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Guest Editors: Michele Acker-Hocevar, Teresa Northern Miller, and Gary Ivory

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Educational Considerations is published and funded by the College of Education at Kansas State University. Address correspondence to Editor, Educational Considerations, Bluemont Hall, Kansas State University, Manhattan, KS 66506 or call (785) 532-5543.
This special issue of Educational Considerations is devoted to the national research study "Voices from the Field: Phase 3" (hereafter referred to as Voices 3), conducted by the University Council for Educational Administration (UCEA) to study the perceptions of superintendents and principals regarding school improvement, social justice, and democratic community. These constructs were drawn from Murphy’s (2002) conceptual framework for rethinking the work of administrative preparation programs. Lead researchers were Gary Ivory and Michele Acker-Hocevar, who worked collaboratively throughout the project with dozens of other researchers. The history of this project; planning for the study; description of the conventions used to quote the superintendents and principals; and a brief description of the articles follows. A listing of the presentations and publications that have grown out of the project is found in the Appendix.

Different Phases of Voices

The first phase of this project, A Thousand Voices from the Firing Line (Kochan, Jackson, & Duke, 1999), began in the mid-1990s with one-on-one interviews. The goal was to enhance collaboration among UCEA’s member universities and to learn from principals and superintendents “their perceptions of their jobs, their most vexing problems, and their preparation” (Duke, 1999, p. 10). UCEA set out to have each of its 50 member universities collect interview data on ten superintendents and ten principals, thus yielding data from ten thousand school leaders.

Phase Two of the project, under the leadership of Barbara Y. LaCost and Marilyn L. Grady, moved from one-on-one interviews to focus groups. The current and third phase of the Voices work, Voices 3, has continued with focus groups where the lead researchers attempted to structure the data collection more systematically and build on the constructs of school improvement, social justice, and democratic community. Voices 3 conducted 29 focus groups with superintendents and principals across the United States between 2004 and 2006. We began with two research questions:

1. How do superintendents and principals from a variety of locations and within different contexts describe their perceptions of and experiences with educational leadership?
2. How do educational leaders relate to the concept of leadership for school improvement, democratic community, and social justice?

The articles in this special issue are the result of transcript analyses of comments by these educational leaders.

Planning of the Study

Planning of the Voices 3 study is described in detail by Ivory and Acker-Hocevar (2003) and Acker-Hocevar and Ivory (2006). For Voices 3, we standardized focus group procedures. The goal was to be able to compare responses from educational leaders in different situations (i.e., school level, size of the district, and geographical locations of the schools and districts); to find common themes; and to note differences where they existed. All moderators were trained on and followed a protocol for structured interview procedures developed by the lead researchers (Acker-Hocevar, 2004).

Our approach to sampling recognized that although studies using qualitative data seldom claim to be representative, we were in a position to collect data from a broad range of educational leaders, and we wanted to capitalize on that fact. Even though we were dependent on volunteers at two levels—researchers who volunteered to conduct focus groups and practitioners who chose to participate—we still wanted to interview educational leaders with a variety of backgrounds and experiences. In addition, one critique of our pilot study was a lack of input from women and ethnic-minority leaders (Ivory et al., 2003). As a result, we alerted focus group moderators to be sensitive to the need for diversity in focus groups.

We concluded from review of Ritchie and Lewis (2003) that we should interview no more than 100 participants from each group. With approximately six people per focus group, our goal 16-18 focus...
groups each for principals and superintendents. Their participation was voluntary, and the focus groups lasted from 1.5 to 2 hours. The study’s protocol was built on Krueger and Casey’s approach (2000), specifically working to establish rapport at the beginning of the dialogue and then summarizing what was heard at the end to verify participants’ responses. All focus group moderators asked participants to respond to prescribed questions (See text box at right). The conversations were audio-recorded and transcribed.

For the superintendent sample, we divided the U.S. into four regions—New England and Mid-Atlantic, Midwest, Southeast, Southwest and West—and calculated the percentages of superintendents in each region using the American Association of School Administrators (AASA) 2000 survey of superintendents (Brunner & Grogan, 2007) and the percentages of districts of different sizes (Snyder, Dillow, & Hoffman, 2008b). Since only 6% of districts in the U.S. had enrollments greater than 9,999 students, we sought one focus group to represent districts of that size. However, despite our efforts, we were unable to do so. Superintendent focus groups completed are shown in Table 1.

Table 2 shows the breakdown, by gender and ethnicity (self-reported), of the superintendents who participated in focus groups. At the time we designed the sample, Brunner and Grogan (2007) reported that women comprised 12% of U.S. superintendents and ethnic minorities 5%. Our focus groups, with 22.2% women and 1.2% ethnic minority participants, over-represented women and under-represented ethnic minority superintendents. (One participant did not report ethnicity.)

For principals, we stratified the sample by level of school: elementary; middle; or high school (Snyder, 2008c), and by the number of accountability sanctions in place in the state (Education Week, 2004, January 8). However, the federal No Child Left Behind Act of 2001 has done much to equalize accountability pressures on principals, so we found less variation in the number of accountability sanctions across states than we anticipated. Principal focus groups completed are shown in Table 3.

When we designed this study, the U.S. Department of Education (Snyder et al., 2008a) reported that 56% of U.S. principals were male and 44% female. Also, 84% were white; 11% black; and 5% Hispanic. Our sample contained 83 principals, of which 9 did not report ethnicity and gender, and one male did not report ethnicity. (See Table 4). Taking into account the missing data, 48.4% of the sample was female, and 41.9% male, denoting an over-representation of women by 4.8%. Of the participants who reported ethnicity, 10.8% and 9.7% were black and Hispanic, respectively, indicating that the former group was slightly under-represented, and the latter substantially over-represented.

Although we continue to grapple with questions about how to characterize the research design for this study, we believe it falls under the broad rubric of qualitative research and employs interviewing techniques unique to focus groups. We acknowledge that in qualitative research, the quality of the findings depends on the skill and judgments of the researchers. We also acknowledge that the study concentrates on the perceptions of a non-random, volunteer sample as opposed a random, stratified sample study representative of an entire population. Thus, claims made and insights presented in the

---

### Focus Group Questions

**Opening Question:**
Each of you please, tell me who you are, where your district is, and one of your interests outside school.

**Transition Question:**
Think back to an experience with school leadership that made a strong impression on you, either positive or negative. Please share it with us.

**Key Question (1):**
Superintendents talk about doing what’s best for students. Tell me about your experiences with that.

**Key Questions (2):**
What has “No Child Left Behind” meant for you as a leader in education?

**Key Question (3):**
There is a piece of paper in front of you. Write an answer to this question and then we’ll share our responses with one another: What does it mean that other people want to have a voice in decision making?

**Key Question if needed and if time permits (4):**
Think back to an experience you’ve had with doing what’s best for students or school accountability or other people having a voice in decision making that was outstanding. Describe it.

**Key Question if needed and if time permits (5):**
What has been your greatest disappointment with doing what’s best for students or school accountability or other people having a voice in decision making?

**Ending Question (1). Summary question:**
Moderator gives a two- to three-minute summary of the major issues covered and then asks, “How well does that capture what was said here?”

**Ending Question (2). All things considered question:**
Of all the issues we discussed here today, which one is most important to you?

**Ending Question (3). Final Question:**
Is there anything about educational leadership that we should have talked about but did not?
### Table 1
**Number of Superintendent Focus Groups Completed**

<table>
<thead>
<tr>
<th>School District Size and Student Enrollment</th>
<th>Region of the United States</th>
<th>New England &amp; Mid-Atlantic</th>
<th>Midwest</th>
<th>Southeast</th>
<th>Southwest &amp; West</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small:</td>
<td></td>
<td></td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>• Student enrollment, 1-999</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium:</td>
<td></td>
<td></td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>• Student enrollment, 1,000-9,999</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mixed:</td>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>• Small and medium school districts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium:</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>• Mix of participants, superintendents and board members from medium school districts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 2
**Gender and Ethnicity of Superintendents: Number and Percentage**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Ethnicity</th>
<th>African American</th>
<th>%</th>
<th>European American</th>
<th>%</th>
<th>Other</th>
<th>%</th>
<th>No response</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
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<td>Female</td>
<td></td>
<td>1</td>
<td>1.2</td>
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<td>19.7</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1.2</td>
<td>18</td>
<td>22.2</td>
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<tr>
<td>Male</td>
<td></td>
<td>0</td>
<td>0</td>
<td>58</td>
<td>71.7</td>
<td>5</td>
<td>6.2</td>
<td>0</td>
<td>0</td>
<td>63</td>
<td>77.8</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1</td>
<td>1.2</td>
<td>74</td>
<td>91.4</td>
<td>5</td>
<td>6.2</td>
<td>1</td>
<td>1.2</td>
<td>81</td>
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</tr>
</tbody>
</table>

### Table 3
**Principal Focus Groups Completed and Number of State Accountability Sanctions Experienced by Group**

<table>
<thead>
<tr>
<th>Number of Principals by School Level</th>
<th>Number of State Accountability Sanctions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-1</td>
</tr>
<tr>
<td>Elementary Schools</td>
<td>3</td>
</tr>
<tr>
<td>Middle Schools</td>
<td></td>
</tr>
<tr>
<td>High Schools</td>
<td>1</td>
</tr>
</tbody>
</table>
articles in this special issue are limited to the superintendents and principals that participated in the focus groups. The study, however, has a breadth of viewpoints, and we believe these viewpoints merit consideration.

Conventions for Identifying Superintendents and Principals
With regard to the articles in this issue, we have protected the confidentiality of participants but, at the same time, tried to give readers a flavor of their individuality. From the beginning, we were concerned that some states had such a small number of superintendents that they might be identifiable. As a result, superintendents’ locations were identified only in terms of regions. Even though there are many more principals in a state than superintendents, for consistency, we identified principals in the same way. Next, we randomly ordered the superintendent focus groups and numbered each superintendent consecutively from the first focus group to the last. The same procedure was used with principal focus groups. In addition to a number and a region, superintendents were identified by the size of their district while principals were identified by their school level–elementary, middle, or high school. Both superintendents and principals were identified by the year the focus group took place.

Overview of the Special Issue and Articles
In this issue, our goal is to add a few more perspectives on educational leadership, based on the richness of the data found in the Voices 3 transcripts. Five research teams have combined to provide a range of perspectives about the many nuances of life as a school leader in today’s world and ways that life has changed with increased accountability. We would like to thank the outside reviewers—Julia Ballenger, Tom Kersten, Azadeh Osanloo, Deb Touchton, Tony Townsend, Wanda Trujillo (Deceased), Kathy Whitaker—for their careful reading of the article proposals and suggestions.

In the first article, Mariela Rodríguez, Elizabeth Murakami-Ramalho, and William Ruff help us understand more about the balancing act principals have to perform, meeting both externally imposed accountability requirements and the needs and wants of their communities. They offer a dramatic picture of principals in the Southwest trying to serve two masters with heart and efficiency.

Continuing the investigation of accountability issues for school and district leaders, Christopher Johnstone, Amy Garrett Dikkers, and Amalia Luedeke investigate the meanings of these issues for superintendents. Perhaps the nature of the job requires a superintendent to emphasize efficiency over heart. Certainly these superintendents are well aware of the advantages of imposed accountability systems, but they are also concerned about their potential negative effects.

Teresa Wasonga and Dana Christman describe principals’ perspectives on fostering democratic community in their schools. Their treatment of the data affirms for us that it is not sufficient to either pledge allegiance to the notion of democratic leadership or merely reject it. Rather, the principals found themselves constantly balancing openness to input against their perceptions of what needed to be done. From the focus group data, Wasonga and Christman were able to identify tactics principals used to work toward that balance.

Teresa Northern Miller, TRudy A. Salsberry, and Mary A. Devin take a similar approach with the superintendent data, viewing these educational leaders’ descriptions of their use of power. The authors apply the typology of French and Raven (1959), later expanded by Andrews and Baird (2000), to superintendents’ discussion of their uses of power, in effect testing the typologies.

The final article by Gary Ivory, Rhonda McClellan, and Adrienne Hyle is an essay on the promise of pragmatism as an epistemological approach to research on small district leadership. They contrast their views on pragmatism with current scholarly approaches.

Voices 3 researchers are discussing other ways to mine these rich data from our colleagues in the field of public PK-12 education. Two book concepts are being developed, and we have had brief discussions about the form the next phase of UCEA voices should take. Voices 4, dare we say? The totality of this research proceeded from beliefs that motivated Kochan, Jackson and Duke’s 1999 study; that

<table>
<thead>
<tr>
<th>Gender</th>
<th>African American</th>
<th>%</th>
<th>European American</th>
<th>%</th>
<th>Hispanic</th>
<th>%</th>
<th>Other</th>
<th>%</th>
<th>No response</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
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<tbody>
<tr>
<td>Female</td>
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<td>7.5</td>
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<td>28.0</td>
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<td>7.5</td>
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<td>45</td>
<td>48.4</td>
</tr>
<tr>
<td>Male</td>
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<td>3.3</td>
<td>28</td>
<td>30.1</td>
<td>4</td>
<td>4.3</td>
<td>3</td>
<td>3.3</td>
<td>1</td>
<td>1.0</td>
<td>39</td>
<td>41.9</td>
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<td>0</td>
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<td>0</td>
<td>9</td>
<td>9.8</td>
<td>9</td>
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</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>10.8</td>
<td>54</td>
<td>58.1</td>
<td>9</td>
<td>9.7</td>
<td>10</td>
<td>10.8</td>
<td>10</td>
<td>10.8</td>
<td>93</td>
<td>100.0</td>
</tr>
</tbody>
</table>
is, the academic knowledge of UCEA members and the practical
knowledge of practitioners can be collected, considered, and synthe-
sized to improve and expand our knowledge base about how to lead
educational efforts for the betterment of programs and students of
educational leadership.

References

Endnotes
1 Although a total of 29 focus groups were conducted, demographic data were collected only on 28.
2 Data source: C.C. Brunner and M. Grogan.
3 In rare cases, focus groups took place where participants could enter late or leave early, and so it was not always obvious from the transcripts who each particular participant is. In those rare cases, it may be that some participants were double-counted. For example, one superintendent may be referred to as “Superintendent 8” in one place and “Superintendent 10” in another, such that transcriptionists could have numbered ten superintendents when there were actually only nine in the focus group.
**Appendix**

**Publications and Presentations from Voices 3**

**Journal Articles**


**Conference Proceedings Paper**

**Paper Presentations**


**Symposia**


Ivory, G., Fairbanks, A., McClellan, R., Whitaker, K., Cox, B.,
Dexter, R., Alsbury, T., Johnstone, C., Painter, S., Ruff, W., Dean,
D., Piveral, J., Edmonds, C., Gable, K., Miller, T., Patterson, F., Hyle,
superintendents in addressing issues of democracy, accountability,
and social justice. Symposium conducted at the annual conven-
tion of the University Council for Educational Administration, San
Antonio, TX.

Miller, T., Gieselmann, S., Kersten T., Hensley, P., Burmeister, V.,
Voices 3: Principals’ perspectives on school improvement. Sympo-
sium conducted at the annual convention of the University Council
for Educational Administration, San Antonio, TX.

**Newsletter Articles**

groups underway and plans and thoughts about the future. UCEA

and principals’ perspectives in “Voices 3.” UCEA Review, 45(2),
15-17.

