership practices are utilized by their school leaders due to the size of the school system.

Conclusions and Implications

The results from these two studies do not generally support the hypothesis that the size of the school district or school system significantly impacts the leadership practices of the school leader. The average score on the five leadership practices did not vary systematically as a function of district size for superintendents in Texas, with both Enable Others to Act and Model the Way ranking as the two most frequently used leadership practices. The rank order for the leadership practices was the same for superintendents in medium and large districts.

For school principals, their average frequency scores on the five leadership practices, as with superintendents, did not vary systematically across the four school-size categories. Indeed, the rank order for how often principals used the five leadership practices was the same across the school size classifications as well as the same as the rank order usage reported by the superintendents. School leaders view themselves as engaging most frequently in the leadership practices of Enable and Model, followed by Encourage the Heart, Challenge the Process, and Inspire a Shared Vision.

However, the perspective provided by the direct reports of the principals provides a somewhat more nuanced picture. First, their average score on each of the five leadership practices is significantly higher $(p < .001)$ than the score generated by the principal; they view their principals engaging more in these leadership behaviors than do the principals themselves. Second, the size of the school system does appear to influence the Inspire and Enable leadership behaviors of school leaders as viewed by their direct reports; and possibly as well both Model and Encourage leadership behaviors. Looking at the rank order of the five practices, direct reports, like their school leaders, rated Enable as the leadership practice most frequently used, and Challenge and Inspire as the two least frequently used. Closer inspection reveals that the rank order from direct reports in small and

medium sized school systems are the same, while the rank order in large and very large sized school systems are the same.

The general conclusion is that leadership behaviors, and skills, are important to school leaders and that the size of the school system does not significantly change the requirements for leadership. While differences in context may change the nature of the actual leadership behavior, the impact of scale (increasing size) does not undermine the significance of engaging in leadership. In a small-sized school system, informal and verbal communications may be effective, while in a very large-sized system, communications will necessarily have to be more formal and written. Likewise, the visibility required of school leaders to Model the Way (set an example) may be achieved in a more person-to-person fashion than it can be in a system with hundreds of personnel, necessitating more formalized, and possibly group, interactions. The similarities in the leadership demanded of school leaders appears to far outweigh any differences due solely to the number of people (students, staff, and faculty) in the system.

Size is, obviously, only one contextual variable that differentiate between school systems and the requirements for effective leadership. Future studies could investigate other contextual factors which may impinge upon the demands and capabilities of school leaders. For example, funding, student performance, parental and school board involvement (politics), campus facilities, tenure, and the like. Researchers might also do more sophisticated analyses within the factor of school size; for example, looking at gender or years of experience. In addition, size is not a proxy for effectiveness and scholars might examine outcome data associated with schools, determining if size, or leadership, or some other factors have a significant impact on the performance of the school system. Qualitative investigations could be conducted with school leaders who have worked in school systems of various sizes to help identify possible similarities and differences in leadership responsibilities and challenges. Furthermore, in these studies school size was determined in two very specific fashions, which may make comparisons between them challenging, and other determinations of school size could be used in future investigations.

An important outcome of this research is that school size is not a significant consideration in the preparation and development of school leaders. For those educating future and current school leaders, the primary focus needs to be on developing their ability to comfortably and frequently engage in leadership behaviors generally, rather than emphasizing one particular set or pattern of leadership behaviors on the basis of school size. Likewise, in the recruitment and hiring (promotion) process of school leaders by school boards the concern should be foremost on scope (demonstrated leadership capability) and the candidate's ability to scale with changing circumstances (like size, as but one of many contextual factors). The five practices of exemplary leadership framework (Kouzes & Posner, 2017) can provide a useful framework for developing and strengthening the leadership skills of school leaders, providing them with a conceptual and practical understanding of how to lead most effectively to meet various organizational circumstances (Dimke, 2011).

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