**Books**

Miller, T.N., Devin, M. D., & Shoop, R. J. (2007). Closing the leader-
ship gap: How district and university partnerships shape effective
school leaders. Thousand Oaks, CA: Corwin Press.1

board leadership: Lessons from superintendents. MD: Rowman and
Littlefield Education.2

The book contains the following chapters: Aiken, J.A. Success
strategy: Prioritize and decide; Alsbury, T.L. Challenge: Needing
to be reelected; Arellano, E. Success strategy: Obtain meaningful
communication; Dexter, R., & Ruff, W. Challenge: Fostering student
achievement; Devin, M., Miller, T.N., & Salsberry, T.A. Success stra-
tegy: Maintain good relationships; Dominguez, R. Success strategy:
Learn about education and your role; Gerstl-Pepin, C. Challenge:
Mandates and micropolitics; McClellan, R., Hyle, A., & Restine, L.N.
Challenge: Shortages of resources; Patterson, F.E. Success strategy:
Recruit, develop, keep, and rely on good staff; Restine, L.N. Chal-
lenges: Understanding your superintendent’s perspective; Ruff, W.,
& Dexter, R. Success strategies: Base decisions on data; Rusch, E.
Success strategy: Sell the vision; Whitaker, K., & Watson, S.T.
Challenge: Leading in an era of change.

1 Quotes from Voices 3 transcripts were used in this book.

2 Quotes from the Voices 3 pilot study as well as Voices 2 and the
original study, *A Thousand Voices from the Firing Line* (Kochan et
al., 1999) were used in this book.
Leading With Heart: 
Urban Elementary Principals as Advocates for Students

Mariela A. Rodríguez, 
Elizabeth Murakami-Ramalho, 
and William G. Ruff

Principals in urban settings serve elementary schools often densely populated with highly mobile, ethnically diverse, and economically disadvantaged students (Dworkin, Toenjes, Purser, & Sheikh-Hussin, 2000). Due to the changing landscape of increasing accountability issues required by the No Child Left Behind Act (NCLB) (2001), principals must adjust the mission of the school community to meet legislative demands (Johnson, 2004). Elementary principals are now heavily invested in strategies to meet the increased expectations of raising students’ academic performance. It is important to understand how urban elementary school principals reconcile the tensions between accountability and equality for all students.

Purpose of the Study

The purpose of this study was to explore how urban elementary school principals reconcile the challenges of educational accountability within the constraints of standardized testing policies required by NCLB. We were interested in developing a conceptualization of principals as student advocates within today’s contentious era of accountability and mandated school reform. Principals play a key role in defining the contexts of their schools. Although there is a plethora of information about school change, accountability, and NCLB (Darling-Hammond, 2004; Fuller, Wright, Gesicki, & Kang, 2007; Kim & Sunderman, 2005; Spillane, Diamond, Burch, Hallett, Jita, & Zoltners, 2002; Spillane, Hallett, & Diamond, 2003), there are gaps in our understanding regarding how urban elementary principals define these terms within the context of their schools and communities. Understanding how principals develop and maintain definitions about what constitutes student success through the accountability movement within the specific context of their schools is essential to consistently improve the capacity of schools as environments where student academic needs are nurtured and supported.

This study therefore sought to contribute to an understanding of specific characteristics of urban elementary principals who demonstrated advocacy for students within a context of accountability as mandated under NCLB. The findings of this study indicated that as mandated accountability measures evolved, inclusive social justice leadership practices were not pushed aside (Oliva & Anderson, 2006), but rather were integrated into the daily professional practices of some urban elementary school principals.

The Changing Role of Urban Elementary Principals

Urban schools’ patterns include characteristics such as being large in size with a highly mobile and diverse student body (Weiner, 2003). Principals in urban elementary schools face challenges intrinsic to urban settings, such as diverse social, economic, and political factors (Cistone & Stevenson, 2000; Cooley & Shen, 2000; Zaragoza-Mitchell, 2000). Socioeconomic issues, most particularly, influence the way in which principals lead such diverse school settings (Lyman & Villani, 2004; Riehl, 2000). Nichols, Glass, and Berliner (2006) discussed the pressures presented by accountability that could contribute to decisions principals make regarding curricular programs for students. Sometimes the overwhelming pressure for principals to demonstrate student achievement on standardized tests influences results in their pressuring teachers to teach to the test and help students pass at all costs (McGhee & Nelson, 2005).

Elementary principals are expected to perform in increasingly complex roles (Mullen & Patrick, 2000; Ruff & Shoho, 2005), especially when immersed in urban environments (Portin, 2000). Given the nature of educating students at an early age, these principals focus more on school-community connections and experience higher parental involvement than secondary school administrators. This close connection to the community results in expectations that are complicated by student achievement and accountability narrowly defined by standardized testing results.

The education of elementary students often involves the education of parents as to how to best assist their children academically. Many urban elementary principals are dedicated advocates for students (Elmore, 2005; Chrisman, 2005), and families and the larger community (Hale & Rollins, 2006). Principals in urban elementary schools face additional challenges such as first generation students, many with language limitations. These principals strive to fulfill campus and community expectations in the areas of instruction, curriculum, management, and staff development (Osher & Fleischman, 2005).

The beginning of the 21st century is characterized by unprecedented expectations for elementary school principals. Included in these expectations are long working hours (50-70 hours a week); more public scrutiny; higher accountability; less appreciation; increased district demands; constricted budgets; less competitive salaries; and highly competitive funding based on performance (Prince, 2000). These expectations unfortunately do not make the position...
attractive for new candidates (Cooley & Shen, 2000; Howley, Andrianaivo & Perry, 2005; Norton, 2004). Thus, elementary principals are divided between the demands of accountability based on government mandates as well as community values. This situation is particularly difficult for principals in urban elementary schools since the school may be the only place for students to be emotionally and spiritually nurtured in preparation for life’s challenges.

**Conceptual Lens and Methodology**

The authors approached this study through the lenses of inclusive social justice leadership as conceptualized by Frattura and Capper (2007) and Riehl (2000). Implications for social justice come to the forefront in urban areas with large numbers of low socioeconomic students. The needs of these students are personal and social as well as academic. Elementary school principals try to meet these collective needs by playing an “affirmative role in creating schools that are more inclusive and that serve diverse students more effectively” (Riehl, 2000, p. 58). It is only through inclusive leadership strategies such as advocacy for students that moral obligations to meet student needs will be accomplished. Leaders who practice inclusive strategies support the needs of students instead of bowing down to restrictive legislative mandates. These are leaders who value their students, their backgrounds and experiences, and the strengths that they bring to school.

In order to support diverse learners, school leaders who place student needs at the center of their decision-making are perceived as valuing inclusive leadership practices (Frattura & Capper, 2007). Examples of inclusive leadership practices that demonstrate a nurturing attitude include maintaining high expectations for all students, treating all students with respect, and supporting school-community relationships (Eilers & Camacho, 2007; Theoharis, 2008). Inclusive leadership practices encompass assistance to different groups of students. Gardiner and Enomoto (2006), for example, highlighted effective practices that supported minority urban students. Helping to socialize immigrant students to U.S. schools, providing culturally-relevant instruction, and providing early intervention strategies were also some of the practices used by inclusive urban school principals in their study. Such inclusive practices support the academic and emotional growth of all learners (Salisbury, 2006).

**Participants**

Sixteen urban elementary principals (n=16) from two southwestern states were selected to take part in two focus groups conducted in 2005 and 2006. In selecting focus group members, experience with and expertise in historically underserved contexts played an important role. Principals with experience ranging from 5 to 20 years in urban settings were recruited to participate. Expertise included regular interactions with students and families experiencing poverty, first generation students, immigrants, and English-language learners.

With regard to demographic factors, nine participants were male and seven female. Eight participants were white, six Hispanic, and one African American. One participant checked other to describe race and ethnicity. All participants were licensed as principals and had Master’s degrees. One individual had a doctorate. Seven principals led schools with fewer than 500 students, and nine served in schools with 500 to 999 students.

**Procedures**

Principals were purposefully selected from a public school directory based on the demographic features of their school and recruited for the focus group based on the length of their experience as principal. During recruitment, the authors explained to principals the purpose of the focus group and informed them of similar focus groups being conducted in other states. The focus groups took place after the school day. Discussions were recorded on audio tape and transcribed for analysis. Each participant was provided with a copy of the transcript to ensure it accurately conveyed the thoughts being expressed. No corrections were made to the transcripts by any participant beyond improving the grammar of some statements—a common event when spoken language is converted to written language.

**Mode of Analysis**

Researchers used the constant-comparative method to develop themes and categories from the focus group transcripts. Two researchers coded the transcripts independently and then compared codes to establish a level of trustworthiness and replicability. A third researcher critiqued the transcripts in search of any statement that might contradict a theme or category established by the other two researchers. No contradictions were found. In addition to the triangulation of analysis procedures, the responses were analyzed thematically (Miles & Huberman, 1994) and included considerations of cultural and contextual components in urban elementary schools as raised by the participants.

**Emerging Themes of Inclusive Leadership**

We used a grounded theory design in developing the themes that emerged from two focus groups of urban elementary principals. Grounded theory is a method of theory development that stems from the data that are being analyzed (Corbin & Strauss, 2007). Theory is developed through the process of analysis conducted by the researchers based on the specific data collected. Some of the pressures that urban elementary principals faced included: meeting adequate yearly progress as defined by state and federal mandates; high stakes testing; district mandates stemming from NCLB; meeting the needs of English language learners; and getting parents more actively involved in schools. Their comments provided a deeper understanding of how urban elementary principals defined and described their challenges: how they enacted their commitment to social justice: and their perception of the transformative social power needed to change their communities’ status quo. These concerns clustered within three themes: (1) Interpretations of the accountability system; (2) ethical considerations for special programs; and (3) building community through authentic actions.

**Interpretations of the Accountability System**

"NCLB doesn’t measure the growth of a child,” began Principal 53 (2006). When communicating with teachers about instruction, Principal 43 (2005) asked, “Tell me how you’re going to make this work to be in the best interest of the kids.” He continued: We’re here for kids and that’s the way it’s got to be, and that’s the way it’s going to continue to be, and if you can’t join in the program about what’s in the best interest of kids and why we’re here, then—see you.
We’ve taken potshots but we have to look at what is the best interest of the kids, being able to go out and run around at lunchtime, being able to sit in the cafeteria and talk with your friends and having some responsibility and control as to what is going on in our building and to know what is happening. That’s got to be in the best interest of the kids and it is important that we look at what is happening.

The principals perceived that in the process of fulfilling NCLB requirements, remarkable improvements were evident in what students were learning from year to year. Nevertheless, they perceived deeper social justice issues associated in the pressure to prepare students to pass the state-mandated test (Diamond & Spillane, 2004; Gerstl-Pepin, 2006).

I saw a tremendous improvement in what kids were learning from year to year,” attested principal 52 (2006). “But then,” he added: I saw a little bit decline...because the teachers felt a little stifled in their creativity. And—and quit, I guess, the rigor of higher-order thinking and started just going for the kids to pass. And I think some of the kids that were close to passing—we use to call them the bubble kids—almost there—the teachers worked so hard with those kids. And the kids that were at the bottom of the barrel got left behind....They are probably the kids that need the most help... if you are looking at the social justice aspect of education. The kids we’re supposed to look out for—the low—are probably going to be the ones that are going to be retained.

The principals in the study highlighted the fact that the current accountability requirements were not allowing for accurate measures of student success due to the restrictive nature of the mandates focusing on student performance on a single standardized assessment.

Our test scores are never going to be the best in the state but, you know, I don’t care because we are going to do what is best for kids and that means that we have before-school programs, after-school programs, and we teach a rich curriculum....I do believe that the philosophy of No Child Left Behind is what we believed in anyway. Yet I think our legislators have done a terrible disservice and injustice for our children. And, I worry about what our country is going to look like 10, 15, 20 years from now.

Another poignant story was of a student “who came to us abused, beat up, neglected; had been in several foster homes—learned commended performance” this year. Three years of hard work, that will never be reflected in NCLB” (Principal 50, 2006). Experiences such as this one captured the feelings of the elementary principals. Another leader shared that his teachers work very hard and have helped students achieve. However, bound by the rigid rules of the accountability system, student progress is usually discounted if it does not take place within a year. Principal 50 (2006) mentioned that teachers have cried when these children are labeled as failures. “We know that child is not a failure. That child has worked!”

Several principals concluded that NCLB, in Principal 50’s words, “has taken the heart and soul out of schools” because of the pressure of student performance on standardized tests. The principals felt that the succumbing to performance pressures focused not on what students accomplished, but rather on what they failed to accomplish.

Synthesizing the discussion, Principal 50 (2006) exclaimed, “The very same population you are trying to help is the one that is under the most pressure.” He continued:

I am in a Title I school, with 86% of students with reduced-price lunch. The challenges are massive, and if you succumb to the "academic yearly progress" pressure, and all the other elements that go along with it, we are doing a disservice to the students.

Ethical Considerations for Special Programs

The principals in one of the states focused on the ways students with exceptionalities were not being adequately served due to restrictions within NCLB mandates. The principals perceived that the conflict between the Individuals with Disabilities Education Improvement Act of 2004 (IDEA) and NCLB exacerbated some of the ethical challenges they faced. Principal 53 (2006) stated:

It just seems like you have two pieces of federal legislation: IDEA and No Child Left Behind that are in conflict with each other, because really at the heart of No Child Left Behind, if you really look at it—it’s unmapped—it’s trying to legislate special education. Because there aren’t any accommodations for them; everyone has to take the test; everyone has to be on grade level.

She told us, “Until it’s going to take a big lawsuit—it’s going to take something between IDEA and No Child Left Behind... scissors, paper, rock; who’s gonna win? Because right now in between we’re caught.” When discussing students receiving special education services, Principal 53 (2006) continued:

Historically elementary schools used to hide the students that wouldn’t pass the [state] test under special ed because they did not have to take the test—and not every elementary school, but some. Same in my district. But you have. I feel, an ethical responsibility to all of your students because as soon as you say they don’t have to take the test then what you find in a lot of schools is that they are not teaching those children at the—that they need to be taught.

She elaborated on the tension between IDEA and NCLB:

We have a 2% exemption rate. We have [not including the children with learning disabilities]—we have 14 kids in my home school. And even of the 14, I think eight of them took the [state test] last year. And this year, my special ed students, I have—oh, it makes me cry. I have four of them that were [rated] commended performance, which, you know, that’s—you have to make those decisions for kids and it means you have to be really willing to take what happens...if it doesn’t work your way. But it’s a scary road you go down....You know, we won't have like the stellar top 100%—you know—scores. But I think that’s the right way you know, the direction. And that’s, I believe, making the decision with the child—with the student in mind.

In many instances, the principals evidenced concern for students who worked hard but missed the passing grade because of an incorrect answer to one question. Students who did not meet the mark were considered failing, even if there was demonstrated growth over time.
Building Community through Authentic Actions

The principals in this study perceived accountability to the stakeholders in the communities they served to be incongruent with the accountability focus on student achievement scores. For example, Principal 51 (2006) explained, “It’s that once test scores come out, that is the only conversations that we have—is what we did on our test scores.” Especially at the elementary level, the principals valued their role and involvement in students’ enthusiasm for learning, and recognition from parents. The principals perceived they were evaluated by parents who wondered, “Does the school care about my child?” Some of the principals agreed that if parents did not know what the principal stood for, then they seemed less willing to trust and support the principal with decisions regarding their children. Principal 50 (2006) offered an example of how some principals in the district who play up their students’ achievements are also the principals who are least likely to have genuine relationships with parents. He stated:

You can talk a big game; you can make presentations; you can become a star in that way. But really, when you get back and people don’t really know who you are, what your goals are, and what your mission is—doesn’t mean a thing.

In fact, the principal noted that during one of the school celebrations, none of the parents would thank him for technology or curriculum initiatives, but would say instead, “Thank you for taking care of my child. We feel so welcome here.” He added: “They do not remember any of the institutional values on which we are rated.”

In order to be leaders focused on social justice and attentive to democratic practices, the principals perceived the importance of building trusting relationships in their communities (Kochan & Reed, 2006; Sanders & Harvey, 2002). Examples included connecting with students and their families by greeting every child and parent at the drop-off curb every morning. The principals seized these opportunities to initiate contact with parents and to maintain previously established connections. These administrators saw this as time to “develop a positive rapport” and to “take that opportunity to try to bond with kids.” All of the elementary principals agreed that the visibility of a school’s leader was foremost in sustaining positive relationships with the entire school community (Harris & Lowery, 2002; Portin, 2004).

The majority of the respondents favored direct involvement with parents and students on a daily basis. They explained that staying connected served as an effective means of staying attuned to what was happening in the lives of their students. As Principal 52 (2006) explained:

[Accountability] makes me look at a child individually as an administrator to make sure I know each one of them, and make sure no one falls between the cracks. And so, every six weeks, I meet with every teacher about every child and, you know, track their progress, and make recommendations, you know, for more interventions or other things the kids need. So, I try to make sure that you know that every single child gets what they need.

When describing how they connected with students and their families, several principals agreed on the value of being visible and approachable. Principal 50 explained his morning ritual:

Every morning I am at the bus loop to receive the buses. Cold, wet, cold rain, hot days, whatever. In the afternoon, I put every kid in every car that drives up in front of the school. And I say hello to everybody, “Hey, how you doing?” you know, and beer cans are falling out of the cars… you know, and other things like that and that’s fine. I never judge. I say, “Hey! Here’s your cans.”

“Hey! I’m sorry.”

“Hey. No problem.”

And then they take off. But we—that right there has done more to connect with what we are trying to do with school and the parents [than] anything else.

Principal 49 (2006) confirmed the value of this exchange by stating, “I think that is more powerful than anything else that you do.” And “You begin to build that relationship with the community out there, and I think that’s just so powerful because anywhere there is an issue they do come back and they do realize he [the principal] is a person.” Principal 53 (2006) added an example of how visibility and parent connections have worked for her:

I remember one of the hardest parent conferences I knew I was going to have. And the parent—and what happened was the parent was saying something happened because there was probably not enough supervision in the cafeterias. And I look at the parent and I said, “I open your car door every morning and every afternoon and I load your son up.” And I said, “Don’t you think if I do that, I watch what is happening in the cafeteria?”

She went, “You’re right, Miss [name]. I’m sorry.” But it buys you so much…capital, just the visibility.

The examples shared above demonstrated that these urban elementary school principals used their leadership roles to enable and empower teachers, staff, and parents to support effective and inclusive learning communities (Kelley, Thornton, & Daugherty, 2005). As Principal 50 (2006) described it, “What’s more important is the interaction, the understanding, the trust, that you have in your community that’s going to make your school—you know—move and progress where you have success. People trust you.” The examples shared by these principals represent individuals who serve as advocates for students and who possess an commitment to social justice.

Conclusions

The evolution of accountability reform and its narrow definition of student achievement have created a tension that challenges urban elementary school principals to attempt to achieve compliance with mandated accountability standards while remaining true to meeting goals for student success. This study demonstrated that the urban elementary principals participating in the focus groups did not view mandated student achievement and social justice as mutually exclusive dimensions of their role. On the contrary, these principals were mindful of both sets of expectations and explained how they worked hard to reconcile the two into an integrated daily practice. The fact that the corpus of data came from participants in two different states suggests that it is worthy of further investigation as to how urban elementary principals have wrestled with integrating NCLB requirements with notions of social justice and community building.

In spite of a growing pressure to focus resources, time, and attention to maximizing the number of students passing state and federal mandated tests, the principals participating in the focus groups
espoused a priority for maintaining a child-focused environment. They placed a high value on getting to know each child individually and using their knowledge of the child’s individuality to facilitate teachers’ efforts and effectiveness, and to establish and maintain interpersonal communications with parents. Members of the school community need to support principals who are genuinely committed to lead with their hearts. A deep commitment to students struggling to succeed is particularly relevant in urban areas. A strong commitment, much like a plant, however, must be nurtured. A principal’s commitment and advocacy can be encouraged through continuous involvement from all educators on campus, the parents and larger community, and especially the distinct. This study focused on urban elementary school principals in two southwest states in order to provide information that may be significant to the examination of schools serving historically underserved populations and challenged by cultural and contextual factors unique to urban settings. The principals capitalized on opportunities to connect with students and parents to cooperatively build a strong foundation for the future academic success of all children. Such demonstrations of advocacy for students exemplified inclusive leadership practices that all principals can take to heart.

References


**Endnote**

1 Note that although some states required and administered academic achievement tests prior to 2001, with the passage of NCLB all states were required to administer such tests. States with pre-existing tests had to gain federal approval to continue these tests or modify them to meet federal requirements. States without such tests were required to develop them and secure federal approval.
Educational Leadership in the Era of Accountability

Christopher J. Johnstone, Amy Garrett Dikkers, and Amalia Luedeke

Recent changes in federal legislation, including the No Child Left Behind Act of 2001 (NCLB), have placed greater emphasis on accountability via mandated reporting of performance measures. Schools and districts are now held accountable for the provision of a successful educational experience for all students. Under NCLB, schools and districts must ensure that students are making “adequate yearly progress” (AYP) on a variety of indicators such as school attendance, disciplinary action (e.g., decreasing numbers of suspensions) and proficiency on statewide tests.1 Although multiple indicators are used to determine if a school or school district is in good standing with NCLB, testing has been at the forefront in most academic literature (Linn, Baker, & Betebenner, 2002) and popular press (Henriques, 2003).

In the current era of high stakes accountability, some stakeholders have expressed concern that the focus on test results and other narrow measures of student success have obscured the educational process (Fuhrman & Elmore, 2004). Other studies have demonstrated that high expectations (such as raising graduation requirements) have had positive effects on previously marginalized students, such as students with disabilities (Johnson, Thurlow, & Stout, 2007).

Although controversy exists, the era of accountability has become a stubborn reality for school district leaders. No matter what their philosophical approaches to accountability are, they are forced to “play by the rules” in order to ensure that funding continues to flow to their districts. For some, the era of accountability has created a need to quickly change practices and focus on areas of need that were neglected in the past. For others, the era of accountability has simply meant continuing activities that began decades ago.

In all educational circles, the word “accountability” is likely to garner strong reactions—either for or against. Often, these reactions are nuanced because education professionals may at once support and abhor particular portions of initiatives. The purpose of this study was to determine to what extent superintendents’ leadership practices are influenced by the contemporary focus on via NCLB. We hypothesized that a national policy as pervasive as NCLB would have an impact on how superintendents lead, and we sought to identify specific aspects of leadership that have emerged during the current era of accountability.

Brief Review of Literature

A variety of issues arose in the literature in relation to leadership and accountability, including commentary on the political and instructional ramifications of accountability; emotions of superintendents in a culture of accountability; and accountability and autonomy. Each of these issues is detailed below.

Political and Instructional Ramifications of Accountability

Superintendents are currently tasked with upholding an assessment system that is deemed to be overly narrow by many school personnel. Tests of accountability are only one way of measuring student learning, but school superintendents are increasingly concerned with student success on high-stakes assessments (Harris, Irons, & Crawford, 2006). Harris et al. (2006) noted that superintendents generally believed that working toward building a larger culture of success at the school would increase achievement scores and that creating a larger culture of success began with identifying the impact of assessment at the district and school level. These same superintendents expressed concern that the sharp focus on statewide testing in schools contributed to a loss of instructional time, lack of funding, and a narrowing of the curriculum overall. The superintendent, then, became one who promoted a culture of accountability while worrying about the implications associated with accountability measures.

Emotions of Superintendents in a Culture of Accountability

As pressures of high stakes testing increase, states and districts have tightened their control of instruction and supervision (Marks & Nance, 2007). Many superintendents have grown weary of accountability and assessment mandates and the politicization of NCLB. One superintendent interviewed by Harris et al. (2006, p. 199) described his state’s testing policies as “too much, too many, too soon.” Such rapid-fire testing made this superintendent “too tired” to respond to the accountability and assessment mandates of NCLB. Mark and Nance’s study revealed that superintendents were committed to facilitating increased levels of student achievement in their districts but were not provided with adequate training regarding assessment and accountability practices. The lack of training exacerbated their feelings of powerlessness and frustration. Furthermore, the superintendents questioned whether assessments were likely to be useful for improving student achievement. Although it was evident that superintendents were invested in increasing their respective district’s academic achievement levels, they felt that specific training regarding how to understand the data being collected and how to communicate this information to their faculty and constituents was needed.

The stress of many accountability activities may be taking its toll on superintendents’ job turnover. McGhee and Nelson (2005) speculated that high superintendent turnover may be one unintended consequence created by policymakers aiming to improve schools. These authors suggested that school leaders whose performance

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was once assessed using a variety of indicators that reflected the complexity of the job are now finding their effectiveness determined in much narrower terms. According to the authors, this has led to an increase in superintendents removed from their positions solely as a result of accountability test scores.

**Accountability and Autonomy**

Under current federal law, schools that fail to meet established benchmarks are potentially subject to takeover and reconstitution. These factors have contributed to schools and districts yielding considerable autonomy to the state for a range of student outcomes (Fuhrman & Elmore, 2004). Although principals and superintendents are central agents of change in the system for improving school performance (Marks & Nance, 2007), school and district leaders under federal scrutiny have reduced autonomy in their instructional decision making. While such reduced autonomy is intended to produce improved results, it may also diminish the influence of school district leaders. At the same time, many school leaders are not prepared to interpret policy or to process and reconcile conflicting policy initiatives (Mark & Nance, 2007). Cibulka (2000) noted that new and less hierarchical approaches to administration may be the antidote to the challenges faced by superintendents. Such leadership approaches may also have implications for a systemic reform movement by encouraging collaborations across the system around core indicators of change. Marks and Nance (2007) suggested that addressing leadership challenges in the ways described above may make administrators be less subject to conflicting demands of accountability measures and sanctions that may be imposed. Furthermore, Cibulka (2000) suggested that research-based innovations contributing to the capacity for organizational learning, (e.g., professional community; data-based and participatory decision making; and transformational, instructional, and distributed leadership) may provide the necessary elements for school improvement to meet challenging accountability requirements.

**Methods**

It is clear that the age of accountability has had a significant impact on the activities of school superintendents. Our research purpose was to better understand how school superintendents lead and manage locally in an era driven by a pervasive and controversial national policy.

Qualitative data obtained through focus group interview transcripts of superintendents were analyzed for this study using methods frequently used for qualitative inquiry (Bogdan & Biklen, 1992). Transcripts from interviews were read and coded with one- or two-word codes describing phenomena. Point-by-point coding was used, i.e., each point made by a participant was individually coded. Next, codes were collapsed into larger themes that described the phenomena described by participants. These themes were supported by quotations from the participants themselves.

A rigorous analysis was conducted. First we produced a common codebook based on our initial reading of the data. We then individually coded transcripts using NVivo software. The process began with individually coding the entries of one focus group session, identifying themes. We then met, discussed the coding, vetted themes with each other, and developed the first version of the codebook. It had seven main codes, with three subcodes under one and two subcodes under a second. We then coded two more focus sessions individually, meeting to go over the coding, refining codes to create version two of the codebook. We then separately coded the remaining documents, contacting each other if we needed clarification on a code or creation of a new code. The last step of the data coding process was a final review of all transcripts, coming to consensus on codes when there was disagreement.

The final codebook had ten main codes and thirteen subcodes as follows:

1. Resource Allocation (RA)
   1.1 RA NCLB specific
   1.2 RA Overall funding
2. Emotion
3. Student Achievement
4. Impacts on instruction (I)
   4.1 I Special populations
   4.2 I New programs
   4.3 I Time
   4.4 Personnel
5. Standards
6. Politics and leadership (PL)
   6.1 PL media
   6.2 PL School board
   6.3 PL Community
   6.4 PL State
   6.5 PL Federal
7. Leadership
8. Data-driven decision making (DDDM)
   8.1 DDDM Internal analysis
9. Other accountability
10. Test validity

**Results**

Results from this study found that the phenomena that superintendents described in districts were similar to those reported in the literature. Superintendents felt caught between the unintended policy outcome of delimited curriculum because of a focus on “teaching to the test” and a desire to maintain high expectations in schools. This section outlines three themes from superintendents’ work that relate to leadership and accountability: (1) Politics and leadership of accountability; (2) emotion and accountability; and (3) impacts on instruction and accountability. These had the largest number of passages coded (including subcodes) in the transcripts.

**Politics and Leadership of Accountability**

This theme had the largest number of passages identified (141 passages coded). As we read through the focus group interviews and checked with each other to maintain coding reliability, we recognized the need to create the following subcodes for this theme to indicate the stakeholder group where political interactions were present: media; school board; community; state; and federal.

Conversations on this theme revolved around NCLB and its requirements. Several superintendents spoke positively about the intent of the law but followed those statements by with saying that
it is impossible for schools to meet all the requirements; the process is not in place to fulfill all the requirements; and the funding necessary to be successful was not available. Superintendents who were succeeding in the era of NCLB still expressed apprehension at being forced or expected to change what they were doing in schools and districts both when they were not succeeding on assessments and when they were not making changes quickly enough to satisfy federal requirements. Stronger emotions were expressed when superintendents described community members’ angry responses at schools not making adequate yearly progress (AYP): community members asking for clarification regarding NCLB requirements; parents wanting schools to do what they think is right for their children; and the difficulty of working with school boards and community members who do not understand NCLB.

For many of the superintendents in this study, finding new and innovative ways to meet the needs of marginalized students was a challenge. Superintendents talked about having to make hard decisions with limited funds and about how best to address the needs of diverse student populations to improve their test scores. One superintendent discussed working in a district where no one had been held accountable before, and she was struggling with how to get people on board and create buy-in in an environment of apathy.

The law was supported by several participants. As an illustration, one superintendent (Participant 1, small district, Midwest) supported the NCLB legislation because he “[did] not believe that our public schools have been accountable to the public, particularly at the secondary level.” He continued:

And I do not believe that our teachers, particularly at the secondary level, have been open to changing their instructional practices to truly meet the needs of kids. I do think they’re [still] teaching the way we taught kids back in 1950’s and 60’s, and the lecture mode is still pretty much the predominant style and that’s not the kind of kids we have anymore. And so if [NCLB] makes people look at what they’re doing and be a little bit more accountable, I’m 100% behind it (Superintendent 1, small district, Midwest).

NCLB created a political storm for superintendents both in and out of their school systems. Overall, superintendents supported the principles of NCLB, but found the lack of resources and punitive nature of the law difficult to support. Some of the greatest challenges superintendents faced were with stakeholders who did not fully understand the law but had access to media coverage relating to whether or not schools made AYP.

**Emotion and Accountability**

The political storm led us to probe the superintendents’ emotional responses. NCLB brought out strong emotions among the participants. The most commonly expressed emotions were stress, resentment, frustration, and disbelief (primarily around the assumption of NCLB that all children could be proficient in a content area or that every student could take and succeed on the same assessment). Two superintendents’ responses to the pressures of the law illustrated how a variety of emotions were present in their work.

What I want is just one more person who has never run a school to tell me how to do it. That’s just high on my list. You know, I just love all these people, President Bush included, who never sat in my chair, trying to tell me what my kids need. That just aggravates me to death. It’s the square peg, round hole. You can’t legislate ability. You can’t legislate home life. You can’t legislate background. You can’t legislate interest levels. So not every kid comes through that door’s gonna be a round peg, and I don’t care what NCLB says, it’s not gonna happen that way. It’s just not. Kids are different; you gotta treat ‘em different; you can’t treat ‘em all the same (Participant 2, small district, Southwest and West).

Another superintendent added:

We do have four administrators and our high school principal doubles up as a part-time curriculum [coordinator] also, so he is a person who kind of is able to focus on that. We work closely together with that and it’s been a lot of extra busy-work, and I know when [NCLB] first came out I just—I was discouraged and gnashing my teeth because it was like you’re just being set up for failure; you’re being set up to be a target of not doing your job, and I resented that, and I thought it was a draconian piece of legislation and punitive and very unfair in many ways considering how hard I know everyone works to do the very best they can do (Participant 3, small district, Midwest).

In general, it was clear that the superintendents in the study sessions were focused on the challenges of politics and the importance of strong leadership in an era of accountability. It was also clear that emotions were quite close to the surface throughout all of the discussions. One interesting finding, though, was that superintendents in all focus groups went beyond general conversations about accountability to identify exactly how the focus on accountability affected the work of their individual schools and districts.

**Impact on Instruction and Accountability**

The third largest number of passages were coded on the theme of impact on instruction and accountability (122 passages coded with relevant subcodes). The main code was for passages that spoke about the impact of accountability on instruction. Subcodes were new programs, instructional personnel, instructional time, and instruction for special populations. For the purpose of this study, students who required special attention in schools were considered special populations, and these included students with disabilities; English-language learners; students with persistent academic challenges; and gifted and talented students. Findings for each of these subcodes are presented below.

**New Programs.** A few superintendents discussed new programs or initiatives that they have implemented in their districts to address the increased focus on accountability. Examples included: Saturday school; extended summer school; and English as a Second Language (ESL) programs. One unique example addressed the needs of a school’s large Hispanic enrollment (84%). Each year the majority of Hispanic students went to Mexico for three weeks at Christmas. Rather than attempt to keep students in school during late December and early January, the school simply closed during this period and extended school year later into summer. This particular school was also experimenting with a year-round schedule because the majority of students spoke Spanish at home and experienced a drop in English proficiency over the summer months (Unidentified participant, medium district, Southwest and West).
Many superintendents discussed the need for having the right (or enough) people to provide instruction when focusing on accountability. Superintendents noted that a focus on accountability required schools and districts to train their teachers, especially around data-driven decision-making. One superintendent mentioned, "It's making instructional leaders out of my principals" (Unidentified participant, medium district, Southwest and West). Others mentioned that the focus increased teacher competency to the point where teachers were proud of their ability to teach when their students did well on the assessments.

The increased focus on accountability made some districts pay more attention to their paraprofessionals and their qualifications, which was seen as a positive outcome for students. A substantial challenge to school leaders was meeting NCLB's stringent "highly qualified teacher" requirements. A summary of their thoughts follows:

- Highly qualified teachers require a higher salary, which sometimes means other budget lines must be cut.
- High qualifications do not necessarily mean someone is a good teacher.
- Having all teachers be highly qualified is unrealistic because, in many districts, it is hard to find teachers in some content areas, regardless of their qualifications. One superintendent from a medium-sized school district in the Southeast explained, "Does anyone think for a minute that superintendents or principals would not want to hire a qualified person to teach math in a classroom? To me it's absurd to think that we would say, 'Oh, I'm just out here wanting to hire anybody I can.' The issue is this law, this procedure here, NCLB, doesn't address what's causing any apparent reasons why you are not attracting people into the field."

Other instructional personnel issues included low morale; high stress and anxiety levels for teachers; additional professional development requirements for staff; choices between teacher salary increases to keep teachers and funds for other programs; and the perception that state departments were monitoring agencies instead of support organizations.

Instructional Time. Another impact of accountability measures on instruction was how schools unconsciously (or consciously) changed instructional time to match subjects tested on accountability assessments. Specifically, superintendents mentioned spending much more time on paperwork, public relations, and "drilling down and making sure your curriculum and your professional development is aligned properly" (Participant 8, medium district, Midwest). Two focus groups (Medium district, Midwest; and medium district, Southwest) had long conversations about what content areas were sacrificed in their districts due to an increased emphasis on mathematics and language arts that came with NCLB.

Instruction for Special Populations. The subcode under impacts on instruction that was coded for the highest number of passages was special populations. Almost a third of the passages coded for the impact for special populations spoke about the requirement that all students can meet rigorous academic standards outlined in NCLB. Superintendents stated that there were positive impacts of an increased focus on accountability for many special populations, especially subgroups who were not previously in the spotlight, such as students with low socioeconomic status, ethnic or racial minority groups, and English-language learners. Teachers of these groups were challenged to change their instructional techniques in order to meet the diversity of needs in their classrooms.

Although many superintendents spoke of the advantages for some special populations that stemmed from an increased concentration on accountability, they also listed ways in which some groups were disadvantaged. English language learners were disadvantaged because the tests are in English, even if the content is not English-specific. Gifted and talented students were disadvantaged because time, people, and focus were taken away from them (and their instructors) to serve other populations not performing well on mandated assessments. One superintendent believed that students on the margins were disadvantaged because money for hiring highly qualified teachers meant less funding was available to hire assistants for classrooms. These assistants generally provided one to one support for students at risk of failure.

According to NCLB, all subgroups must be proficient on state-wide assessments. Superintendents whose schools and districts had large numbers of special education or low-performing students felt that their schools were unfairly penalized because the schools were unable to reach AYP based on results of subgroups. Some districts also had high rates of student mobility or high numbers of children in need, which superintendents also felt disadvantaged schools regarding rankings and AYP.

Summary

Results from focus groups indicated that NCLB has had tremendous impact on the work of school superintendents. The political dimensions of the Act have tapped into the emotions and actions of superintendents. Components of NCLB, such as high-stakes testing, requirements for highly qualified teachers, and success of all subgroups on NCLB measures have been some of the greatest challenges. Despite these challenges some (not all) superintendents supported all or part of the Act's intentions and procedures. It was evident from superintendents' comments that implementation of national policy at the local level was complex and layered.

Conclusion

NCLB was not the first, nor will it be the last national policy in education in the United States that mandates fundamental changes in schools and districts. Despite its historical context, beginning as the Elementary and Secondary Education Act of 1965, NCLB has dominated the political landscape of public education for the first decade of the new millennium. Challenging accountability requirements (including success on statewide assessments and teacher qualifications) have forced school districts to examine their day-to-day activities in order to avoid sanctions laid out as part of NCLB.

For superintendents, the challenge is clear: meet the requirements of the law or lose much-needed federal funding. For leaders who depend on such funding to ensure a high-quality education experience for their students, the potential for anxiety is also clear. Superintendents are often the first to be blamed when accountability requirements are not met. There was great concern about specific
characteristics of NCLB. It was clear that the ramifications of high stakes testing (including perceived unrealistic goals for special populations and narrowing of curriculum) and personnel issues (including highly qualified teacher requirements) were of great concern to superintendents. These concerns appeared to generate the superintendents’ most emotional responses.

As the number of schools and school districts not meeting annual NCLB requirements grows, leaders who have survived sanctions appear to be those who can leverage highly challenging external requirements into internal actions that improve achievement. We may again have an era of education where leaders can shape decentralized visions of the teaching and learning process. For now, however, superintendents must act as facilitators who can transform strong external demands into manageable processes of teaching and learning.

References

Endnotes
1 Note that although some states required and administered academic achievement tests prior to 2001, with the passage of NCLB all states were required to administer such tests. States with pre-existing tests had to gain federal approval to continue these tests or modify them to meet federal requirements. States without such tests were required to develop them and secure federal approval.
2 See the introduction of this special issue for descriptive statistics on the superintendent sample and focus groups.
Negotiating for Democratic Communities in Schools: Principals’ Perspectives

Teresa A. Wasonga and Dana Christman

Introduction
This study explored the strategic use of negotiating as a tool for creating and enhancing democratic communities. Principals have been described as an important unit of analysis in examining leadership practice (Spillane, 2006). They have also been described as the “school catalyst for success for all stakeholders” and the chief proponent of the value of democracy (Wilmore, 2002, p. 5). As facilitators of leadership in schools, the patterns of principals’ behaviors are likely to determine the extent of the practice of democratic principles.

Democratic ideals of leadership “call for school administrators to commit to new practices of diversity that uphold social justice, concern for oppression and a healthy skepticism toward leadership and authority” (Mullen, 2006, p. 100). According to Mullen, democratic leaders formulate just decisions, ask moral questions, and solicit diverse stakeholder viewpoints. It is through such actions that schools may realize ideals for democratic communities. In the writings of Williams, Ricciardi, and Blackbourn (2006), democratic leadership is described as involving “leaders using various decision procedures that include follower input” (p. 590). Follower input is obtained through consultation, integration, and accommodation of multidirectional communications with subordinates. These actions then lead to the development of networks, and the sharing of power among leaders and followers. Because of the nebulous nature of these networks, defining democracy as finite has been challenged (Furman & Shields, 2005). Just like “the concept of social justice, democratic community is an ideal, a moral purpose toward which educators strive, one that is never fully realized” (p. 120).

Method
The origins of this article lay with discussions that indicated that knowing what leaders are supposed to do is important, but knowing how they do it (democratic pedagogy, pedagogical leadership, and democratic accountability) on a daily basis is essential, both in understanding leadership practice and preparing future school leaders (Place, Ballinger, Wasonga, Piveral, & Edmonds, 2006). A qualitative method of study was used to identify repeated and recognizable patterns of behavior indicating how principals engaged members of the school community in decision-making processes. The phenomenological approach to this study focused on increased understanding of processes used by school principals to engage others in decision making and nurturing democratic communities. Phenomenology refers to the lived experience of these principals. Although subjective, the focus of the research method is on the essence of the meaning between participants and the world in which they interact (Merriam & Associates, 2002).

Research Questions
The research questions generated to guide the study were: (1) How do school principals describe their conceptions of a democratic community? and (2) How do school principals relate to the concept of democratic community?

Definition of Terms
Democratic community. This study focused on democratic community as a place in which decisions are made “in ways that respect the fundamental equality of each citizen, both as participant in deliberation and as the bearer of potentially equal power in decision[s]” (Mansbridge, 1995, p. 342).

Democratic leadership. Mullen’s (2006) conception of democratic leadership and capacity was used where democratic leadership can be characterized as having three strands:
(a) Democratic pedagogy: School leadership approaches the renewal or improvement of schools, teachers, and students as participatory and community oriented; (b) pedagogical leadership: An organization’s resources are expended through community-building efforts where the value of human supersedes that of economic prosperity; and (c) democratic accountability: leaders negotiate the seemingly contradictory forces of democracy and accountability (p. 100).

Negotiating. For the purposes of this study, negotiating refers to the ways participating principals mediated, managed, or engaged the school community in deciding matters related to school (Bruffee, 1999; Cranston, 2001; Lunenburg & Ornstein, 2004; Norton, 2005).

Participants
Included in this analysis were the discussions of seven focus groups comprised of principals from six states: Michigan, Illinois, Alabama, Missouri, New Mexico, and Ohio. A total of 44 principals from four elementary schools, two middle schools, and one high school, provided data for this study. Focus groups ranged in size from five to eight participants.

Mode of Data Analysis
The transcripts were read several times for familiarity. During this process, the researchers looked for convergence in concepts from participants’ narratives. Information that demonstrated a common theme was put together through a process of coding and data reduction (Wiersma & Jurs, 2009). Coding and data reduction involved “organizing them [the themes], breaking them into manageable units,
synthesizing them, looking for patterns, discovering what is important, and what is to be learned” (Bogdan & Biklen, 1998, p. 157).

Through axial and selective coding (Bogdan & Biklen, 1998), the researchers identified themes. The responses leading to these themes were further organized as categories based on the frequency of occurrence in all the focus groups (Fink & Kosecoff, 1998). As a check on the reliability of the coding, a second coder, unfamiliar with the data, coded the same data set. The inter-rater reliability between the second coder and the researchers was established at 87%. After themes were identified, the frequencies of occurrence by theme were counted. Themes were then ranked according to the frequency level.

**Findings**

Five themes of negotiation were identified through data analysis: Interacting; evoking; empowering; recognizing challenges; and controlling. In addition to the five themes, data indicated that “hiring the right people,” was the foundation for developing a democratic community. Participants described the right people as those who were willing to engage in active discourse, and leaders who listened, modeled their values, and respected what other people had to offer. The principals agreed that shared decision-making yielded better decisions and actions. To make this happen effectively, however, principals needed facilitation skills that enabled them to be perceived as predictable and in control. Although control was the theme ranked last (See Table), participants justified the need for control by explaining that schools are bureaucratic organizations where leaders are expected to be responsible and accountable for outcomes. The principals also expressed concerns about substantive community participation. They stated that often teachers did not come up with substantive suggestions; were not willing to take risks; were too busy; or felt that the principals were paid to make decisions.

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<table>
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<tr>
<th>Themes</th>
<th>Percentage of Responses by Theme (%)</th>
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<tr>
<td>1. Interacting</td>
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<td>2. Evoking</td>
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<td>12</td>
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<td>5. Controlling</td>
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**Interacting**

Interactions are contextual formal and informal practical conversations rooted in experiences and everyday thinking. Bruffee (1999) wrote that conversations are the most powerful ways of influencing people. Conversations may lead to new products, services, or systems (Nonoka & Takeuchi, 1995). Sergiovani (2006) found that interactions among personnel in schools were necessary for promoting and institutionalizing decisions. In addition, a principal's interactive style impact a teachers' construction of others as influential (Cranston, 2001; Johnson & Venable, 1986; Spillane, 2006; Spillane, Hallet, & Diamond, 2003).

All participating principals in this study used interacting as a way to develop interpersonal relationships or build social capital. Participants indicated that interactions brought in more facts and processes to consider when making decisions. In other words, as they engaged in conversation about school matters, they were more likely to discover new ways of looking at issues, and questioning or affirming their assumptions, often yielding new facts that were likely to influence their decisions. For example, the team approach was mentioned by principals from Illinois, Michigan, and Missouri. A principal from Illinois used teamwork to bring teachers together to exchange ideas and to develop objective understanding of students with Individualized Educational Plans (IEPs). Here is how she explained the process of interacting through teamwork. “When we sat as a team,” she said, “…one teacher says, ‘This child, he swears and he doesn’t do his work,’ and another teacher says, ‘Mmm, I don’t have any trouble with him.’” These dialogues among teachers enabled them to question their assumptions in this case; disown some of their own judgments; and become more objective in their deliberations about students.

Another principal from Illinois explained that he built an engaging school culture through “conversations with other people” and “face to face contact.” For him, interacting “broadened the conversation base” by engaging even parents who “didn’t like what I was doing, but bringing in new ideas that I won’t necessarily get.” These interactions were seen as building blocks for relationships that would translate into greater community participation.

A principal from Michigan explained that top-down decisions can become democratic “by talking about it as staff” to figure out the best way to resolve an issue. Principals from Missouri emphasized conversations about facts with the hope that a common background (interest) would more likely lead to more widely acceptable conclusions and decisions. They gave the example of a reading program that was not working despite the teachers' best efforts. Teamwork was a method used to determine problem areas and possible solutions.

**Evoking**

Evoking, the second most frequently (22%) used negotiating tool or theme, was used to stimulate thoughts, ideas, and interactions among members of the school community. Posing simple, unsophisticated questions, can reveal many important problems and solutions (Blase & Blase, 1999; Bruffee, 1999). Questions, promises, imperative statements, or data challenge school and community members to consider opposing or alternative views. Evoking may also lead to the breakdown of routines, habits, or cognitive patterns and assumptions, providing opportunities to reconsider foundational thinking and perspectives. According to Nonoka & Takeuchi (1995), a breakdown may lead “attention to dialogue as a means of social interaction, thus helping us to create new concepts” (p. 79).

According to Browne, Curley, and Benson (1997), evoking implicitly assumes that the more knowledge, information, or motivation there is, the better the chances of identifying what is relevant to the decision-making process. With the speed at which technology and information changes, evoking other people's skills and knowledge is a source of competitive advantage for any school leader. Evoking may
reduce the impact of Simon's (1979) theory of “bounded rationality” which describes decisions that are made by settling for less than optimum decision making because the decision maker is limited by what he or she knows.

Principal engaged in evoking through promises, questions, imperitive statements (directives), or data. For example, to get his staff to take risks, an Illinois principal promised to take the heat for any failures. In return, his teachers have been good about thinking of what else to do. “I told the staff that if you have questions ask the teachers, if you have complaints, they are mine because it is my decision.” He was amazed at “how many more people came on board to help with things” just because he said up front, “I am going to take the heat for it. I still want your input.”

Another principal made her intentions known through her critical statements that laid the groundwork for what was expected from teachers: “I am paying for subs. You guys will all have subs and we will bring everybody on the docket and run them through an entire day [of training on IEPs].” She told the teachers, “You need to do what is best for kids before you bring them up to that table.” Based on these statements, she claimed, “I have seen just a lot of good ideas coming together.”

Evoking was also realized through experimenting, creating alternatives, and using research. Experimenting with ideas or alternatives inspired members to engage in the process together. One principal said, “I feel very strongly that finding ways to ask the right questions helps in getting them [teachers] involved in how to help the kids.” A principal from New Mexico indicated that “giving them [parents, teachers and children] the freedom to voice their opinions regardless of what the outcome is, they got to say what they thought and what they felt.” In his opinion, people had strengths that may not be known about as a principal unless you “tap into it” (evoke it). All focus groups discussed data and research as ways to get teachers and parents engaged and understand implications of student performance. A principal from Missouri indicated that this approach “has led to real change in the classroom and the teaching approach that teachers use.” Whether the principals used data, questions, or imperative statements, the process of evoking encouraged teacher involvement, responsibility, problem-solving, data-driven decision-making, and more thoughtful and deliberative actions.

Empowering

Empowering was the third (16%) most frequently used negotiating tool. The literature is replete with the benefits of empowering teachers and students in schools (Blase & Blase, 2001, 2004; Short & Greer, 1997; Weiss & Cambone, 2000). This study supported previous findings that empowering teachers enabled them to participate in school governance and, thus, expand and create a democratic community.

The sense of empowerment in a school is the degree to which members can make decisions that control events critical to their work and the perceptions that members can effectively make happen what they wish to have happen through their abilities and competence (Kleckner & Loadman, 1998; Short & Greer, 1997, p. 139). Leaders empower by creating a culture that supports risk-taking, active problem solving, opportunities for new learning, and by using the competencies and abilities of others. Such a culture leads to the development of “shared understanding of what’s important, what’s acceptable, what actions are required, and how these actions will get done” (Wheatley, 2000, p. 341).

Participants recognized that empowerment supported democratic ideals. For example, in response to a question on what it meant to have other people want to have a voice in decision-making, a principal responded:

That’s an easy value to espouse… but there is the reality that until you build a culture in the building where the teachers know what you are all about and understand where you are coming from [in terms of involving others in decision-making], it won’t work.

In other words, principals needed to establish enabling environments that would lead to shared understandings of expectations in order for others to become constructive participants. One Illinois principal promoted empowerment through listening and providing meaningful opportunities for involvement. He said, “Just the listening [to teachers], getting them involved in consequential activities makes them feel much empowered.” He qualified this statement by adding, “I do not mean in a union-empowered way, but just that we are here for the kids and we all have a say, and I think that is a good thing.” A principal from Alabama realized that getting all of her teachers in different task forces made a difference in their engagement because “they have that power to make decisions ...they are sharing decisions and things are just lovely.”

The principals also referenced professional development and teacher recognition as sources of empowerment. In describing a principal’s role in empowering, one principal observed, “An administrators’ role is developing staffs’ concepts, knowledge, new teaching strategies, and providing them staff development opportunities.” She noted that just like children, teachers needed to be motivated to become involved:

It is true, I think sometimes in education we think that they are servants (referring to teachers). Some of the best things that work for kids in terms of recognition, work for teachers also. When the teachers feel good about what they are doing and they feel as if they are empowered by new ideas and strategies, they are going to go to the classrooms and do the best for the kids.

Another principal explained that modeling empowerment and risk-taking by school district leaders enhanced the chances of teachers doing the same. Thus, according to these participating principals, empowering teachers through shared understanding (common interest), professional development, opportunities for meaningful participation, and motivation engendered democratic community and accountability.

Recognizing Challenges

Recognizing challenges was the fourth (12%) most frequently used negotiating tool. Recognizing challenges indicated the continuous tensions that exist in communities between collective and individual interests (Etzioni, 1998; Mansbridge, 1995; Mullen, 2006). As Janis (1972) and Janis and Mann (1977) indicated, recognizing and accepting the existence of challenges in the process of constructing democratic communities increased opportunities for success and decreased the occurrence of groupthink. However, at the point of dealing with the challenges of fostering a democratic community, principals often revert to control, especially when decisions do not reflect their personal interests, vision, or beliefs.
School administrators pursue multiple and often conflicting goals within a network that constrains and restricts maximization of goal achievement (Cook & Levi, 1990; Kowalski, Petersen, & Fusarelli, 2007). According to Mansbridge (1995), the challenge for leaders and communities is to find "ways of strengthening community ties while developing institutions to protect individuals from community oppression" (p. 341). Mullen (2006) described this as "negotiating the seemingly contradictory forces of democracy" (p. 100).

Another challenge expressed in this study was consistency. Without consistency, a leader may lose credibility with the community. A principal from Illinois cautioned that consistency was often contextual and fluid, causing tension between community and individualism, stating, "They [the community] are looking to see whether you are consistent. If you espouse something and change it when it doesn't seem to be the expedient thing to do politically...you have lost it. You've lost all the capital you built." Another principal expressed challenges of consistency in this statement:

Sometimes what is good for kids can be viewed as inconsistent because the staff will say, "Wow, in that situation you did such and such, and in this situation you did this." Yes, I am individualizing and that is kind of hard.

Diversity of opinions and interest was also discussed as a challenge for developing a democratic community. In one principal's opinion, People offer great ideas and somehow it doesn't fit with the objectives you are trying to align to, then they feel isolated or not listened to. That becomes a challenge. When everybody wants to be heard, that's hard to do.

Giving up power and still maintaining authority was mentioned in all of the focus groups as a challenge to establishing a democratic community. Short and Greer (1997) and Klecker and Loadman (1998) discovered that leaders find it very difficult to give up power. Some principals struggled with being absent from teacher-led committees while the teachers often wondered if it was right to have certain discussions without the principal (Short & Greer, p. 145). In an attempt to explain the challenges of power struggles, a principal said,

It's hard to give up any of that power because you do see it as loss. But you need those other [teachers'] ideas. ...And there are times that not everybody. when you get a bunch of voices in there, has the same goal.

Control

Control was used 11% as a negotiating tool for a democratic community. The use of control in schools was explained by Weiss and Cambone (2000) as follows: "Principals were responsible for the school and accountable to the superintendent, and in certain cases, they believed that their judgment had to prevail" (p. 371). This finding confirmed the tension between democracy and accountability (Mullen, 2006) and tension between community and self interest (Mansbridge, 1995). In this study, principals seemed to exercise control because of unease about the impact of teachers opting not to participate; operating outside school interests; or acting against the best interest of the child. They considered control as a way to enhance democratic community while protecting children from oppression by teachers or the system. This form of control gave the principal power to create boundaries for participation, and the ability to engage those not naturally inclined to participate for reasons ranging from differences in opinion to self selected isolation. Even though control in ordinary circumstances may be considered negative, it was not considered negative by principals in this study; especially when it was used in the best interest of students.

Wheatley (2000) described control in organizations as designing people's jobs and requiring them to perform with "machine-like obedience" (p. 339). It is the opposite of empowerment. Leaders who exercised control believed that their vision was required to energize the community, that incentives motivated the community if they had no intrinsic motivation, and that the organization should impose plans on community and avoid real participation (Wheatley, 2000). This is typical of Theory X leadership which McGregor (1960) found to be incompatible with democratic organizations because it conflicted with individual needs fulfillment in the work place. Although control may discourage participation and productivity in organizations, it may be necessary in the bureaucratic pattern of governance that characterizes most school systems, where principals are mostly responsible for outcomes (Crow, Hausman, & Scribner, 2002; McGhee & Nelson, 2005; Short & Greer, 1999; Thompson, Blackmore, Sachs, & Tregenza, 2003). Control may lead to tension between democracy and accountability as explained by Mullen's (2006) third strand of democratic leadership capacity - "democratic accountability" (p.100), in which leaders have to negotiate the seemingly contradictory forces of democracy and accountability.

Participants in this study expressed fear of letting others be responsible for that for which they themselves were held to account. Although they perceived their role as that of consensus builder, they found it prudent to exercise control by setting conditions and constraints for members based on student interests, school vision, or leadership accountability. Control was practiced as a self preservation instinct almost at a subconscious level. Etzioni (1998) explained that social and personal tensions cannot be eliminated. For example, the principals referenced "vision" as integral to the development of a democratic community, but they talked of "my vision" rather than "our vision." One principal expressed the belief that his vision was "required to guide others" or, in Wheatley's (2000) words, "energize the community" (p. 339). According to another principal, to succeed, "I have to be confident in who I am and what my vision is in order to work with people. It's possible to lose control of the whole process."

His argument for control was:

As an administrator I am held responsible and accountable for our building. If I don't have the authority to do something because the conversation has taken that away from me, that is scary because who wants the responsibility without authority?
These principals articulated that control was not only necessary for purposes of accountability, but also as an exercise of power to include those who would otherwise not participate. Their statements indicated that it would be difficult to create a democratic community without some form of control. It was important to find a balance between individual interests and school interest, and ways to be in control of what was happening in the school without constraining involvement of members (school and community).

**Implications and Need for Future Research**

In this study, although principals indicated that negotiating led to more informed decisions and/or actions, issues of control/responsibility/accountability were sources of tension and fear. Participating principals were doubtful that every school leader believed that democratic leadership was the way to lead in all schools. Bruffee (1999) explained that most school leaders and teachers are already deeply acculturated in bureaucratic governance. Some of them preferred to govern in the foundational conventions of traditional schooling (as a bureaucracy or as a machine). Despite this, organizations have become more diverse and complex and, social constructivist understandings of leadership have emerged (Leithwood & Jantzi, 1999; Spillane, 2006). Social constructivist leadership involves shared decision-making and a focus on the interactions between leaders and followers. Just as Freire (1990) required teachers and students to be teachers and students simultaneously, social constructionist theories require teachers and leaders to share and exchange roles. How school leaders’ behaviors contribute to the social constructionist leadership approach is what is at stake because leaders tend to stay in dominant situations most of the time.

The results of this study found that within schools, principals used certain skills to negotiate bureaucratic roles, and expectations in order to invite all voices. These skills are what Mullen (2006) defined as democratic pedagogy (interacting, evoking, empowering, control). In using these pedagogies, the principals demonstrated that inviting others “can improve the competitive status of the group as a whole by providing an efficient way of solving problems of collective action” (Mansbridge, 1995, p. 342).

Three of the five negotiating tools (interacting, evoking, and empowering) served to expand the principals’ resources by tapping into the human capital. Interacting was the most frequently used tool (39%) in negotiating for democratic communities. Interacting, initiated by principals, enhanced dialogue and interpersonal relationships. While Spillane (2006) established that interactions are the key to unlocking leadership practice from a distributed perspective, Liberman, Saxl, and Miles (2000) found that interactions enhanced interpersonal relationships. These interpersonal relationships helped legitimate leaders’ positions in case of conflict or resistance in the process of engaging others. Bruffee (1999) proposed that the most powerful form of persuasion was the influence that interlocutors have on one another in the process of interacting. In this study, whenever principals engaged teachers, students, or teams, they distributed and generated knowledge and authority among themselves and thereby expanded and exceeded what the principal would have achieved alone.

Wheatley (2000) asserted that leaders have consistently chosen control over productivity associated with participation of others. This may be true, but in this study, control was used because principals recognized: (1) The fact that they are unilaterally held responsible and accountable for the outcomes of their schools; (2) they must guard community and student interest; and (3) they needed to include those who may be inclined to self-isolate. It is also important to note that behaviors reflecting the willingness of principals to engage others without control were practiced 89% of the time compared to control at 11% of the time. By using the engaging patterns of behaviors more often, but in combination with control where necessary, principals transcended the traditional binary distinction between control and consensus. They applied the “new golden rule” of greatly reducing “the distance between ego’s preferred course and the virtuous” (Etzioni, 1998, p. viii). For many of these principals, in order to achieve the mandate of educating every child, they used a range of mechanisms to engage as many people on staff and in the community without abdicating responsibility and accountability. They recognized that the work of principals and teachers was highly interdependent and neither could succeed without the other. They also tried to ensure that everybody had a common focus. Sometimes this required the use of control. On the other hand, the data indicated that control may have been used as a self-preservation instinct. The principals believed that they had to exercise authority (ego-preferred course) in order to be seen as the leader by those within the school and the larger society.

Fullan (2002) and Wilmore (2002) maintained that beyond a self-preservation instinct, there are systemic norms of control. The principalship is an embedded role, and it cannot be assumed that personal strategies alone would lead to the desired democratic community. Systemic norms of control, some of which are beyond the powers of a principal may impact the extent of a democratic community. Therefore, the extent of the democratic community seemed to reside not only in the principals’ abilities to maximize inputs from community without control or consensus, but also in the systemic norms, structures, and leadership expectations provided by the school district, the immediate, and larger community. This study suggests the need for better understanding of: (1) How negotiating skills may be developed and delivered in principalship preparation programs; (2) methods of accessing members of the school community and which of the negotiating tools to use with particular people or problems; and (3) how these skills may be developed by practicing school principals.

**References**


Endnotes

1 According to Mansbridge, forms of democracy depend on the degree of common interest or tension between community and individual. The greater the degree of common interest, the lesser the degree of tension between participants in the deliberation when making decisions. Etzioni (1998) referred to this tension as the “golden rule,” a rule that contains the “unspoken tension between what ego would prefer to do, …[and that] which ego recognizes as the right course of action” (p. viii). He argued that it is very difficult to eliminate this profound source of social and personal struggle. For this reason, Etzioni suggested a “new golden rule” which is, to “greatly reduce the distance between ego’s preferred course [of action] and the virtuous one” (p. viii). This rule implies that the levels of democracy depend on the gap between ego and virtue or individual and common interest, where virtue and common interest are the preferred. Thus, the challenge for school leaders in creating democratic communities is to find a balance between personal and community interests. The “stronger the community [interest], the less useful are aggregate democratic forms like majority rule, …and the more useful are deliberate democratic forms” (Mansbridge, 1995, p. 342). Strike (1999) referred to these varieties of democracies as “thin” and “thick” democracies where thick democracy promotes mutual accommodation and agreement while thin democracy works fundamentally for conflicting interests.

2 On the other hand, teachers reported that “the fruits of their participation were not visible” (Weiss & Cambone, 2000, p. 373).
Power and the Role of the Superintendent

Teresa Northern Miller, Trudy A. Salsberry, and Mary A. Devin

As schools move further into the 21st century, there is a strong need for education leaders and those who train them to prepare students for a future that is decidedly different from the past and to do so in a high stakes accountability environment. In meeting these challenges, school superintendents encounter politics in every arena (Hall & Hord, 2001) and constantly use a variety of types of power to accomplish their goals. These architects of both individual and organizational improvement must understand both the how and the why of leadership effectiveness (Reeves, 2006), and be able to appropriately apply the tools of power and influence. Leithwood, Aitken, and Jantzi (2006) identified a set of research-based practices for all leaders to use as part of school improvement efforts: set directions; develop people; develop the organization; and manage the instructional program. All of these practices involve the use of power. Successful leaders not only use a variety of types of power in explicit and subtle manners, but they also recognize that stakeholder groups will use the same types of power on them.

As part of the Voices 3 project described in this issue’s introduction, school leaders were asked to discuss actions they took in working toward three concepts: (1) school improvement; (2) development of democratic communities; and (3) social justice. As we analyzed the transcripts, we observed that multiple comments from superintendents indicated the use of power in working toward these concepts. We then analyzed superintendents’ descriptions of their actions by superimposing on the transcripts a theoretically-driven model developed by French & Raven and later expanded by Andrews & Baird (as cited in Ambur, 2000) to identify the types of power being used by and upon superintendents.

Conceptual/Theoretical Framework

According to French and Raven, power is a relationship between two agents where one agent exerts power affecting the reactions of the other agent, and the use of power from various sources yields different consequences. Their earliest discussion identified five types of powers, and later work by Andrews and Baird added two more, for a total of seven:

- Reward power, related to positive reinforcement for behavior;
- Coercive power, related to ability to inflict punishment;
- Legitimate power, related to authority retained within a position;
- Referent power, related to respect and esteem given to individuals;
- Expert power, related to recognized expertise;
- Informational power, related to an ability to control the availability and accuracy of information;
- Connectional power, related to influence and support.

The research literature in educational administration has long been interested in the conceptualization and use of power. More recent research has documented a move away from more traditional types of power, validating the need to further examine the superintendent from the perspective of power. In 1996, Grogan predicted the administrative shift from top-down leadership to shared leadership and the subsequent changes in the use of power by superintendents. Brunner’s later research (2000) affirmed the move to shared power in the superintendency and defined this change in the superintendent’s role as “one that makes greater use of open questions, proactive listening, respectful, and caring treatment of others, a fuller honoring of multiple perspectives, a focus on social justice, and one that more accurately reflects the realities of the role” (p. 425). This shift in leadership responsibilities relates directly to superintendents’ awareness and use of power, reflecting a move away from reward and coercive powers toward informational and connectional powers. Related to the move to shared power, Petersen and Short’s research (2001) revealed that “the superintendent’s reputation and job survival was largely dependent on others’ perceptions of his or her credibility, as well as his or her ability to influence critical policy decisions” (p. 553). Petersen and Short also found that superintendents who communicated a level of expert and referent power were better able to establish and develop collaborative stakeholder relationships that could serve to minimize opposition.

Loehr and Schwartz (as cited in Fullan, 2003) emphasized the importance of understanding the actions of leaders and the relationship to the types of power used by them and upon them: “Leaders are the stewards of organizational energy... They inspire or demoralize others first by how effectively they manage their own energy and next by how well they mobilize, focus, invest and renew the collective energy of those they lead” (p. 35). Reeves (2006) asserted that every decision leaders make, “from daily interactions with students to the most consequential policies at every level of government, will influence leadership and learning” (p. 180). Based on a need for more investigation regarding the use of power and influence by and upon superintendents, a qualitative analysis of power within the role of superintendents was conducted for this article using the focus group interview transcripts of the Voices 3 Project.

Teresa Northern Miller has several years experience as a principal and is currently Associate Professor at Kansas State University in the Department of Educational Leadership teaching aspiring teacher and administrative leaders through university/school partnerships.

Trudy Salsberry is Professor in the Department of Educational Leadership at Kansas State University where she teaches courses on the topics of diversity, school change, and qualitative research. Her research primarily focuses on school change/school improvement, issues associated with women and persons of color in leadership positions, and leadership preparation.

Mary Devin has 37 years experience as a K-12 district administrator and is currently Associate Professor in the Department of Educational Leadership at Kansas State University. She teaches superintendent courses and directs several school/university partnerships to train new leaders.
Methods and Data
This analysis was limited to the use of power on decisions and actions taken or experienced by these superintendents, as recorded in the transcripts. The authors recognized the complexity, richness, and vast amount of information contained in the focus group transcripts and chose the use of power because of its prominence in successful leadership. An analytic process reflecting common steps recommended by Creswell (2006) was used: Sketching ideas; taking notes; summarizing field notes; working with words; identifying codes; reducing codes to themes; counting frequency of codes; relating categories; relating categories to the analytic framework in the literature; creating a point of view; and displaying data.

The authors worked independently, first to read and review all transcripts and demographic information in order to provide tentative ideas, notes, and summaries of field notes. After initial individual reviews, they met frequently to establish consensus on definitions and examples for each initial coding category, to confirm consistency in the coding, and to later determine patterns or themes across and within categories. After initial coding categories were established, each main category was analyzed using sub-codes to further reduce the data to meaningful findings for each of the sources of powers. Finally, the findings from each source of power were used to determine emerging themes that cut across coding categories. The section on findings provides the point of view and data displays for each of the seven types of power used in the initial coding categories, as shown in Table 1.

Findings
The findings for each source of power will be discussed first in this section, followed by the emerging themes, i.e., those understandings that cut across the categories or sources of power.

### Table 1
**Coding Chart: Type of Power, Definition, and Transcript Samples**

<table>
<thead>
<tr>
<th>Type of Power</th>
<th>Definition</th>
<th>Transcript Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reward power</strong></td>
<td>Uses positive reinforcement for behavior</td>
<td>...and just flat told them, “You’re the most important group here because you’re the first ones that any kids see.” (Superintendent 58)</td>
</tr>
<tr>
<td><strong>Coercive power</strong></td>
<td>Uses ability to inflict punishment</td>
<td>You pay me more or I’m not doing it! (Superintendent 59)</td>
</tr>
<tr>
<td><strong>Legitimate power</strong></td>
<td>Uses authority retained within the position</td>
<td>...but we are the professionals that are charged with making the decisions that are in the best interests of our kids. (Superintendent 55)</td>
</tr>
<tr>
<td><strong>Referent power</strong></td>
<td>Uses respect and esteem given to individuals</td>
<td>We did a couple of additional things which we believe added quality things for our staff. The first one we dealt with, we embraced district-wide, the notion that kids and everyone else respond to dignity and respect. (Superintendent 55)</td>
</tr>
<tr>
<td><strong>Expert power</strong></td>
<td>Uses recognized expertise</td>
<td>I think if I’ve learned nothing else in all of my years in education, you’ve got to have that ability to step back one step and not get so... so involved emotionally that it deters the cause that you’re supporting. (Superintendent 61)</td>
</tr>
<tr>
<td><strong>Informational power</strong></td>
<td>Uses ability to control the availability and accuracy of information</td>
<td>We have a right-wing Republican school board member, and he’s for our referendum. Which is great. And, of course, we’ve run into a lot of fine articles about maintaining excellence. (Superintendent 72, medium-sized district, Midwest, 2005)</td>
</tr>
<tr>
<td><strong>Connectional power</strong></td>
<td>Uses influence and support</td>
<td>[A school-board member said] “You know, there is a listserv of three or four hundred people, a segment of our community that share/oppose issues about the school district or about education with one another.” She said, “You might want to ask to get on that” (Superintendent 62)</td>
</tr>
</tbody>
</table>

1 All quotes but the one on Informational Power are from a focus group with superintendents of medium-sized districts in the Midwest, 2006.
Reward Power

Reward power, or power related to positive reinforcement for behavior, did not surface in the transcripts as frequently as other types of power. Categories used to examine reward power included intrinsic rewards (internal and/or intangible) and extrinsic rewards (external and/or tangible). Extrinsic rewards were more typically referenced in superintendents’ conversations, and the effects of rewards were most often associated with teachers or staff rather than other stakeholders, such as students or parents. Superintendents also mentioned trying unsuccessfully to use reward power, as in this example:

We have after-school programs and we ask teachers now to spend time after school and they are so busy with their day that when they go in there and then you try to offer 15 to 20 dollars an hour— they will come right back and say, “You know, I just can’t do it.” (Superintendent 50, medium-sized district, Midwest, 2006)

Coercive Power

Superintendents’ told of several instances when coercive power, i.e., the ability to inflict punishment, was used on them under provisions of the No Child Left Behind Act of 2001 (NCLB), compelling them to take certain actions with staff and students out of fear of sanctions. NCLB requirements were described with mixed tones—sometimes positively and sometimes negatively, depending upon whether superintendents thought they were in the best interests of students. When superintendents described coercive power being used against them by stakeholder groups like parents, boards, and community patrons, it was described negatively. Superintendents, however, did describe choosing to use coercive power related to NCLB to make changes they felt in the best interests of students, such as requiring teachers to alter teaching strategies, counseling ineffective teachers out of the classroom, and taking disciplinary actions against both staff and students. These actions were coded as discretionary use of coercive power. The positive and negative tone designations in Table 2 reflect superintendents’ perceptions as drawn from their conversations.

Table 2

<table>
<thead>
<tr>
<th>Groups Involved</th>
<th>Action Description</th>
<th>Positive Tone (+)</th>
<th>Negative Tone (-)</th>
<th>Compelled Use of Coercive Power</th>
<th>Discretionary Use of Coercive Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superintendents</td>
<td>Meet all state/federal requirements</td>
<td>+</td>
<td>–</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Force students to make tough choices about academic options</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Require staff to become experts in everything</td>
<td>–</td>
<td>–</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Focus dollars on unfunded mandates not on what’s best for students</td>
<td>–</td>
<td>–</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Use to counsel employees out of teaching, reassign, or hire new employees</td>
<td>+</td>
<td>–</td>
<td>–</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Use to get needed results for student success</td>
<td>+</td>
<td>–</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Take disciplinary action with staff to address changes required by NCLB accountability</td>
<td>+</td>
<td>–</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Used power of NCLB to make change building-wide</td>
<td>+</td>
<td>–</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Staff</td>
<td>Negotiate contract restrictions</td>
<td>–</td>
<td>–</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Board</td>
<td>Rescind superintendent decisions</td>
<td>–</td>
<td>–</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Parents and/or community members</td>
<td>Used to sway and/or change board or superintendent decisions</td>
<td>–</td>
<td>–</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>State/NCLB</td>
<td>Design sanctions for not making adequate yearly progress</td>
<td>–</td>
<td>–</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
Legitimate Power

Legitimate power is related to the authority retained within a position. Several superintendents’ comments referred to actions related to their job responsibilities, such as finance, personnel, management, and maintenance. One superintendent mentioned feeling overwhelmed by being responsible for everything and by the need to be visible everywhere in the community. As superintendents described their responsibilities, their actions were coded as use of legitimate power in either positive or negative ways (tone), based on the context of the conversations. Typically, when superintendents agreed that the action was best for students, their comments reflected a positive tone; when they felt the actions were required by their job, but did not reflect what was best for students, the tone was negative. Superintendents described actions negatively when stakeholder groups (staff, board members, parents and/or community members, regulatory groups) used legitimate power against their decisions. Table 3 illustrates the uses for legitimate power.

Referent Power

Referent power is related to respect and esteem given to individuals. Examples of the use of referent power were infrequent in the transcripts and when found were similar to descriptions for legitimate and expert power. Only actions that specifically related to esteem or respect were coded as examples of referent power, as in a comment by superintendent 55, “We embraced district-wide the notion that kids and everyone else respond to dignity and respect” (medium-sized district, Midwest, 2006).

On the other hand, there were multiple statements regarding the lack of referent power. Superintendent 56 described the following situation:

I feel really bad about the fact that the profession is getting bashed. And particularly—It just wears on me some that on a daily basis, we’re out there doing these things to work with staff, facilitate the communication, do what’s best for kids, on and on. And there are some folks that don’t think we’re worth a darn. It’s really frustrating right now. (medium-sized district, Midwest, 2006)

In addition, one superintendent described unsuccessful efforts in seeking referent power from his board of education members, and another spoke of similar lack of referent power with the teachers’ association.

Table 3
Use of Legitimate Power

<table>
<thead>
<tr>
<th>Stakeholder Group</th>
<th>Compelled Use of Legitimate Power</th>
<th>Positive Tone (+)</th>
<th>Negative Tone (-)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superintendents</td>
<td>Make land transfers, refocus curriculum, reassign staff and students</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Manage operations, financial and maintenance issues, provide the resources, the training, the support, the vision, the passion, to get things done– be responsible for everything</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>School Boards</td>
<td>Set agendas and address curriculum</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>State/Federal Requirements</td>
<td>Meet adequate yearly progress requirements</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stakeholder Group</th>
<th>Discretionary use of Legitimate Power</th>
<th>Positive Tone (+)</th>
<th>Negative Tone (-)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superintendents</td>
<td>Outline all the expectations for every child (and teacher) and hold the line</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>School Boards</td>
<td>Charged with making the decisions that are in the best interest of our kids– the right things for the right reasons</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Legitimately block everything</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Do not stand up for superintendent decisions</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Parents</td>
<td>Challenge board or superintendent decisions</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Community</td>
<td>Challenge board or superintendent decisions</td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>
Expert power is related to recognized expertise. Actions related to expert power and legitimate power were difficult to distinguish from each other and were very much related to the nature of shouldering responsibilities, or as an effort to gain credibility or referent power. As the superintendents described actions, the authors coded those related to recognized expertise as expert power. These actions were then categorized by standards from the ISLLC Standards for School Leaders (Interstate School Leaders Licensure Consortium (ISLLC), 1996), widely recognized for their application to school leadership. (See Table 4). In addition, many superintendents mentioned actions that matched the definitions for other types of power, used at the same time, such as referent power in the act of seeking informational power; or they mentioned using the coercive power of NCLB to force others to seek informational power through data collection. They then disseminated the results, which aligned with connectional power.

### Table 4
**Uses of Expert Power**

<table>
<thead>
<tr>
<th>ISLLC Standard</th>
<th>Action Taken</th>
<th>Powers Used or Accessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. A Vision for Learning</td>
<td>Innovations, reform and use of technology</td>
<td>Used expert power with coercive power and legitimate power</td>
</tr>
<tr>
<td></td>
<td>Vision-setting</td>
<td>Used expert power with coercive power</td>
</tr>
<tr>
<td>II. A Culture for Learning</td>
<td>Meeting NCLB requirements related to student performance</td>
<td>Used expert power and legitimate power with coercive power of NCLB</td>
</tr>
<tr>
<td></td>
<td>Curriculum choices/best practices</td>
<td>Used expert power and legitimate power with coercive power</td>
</tr>
<tr>
<td></td>
<td>Evaluation of programs and staff</td>
<td>Used expert power with informational power</td>
</tr>
<tr>
<td>III. Management for Learning</td>
<td>Problem-solving</td>
<td>Accessed expert power of other groups</td>
</tr>
<tr>
<td></td>
<td>Finding ways to train and save money, making the most of resources available</td>
<td>Used financial expert power with legitimate power and informational power (and could sometimes gain referent power)</td>
</tr>
<tr>
<td></td>
<td>Maintenance and transportation</td>
<td>Used expert power of other groups to guide decisions</td>
</tr>
<tr>
<td></td>
<td>Delegation and monitoring</td>
<td>Accessed expert power of other groups and then used legitimate power for monitoring</td>
</tr>
<tr>
<td>IV. Community for Learning</td>
<td>Leading groups– teachers, board, community, principals</td>
<td>Used expert power with legitimate power and referent power</td>
</tr>
<tr>
<td>V. Ethics for Learning</td>
<td>Student advocacy</td>
<td>Used expert power to gain referent power by doing what’s best for students</td>
</tr>
<tr>
<td></td>
<td>Legal issues</td>
<td>Used own legal expert power to gain referent power</td>
</tr>
<tr>
<td>VI. Larger Context for Learning</td>
<td>Community communication</td>
<td>Used expert power to increase informational power, gaining connectional power as a result</td>
</tr>
</tbody>
</table>

Four categories of informational power emerged from superintendent comments involving the use of informational power:
- Matters related to professional development;
- Make decisions for school improvement;
- Inform others inside district outside district;
- Collect data

Categories were further broken down by general settings in which actions occurred and the broad purposes (or outcomes) superintendents were seeking from the action. The categories, settings, and purposes are listed in Table 5. Superintendents often made use of informational power across all categories in settings related to NCLB. NCLB was credited with increasing the use of data (information) in making decisions related to improving student achievement and there were indications that the decision-making process had become more data-driven.
Connectional power was the power most frequently involved in actions superintendents mentioned. Seven general categories emerged related to the use of connectional power:

- School improvement work;
- Problem solving;
- Support of the democratic process, e.g., giving everyone a voice;
- Changing/influencing the opinion of others;
- Listening for input, maintaining visibility;
- Professional development activities for self, staff, board of education or parents;
- Goal setting.

These connections were made with six identifiable groups: boards of education; community outside school; staff, including teachers; students and parents; other districts and superintendents; and elected officials. The settings of the connections were coded as having a positive (+) tone, a negative (-) tone, or a neutral (nt) tone, as shown in Table 6.

The most frequently mentioned purposes for using connectional power were school improvement work and problem solving. A noticeable number of comments described either broad general actions for the purpose of engaging all stakeholders (coded as supporting the concept of democratic community), or influencing/changing others’ opinions. Other purposes mentioned less often included listening to constituents to acquire input; activities related to professional development; and goal setting for the organization.

Superintendents mentioned connections with individuals and groups both inside and outside the district almost equally. Connections inside the district most frequently mentioned were staff and students or school populations (including parents). Superintendents indicated using connectional power most frequently for purposes of collaboration with others as opposed to exerting pressure, or promoting positions. Out-of-district connections were made to collaborate, problem solve, or to network with peers for support. Connections for professional development activities were for the benefit of staff, boards of education, teachers, or self. School improvement connections included efforts with teachers, parents, students, the community, and other districts.

Overall, the settings involving the use of connectional power for any purpose were more positive in tone than negative, and all groups were represented in the positive tone contexts. Negative tone connections were limited to groups or individuals outside the district. There were no negative tone ratings for setting goals, listening for input, or professional development activities. With very few exceptions, connections in order to support school improvement were positive. While both negative and positive tones were found for all purposes, the greatest number of negative ratings involved solving problems, such as budget issues, hiring, or discipline hearings; and changing or influencing someone’s opinion, such as promoting bond issues or advocating for resources.

Superintendent comments describing actions in general support of the democratic process were more positive than negative in tone and occurred both inside and outside the district, as exemplified by this superintendent quote:

**Table 5**

**Uses of Informational Power**

<table>
<thead>
<tr>
<th>Categories</th>
<th>Setting in which Action Occurred</th>
<th>Purpose for Using the Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matters Related to Professional Development</td>
<td>• Working with data related to NCLB</td>
<td>• Improving skills for self, staff, board, parents</td>
</tr>
<tr>
<td></td>
<td>• Working with data from other sources</td>
<td></td>
</tr>
<tr>
<td>Make Decisions for School Improvement</td>
<td>• Decisions related to NCLB compliance</td>
<td>• Whole school academic improvement</td>
</tr>
<tr>
<td></td>
<td>• Decisions related to improving performance in areas beyond NCLB at all school levels</td>
<td>• District-wide academic improvement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Improved performance of individual students or groups across grades and district levels</td>
</tr>
<tr>
<td>Inform Others</td>
<td>• Working with staff, board, parents, students</td>
<td>• To counter misinformation from newspapers, rumors, Internet, other sources</td>
</tr>
<tr>
<td>Inside District</td>
<td>• Working with community patrons, elected officials</td>
<td>• To problem solve</td>
</tr>
<tr>
<td>Outside District</td>
<td></td>
<td>• To explain decisions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• To make decisions</td>
</tr>
<tr>
<td>Collect Data</td>
<td>• Working with Staff (including teachers)</td>
<td>• To problem solve</td>
</tr>
<tr>
<td></td>
<td>• Working with parents, students</td>
<td>• To make school improvement decisions</td>
</tr>
<tr>
<td></td>
<td>• Working with NCLB requirements</td>
<td>• To inform others</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• To listen and respond to constituents</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• To assess personal effectiveness</td>
</tr>
</tbody>
</table>

**Connectional Power**

Superintendents mentioned connections with individuals and groups both inside and outside the district almost equally. Connections inside the district most frequently mentioned were staff and students or school populations (including parents). Superintendents indicated using connectional power most frequently for purposes of collaboration with others as opposed to exerting pressure, or promoting positions. Out-of-district connections were made to collaborate, problem solve, or to network with peers for support. Connections for professional development activities were for the benefit of staff, boards of education, teachers, or self. School improvement connections included efforts with teachers, parents, students, the community, and other districts.

Overall, the settings involving the use of connectional power for any purpose were more positive in tone than negative, and all groups were represented in the positive tone contexts. Negative tone connections were limited to groups or individuals outside the district. There were no negative tone ratings for setting goals, listening for input, or professional development activities. With very few exceptions, connections in order to support school improvement were positive. While both negative and positive tones were found for all purposes, the greatest number of negative ratings involved solving problems, such as budget issues, hiring, or discipline hearings; and changing or influencing someone’s opinion, such as promoting bond issues or advocating for resources.

Superintendent comments describing actions in general support of the democratic process were more positive than negative in tone and occurred both inside and outside the district, as exemplified by this superintendent quote:
And, as I tell folks, you know, when you say “You gotta keep kids,” first and foremost, “kids” is an all-inclusive statement and I’m not sure we’ve always approached that as an all-inclusive statement. That means all of our children. And so, that’s been a really neat opportunity for me to work with.

Emerging Themes

After the authors analyzed the transcripts by each power individually, they then discussed the interaction between the powers and the three concepts of the Voices 3 project (school improvement, social justice, and democratic community). This process yielded five emerging themes with regard to superintendents’ use of power:

- **Shift toward shared leadership and community building.**
  The use of some powers appeared more frequently than others and for different purposes than might have been expected. Reward power and referent power actions were coded infrequently and usually in relationship to other powers. Informational and connectional power actions were coded most frequently. Connectional power was used not to force a solution, but to gather information and work with stakeholder groups to develop solutions. The increased use of informational and connectional powers affirms the shift from top-down leadership toward shared leadership and community building mentioned by Grogan (1996) and Brunner (2000).

- **Blending the use of types of power.**
  Superintendents demonstrated a tendency to combine powers to influence decisions or actions. Legitimate power, for example, would often be used in combination with reward power. The superintendent would insist on a particular change or action but follow that directive with a reward in the form of additional compensation, recognition, or support for the change. Superintendents also described blending the coercive power of NCLB with the legitimate power of their position to make changes that needed to be made for the shared vision of what was best for students. Some superintendents shared examples of using legitimate power, expert power, and informational power to gain referent power. Often, stronger connectional power resulted from the use of other powers. This blending of powers relates to effective leaders knowing how and when to use specific types of power to accomplish their goals (Reeves, 2006).

- **Politics and the use of different types of power.**
  Superintendents both exerted and were influenced by various types of power. Superintendents exerted coercive, legitimate, expert, informational, and connectional powers to meet the requirements for NCLB. When stakeholders groups exerted legitimate power against them, superintendents’ decisions were impacted, such as having their decisions overturned by their boards or having a student suspension appealed and/or changed through a parent’s actions. These situations demonstrate Hall and Hord’s (2001) warnings regarding politics in every arena.

<table>
<thead>
<tr>
<th>Purpose for Use of Connectional Power*</th>
<th>School Board</th>
<th>Community Outside School</th>
<th>Other Districts or Superintendents</th>
<th>Elected Officials</th>
<th>Students and Parents</th>
<th>Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>School improvement work (Setting tones: +12, -2, Nt11)</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Problem solving usually involving budget issues, student hearings (Setting tones: +5, -6, Nt12)</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Actions related to carrying out a democratic process—giving everyone a voice (Setting tones: +5, -2, Nt9)</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Influence/change others’ opinions, pass bond issues, advocate for resources (Setting tones: +2, -5, Nt8)</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Listen for input, be visible in the school or community (Setting tones: +6, -0, Nt5)</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Professional development activities for self, staff, board (Setting tones: +5, -0, Nt3)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Set goals for the district (Setting tones: +2, -0, Nt1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

* Note. The settings of the connections were coded as having a positive (+) tone, a negative (-) tone, or a neutral (Nt) tone. Tone Totals: +37, -15, Nt 49.
Voices 3 adds to the research base with regard to the range and nature of superintendents' use of power in relationship to the goals of the Voices 3 project—school improvement, social justice, and democratic community:

- First was a shift towards greater use of shared leadership and community building by superintendents.
- Second, superintendents have become more cognizant of blending two or more types of power to achieve their goals.
- Third, superintendents realized that the "politics" of school districts and communities required them to use different types of power in different situations; and conversely, they understood that they would be on the receiving end of the uses of power by stakeholders.
- Fourth, the necessary use of power to carry out mandates like NCLB sometimes left superintendents feeling conflicted because they did not feel the mandates were not in the best interest of students.
- Fifth, superintendents found they needed to know when it was not effective to try to exert power.

Recommendations for Future Research

The dynamics and impact of the current high stakes accountability environment related to NCLB and the impact of increasingly harsh sanctions should be further studied given the recurring comments by superintendents that they felt a lack of legitimate or referent power. Future research should also explore the influence of sanctions-based legislation like NCLB on superintendents' ability to use reward power and the extent to which the threat or reality of sanctions has resulted in increased use of coercive power by superintendents. An unexpected finding in the study was the extent to which experiences that shaped beliefs and actions of superintendents acquired prior to assuming the superintendency appeared often within focus group conversations and appeared to have a direct impact upon their later actions. Further research is warranted to determine how pre-existing beliefs influence superintendents' use of power after they move into the superintendency.

The findings from this study point to the need for future studies of superintendents' actions which reflect changes in the work environment since the initiation of NCLB in 2001. This early analysis reflects the changing nature of the superintendency as well as the movement toward more collaborative community building based on knowledge and instruction. This change in the nature of the superintendency is a subject worthy of further investigation. Our results also suggest a need to pursue research into the roles and actions of current superintendents, in order to close the gap between a past vision of school leadership (top-down) and the current vision (more connected to stakeholders) needed for school leaders to be both effective and successful in the 21st Century with all stakeholder groups.
References


Endnote

1 Subsequent reference to French & Raven and Andrews & Baird in this article are also secondary references found in Ambur (2000).
Resurrecting Pragmatism as a Philosophical Frame for Understanding, Researching, and Developing Performance in the Small District Superintendency

Gary Ivory, Rhonda McClellan, and Adrienne E. Hyle

We propose in this article that pragmatism is a perspective with great promise for understanding and researching the work of small district superintendents and developing the abilities of both preservice students and in-service practitioners to do that work. We maintain, based on our reading of focus group interviews with small district superintendents, that pragmatism adds important dimensions to understanding, researching, and developing the superintendency largely absent in other philosophical frames currently in use.

Pragmatism has three characteristics: (1) a disinterest in metaphysical questions, i.e., questions dealing with ultimate realities beyond the physical world; (2) related to the first characteristic, a disbelief in absolute eternal truths and thus a disbelief in foundations, certainties upon which we can build all our knowledge or morals; and (3) most important for our views, a focus on the practical and on successful problem solving as the only validation of beliefs. Hilpinen (1999) explained that pragmatism began with the work of American philosopher Charles Sanders Peirce in the early 1870’s who held that the meaning of any expression is determined by how practical everyday life would be affected if it were true. Precisely because of traditional philosophy’s efforts to focus on truth and meaning beyond practical everyday life, Peirce’s criteria led some to characterize pragmatism not as a philosophy, but as an anti-philosophy. John Dewey is the pragmatist with the greatest direct effect on education in the United States of America. Because of pragmatic criteria that ideas were to be evaluated on their practical utility for a given time, Dewey (1957) viewed traditional western philosophies as conceptual schemes of only limited usefulness to him and his contemporaries since traditional philosophies had not addressed the problems of people who lived after the occurrence of scientific, political, and industrial revolutions.

First, because pragmatism depends on a non-foundational epistemology, it seems to us consistent with how our participants described their work, problem-solving amid great conflict and uncertainty, with no clear, final, uncontested ends to guide them. As one superintendent stated:

Probably the one thing that I’ve realized is that everything is not black and white. Everything is not in policy. Everything is not mandated, and you have to make decisions pretty much daily on things that are not black and white. You have to enter that gray area and you have to make decisions on what’s best for your students (Superintendent 20, Southwest & West, 2005).

Second, since pragmatism emphasizes solving problems, it is relevant to how our participants described their work. According to pragmatism, the main understanding worth searching for (including in all the academic disciplines) is the effort that “has been found to yield the maximum of achievement” (Dewey, 1957, p. 138). We see the small district superintendents doing precisely this kind of thinking.

This is less a research article than an argument intended to motivate discussion. That is, we do not review the literature, derive research questions, and then mine the data for answers to the questions. Rather, we discuss how we are inspired by our reading of the transcripts and our considering the perceptions of our participants to review philosophical perspectives currently in-use in scholarship on educational leadership. We contrast pragmatism with three other commonly-used epistemological frames: positivism/postpositivism, postmodernism/poststructuralism, and critical theory to explain why we think pragmatism brings a perspective essential to researching and developing the superintendency.

Methods and Results

Six Voices 3 focus groups were conducted with 37 superintendents. Three of the focus groups were with superintendents from the Midwest, two from the Southwest and West; and one from the Southeast. We considered only the words of those superintendents in small districts (student enrollment less than 1,000) in our review.

We read each transcript and derived themes that seemed persistent. Then, we revisited these themes, refined our definitions of them and identified other themes. Once we had agreement between two authors on each revised theme definition, we selected two themes that seemed to us, to capture the small district superintendents’ view of problem solving. Then two of us each took the revised theme definition and coded the original set of six transcripts according to it. Finally, each of us reviewed the other’s coding. We considered validly coded segments where two of us agreed on the coding, and none of us objected. We describe these two themes below and explain how pragmatism clarified our understanding of superintendents’ perceptions in important ways missing from the other three perspectives: positivism/postpositivism; postmodernism/poststructuralism; and critical theory.

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Rhonda McClellan is currently Assistant Professor at Texas Woman’s University. She has K-12, community college, and university teaching experience.

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Small District Superintendents Must Keep People Focused

The first theme is consistent with pragmatism’s attention to problem solution and, in particular, with pragmatism’s interest in knowing what one “is about,” intending “certain consequences,” being able to “anticipate what is going to happen,” and “therefore, get ready or prepare in advance so as to secure beneficial consequences and avert undesirable ones” (Dewey, 1966, p. 77). Superintendents must focus stakeholders’ attention on what is best for students. Based on their experiences and the consequences they have faced in education, superintendents have to spend time trying to rectify thinking, action, and situations. They turn people away from minutiae or personal agendas and steer them back to doing what is needed for students. They described carrying out this action with students, teachers, principals, parents, local elected officials, and other community members, even their own friends. For example, Superintendent 17 said of board members:

I think the challenge also is that—we’ve all had this experience—is getting board members elected or appointed with a specific agenda that doesn’t always seem to be focused on what’s good for kids. The thing that we’ve got to do, gently, and sometimes not so gently, is to bring them back around in their focus on every decision that’s made by the board and ask the question, how does this approach benefit our children versus this other approach? (Southeast, 2006)

Small District Superintendents Monitor Positive Effects

The second theme is consistent with pragmatism’s focus on the effectiveness of superintendents’ efforts as the main guide for considering their work. Superintendents monitor the positive effects of their decisions, actions, or experiences. In the focus groups, they discussed positive effects of the following: pursuing their visions; making decisions about students; hiring good people; promoting accountability and getting people to base decisions on data; fostering professional developing; terminating ineffective personnel; securing resources and channeling them effectively; soliciting meaningful input from employees, parents, and other community members; building relationships; dealing with crisis and tragedy; getting boards to respect their decisions; and improving student achievement. In the following example, Superintendent 25 described seeing the positive results from her efforts:

But then from the superintendency end—again it’s not one specific thing—it’s a series of things that just by very small movements or very small suggestions, all of a sudden of that grows so much positive in things you can do. It’s not just at the board table, but it’s at the correspondence that comes across your desk, the offers that are out there, and it’s that linker. And you realize that you’re the only person there that’s doing that, and if it would not be for you making that phone call to this or latching on to that, all of sudden a whole series of things set in motion would never be (Midwest, 2004).

Contrasting Pragmatism with Three Other Perspectives

We suggest that three other perspectives—positivism/postpositivism, postmodernism/poststructuralism, and critical theory—fall short in guiding study of the work of small district superintendents because they lack the emphasis on either uncertainty or practicality. We offer definitions of these three perspectives often found in the curricula of leadership programs and used as guides to research and to develop administrators’ work. We then summarize their strengths and weaknesses.2

Positivism/Postpositivism

Positivism/postpositivism emphasizes the merits of science. We use the term “postpositivism” because “positivism” is often associated with logical positivism, a movement simultaneously used to explain scientific knowledge philosophically and to make philosophy as rigorous a discipline as the natural sciences. Logical positivism, specifically, has few adherents among scholars of educational administration; postpositivism is still seen as a viable approach. Lincoln and Guba (2000) described postpositivism as a perspective that recognizes the limitations of positivism to get at reality, but still holds to an assumption that there is an external reality that can be apprehended, though “only imperfectly and probabilistically” (p. 165). Postpositivism was most relevant to educational administration during the theory movement of the 1950s through the 1970s. “The theory movement sought . . . correctness of administrative decision-making as a matter of fact to be validated by evidence of effectiveness, and the development of context-free, law-like generalizations” (Ivory, 2006, p. 781). Echoes of positivism can still be found in efforts to identify best practices, “leadership practices [that] are valuable in almost all contexts” (Leithwood & Riehl, 2005, p. 19).

Postmodernism/Poststructuralism

For purposes of this study, we conflate postmodernism and poststructuralism to describe a variety of approaches that repudiate the idea that “there can be any absolute foundation for knowledge” (Schutz, 2000, p. 216); work to understand and expose “that objects are constituted or defined by underlying linguistic, cultural, economic, or mental distinctions” (Bredo, 2006, p. 19); analyze texts for “antinomies, contradictions, silences, and hidden hierarchies” (English, 2006, p. 783); and reveal “the way in which the social sciences have served as instruments of the disciplinary society” (Rorty, 1982, p. 204). We refer to such perspectives herewith as “postmodernism.”

Critical Theory

Critical theory refers to a “range of scholarship critical of existing economic, social, or political arrangements” (Bredo, 2006, p. 23). These arrangements color and shape the efforts of participants, who are regularly unconscious of this and believe they are being objective. Furthermore, critical theory warns “of the moral failings of our acquiescence to the system” (Grogan, 2004, p. 223). For purposes of this article, we emphasize critical theory’s efforts to point out where systems fail to foster justice and human development.

Strengths and Weaknesses of the Three Perspectives

Postpositivism, postmodernism, and critical theory provide important insights into public education and school leadership. We respect postpositivism’s emphasis on “obeying the normal conventions of your discipline” (Rorty, 1982, p. 194), attending to evidence, attempting to separate personal hopes and fears from interpretations, and being open to inquiry and falsification. We appreciate postmodernist approaches for their reminders “to look behind the new freedoms which political democracy has brought, at new forms of constraint which democratic societies have imposed” (Rorty, 1989, p. 62). We
We see little in postmodernism to guide them in accomplishing in a particular direction. Superintendent 7 cautioned: distinguishing between stakeholders who sincerely wanted to work toward of perspectives, but for our superintendents, it was not merely a mat-

are to foster good educational experiences. (p. 20). We have no argument with any of what Leithwood and Reihl offer. The limitation of postpositivism are revealed when its exponents present findings as established truths, rather than as promising insights that turn out “to be good for some purposes in some situations, rather than wonderful in all respects” (Bredo, 2006, p. 3). In this regard, we note that the challenges of the small district superintendency seem to come precisely from variability in specific situations. Our reading of the superintendents’ words suggests that the challenge is not in knowing that it is important to identify and articu-

lating a vision” (p. 20). We do not find postpositivism wrong here so much as limited in what it can offer. Its findings seem irrelevant “to most of the interesting decisions people really face” (Feuer, 2006, p. 67).

The potential of postmodernism is that “it can promote a level playing field in the competition of ideas and perspectives” (English, 2006, p. 783) and thus enable new, more promising, ideas to surface. Grogan (2004) advised that superintendents learn from postmodernism the importance of constructing narratives other than those proposed by the dominant establishment. But postmodernism approaches often seem to evoke despair of improving situations. For example, Foucault admitted, “To participate in this difficult displacement of forms of sensibility and thresholds of tolerance—I hardly feel capable of attempting much more than that” (cited in Bredo, 2006, p. 19), but small district superintendents need more than that if they are to foster good educational experiences.

We agree that superintendents may benefit from considering a wide range of ideas and from gathering and listening to a multitude of perspectives, but for our superintendents, it was not merely a matter of being open to other narratives. It was also a matter of distin-

guishing between stakeholders who sincerely wanted to work toward reasonable solutions and those who merely wanted to push decisions in a particular direction. Superintendent 7 cautioned:

The tricky thing is that some people are bullies... and they speak louder than everybody else. They push people down. So how do you orchestrate it so that everybody who wants to have a voice has a voice, and it’s heard?” (Midwest, 2006).

We see little in postmodernism to guide them in accomplishing such work or in monitoring its success. Postmodernism emphasizes questioning assumptions behind definitions of problems: it has shown comparatively little interest in problems once they are defined.

We find illuminating and helpful Schutz’s (2000) work to identify ways in which postmodernism could contribute to the teaching of freedom. He affirmed that postmodernists often argue for greater freedom while simultaneously urging the questioning of all assumptions, including assumptions about freedom. Schutz wondered how postmodernism could guide movement toward working for freedom in the midst of questioning the worth of all efforts and the assumptions on which those efforts were based. He concluded that there was still room in postmodernism (despite its skepticism) for selecting strategies to achieve goals. We are convinced by his argument, and note that it seems compatible with our understanding of pragmatism. Pragmatism has given up on epistemic foundations as postmodernism has, but it deals more directly than postmodernism with the need to solve problems in day-to-day life. We contend that a postmodernist who desires to work with the superintendency might best consider him/herself a pragmatist for that purpose and consider, amid the necessary work of deconstructing unquestioned assumptions, how to work to solve practical problems.

We assess much writing from the critical theorists the way Szasz (1976) assessed the platonic view of ethics. To paraphrase, it is fine for those to whom the superintendency “is a spectator sport: the players, however, need something that gives them a little more protection in the clinches” (p. 33). Those who lead, those who aspire to lead, and those who teach them must come down from the ivory tower and into the arena and problem solve amid great complexity with insufficient information to guide them. Their efforts can then always be criticized by anyone who did not have to make them. We find critical theory too often guilty of what Feuer (2006) referred to as after-the-fact assessment “of the ‘rightness’ of any particular answer” (p. 67); and the question emerges: What good is critique if we do not provide clues about initiating positive action? We believe that critical theory provides too little in the way of positive guidance.

In fact, we think critical theory is caught in a trap it has worked diligently to perfect. Evans (2007) illustrates our point. She recounted in positive terms the work of the Highlander School for African American adults. We noticed that in describing this positive example of a school that fostered social justice, she largely neglected the discourse of critical theory. Then, once she had completed her description of the Highlander School, she urged researchers to focus “on oppression and discrimination and the analysis of empirical data as possible methods to reveal the ways that schools may perpetuate inequalities” (p. 267), a tactic she herself did not deploy in describing the school. We believe the citing of positive examples is outside the critical theoretical repertoire because it is outside of the critical theory perspective. To sum up, we believe that critical theory makes important contributions to school leadership but falls short in recounting positive examples that can also make important contributions. We find critical theory incapable of providing this second contribution. We believe Feuer’s (2006) caution is appropriate here against a stance “in which no findings are tolerated except those that point to flaws in... policies and practices” (p. 69).

We note that Evans (2007) is not the only researcher who seems to step away from the strict confines of critical theory when engaging with the world of practice to see how it can be improved. Hoffman and Burelo (2004) began their study of superintendents by noting
Foster’s division of leadership into protest leadership and institutional leadership, with an implicit nod to protest leadership that “is designed to overthrow systems of domination” (p. 271), but by the end of their study, they wrote mostly approvingly of the work of several superintendents who were in fact not trying to overthrow anything, but merely rethinking their efforts. Hoffman and Burello provide another example of critical theorists having to step away from their own preferred approaches when they engage with the real struggles of education leaders.

Can Pragmatism Guide Understanding, Researching and Developing the Small District Superintendency?

We see pragmatism as vulnerable to criticisms as postpositivism, postmodernism, and critical theory. We highlight two here: (1) pragmatism can easily devolve into a narrow instrumentalism that justifies any action by its short-term gains; and (2) pragmatism can restrict itself to problems and solutions of only the dominant members of society. Instrumentalism shows up, for example, in school district responses to accountability systems that overemphasize scores on standardized assessments, exclude children from standardized testing, or outright cheat to meet political or public relations goals. Some who justify such actions announce that they are being pragmatic, but we note that there is nothing inherent in writings of major pragmatist writers that makes such narrow views necessary or even likely (Rorty, 1982, 1989, 1999; West, 1989, 2004). The writings of these scholars show them grappling with as serious and profound ethical issues as writers from any other perspective. Their writings also show that pragmatism has the wherewithal to criticize a narrow focus on goals.

The second critique of pragmatism is that it focuses on the concerns and perspectives of white men like its most famous progenitors. West (1989) argued that James and Dewey aspired to bring about social reform, but he accused them both of seeing such reform overwhelmingly in terms of the concerns and values of people like themselves and the actions that people like themselves could take. Pragmatism must be open to the perspectives and participation of marginalized people and must deal with the concerns they bring to discussions. We believe there is sufficient evidence in pragmatist writings, particularly Rorty’s (1982, 1989) discussions of the creation of new vocabularies and his arguing for “taking the needs and interests of more and more diverse human beings into account” (1999, p. 82), and West’s evocation of what he calls “prophetic pragmatism” (1989, 2004), that pragmatism can rise to the task of considering a wide range of perspectives.

Recommendations

Since it seems to us from reading these transcripts that pragmatism coheres with how small district superintendents describe their work, we see promise in pragmatism (that we do not see in the other three perspectives) for researching the superintendency and developing both candidates and practitioners. How do we think things would look different in the academy if research on and preparation for the small district superintendency were guided predominantly by pragmatism rather than the other perspectives? An implication of our view is that our research and our teaching should focus on examples from practice, specifically on practical problem-solving efforts and consider them from different points of view, including those of superintendents.

Feuer (2006) described pragmatism as, “doing the smartest thing possible under the very real constraints of time, resources, and context” (p. 69). We suggest that striving to understand and improve the problem solving capabilities of superintendents and aspirant superintendents may be the most productive work in which we academics can engage. and we agree with Feuer (2006) that effective problem-solving does not entail that superintendents’ efforts always result in “maximal solutions” (p. 74).

Therefore, we should not expect studies of the superintendency, our preparation of candidates for the superintendency, or our professional development efforts with superintendents to culminate in superintendents who never make mistakes, never lose their jobs, or always make optimal decisions. Rather, we should strive to provide the most sophisticated understanding of relevant concepts and the richest variety of experiences we can with a view to having those who learn from us develop the greatest variety of problem solving approaches possible in the finite time we have. Dewey’s (1966) claim, “The purpose of school education is to insure the continuance of education” (p. 51), is relevant to our efforts to educate superintendents. We should consider our efforts in terms of whether they foster continued learning in our superintendent and aspirant-superintendent clients.

We think the suggestions of Björk, Kowalski, and Browne-Ferrigno (2005) are promising in light of a pragmatic framework to guide preparation of superintendents. First, create university/district partnerships that provide candidates both intellectual development and practical experience. “Expanding work embedded learning and performance-based assessment” (Björk et al., p. 88). Second, replace admissions processes that are largely based on self-selection with university/district partnerships that actively recruit promising candidates and increase admission requirements and prepare candidates in cohorts with demanding performance standards. Third, identify “where knowledge and practice align” and develop learning experiences based on the alignment “to enhance learning and work performance” (Björk et al., p. 92). Fourth, provide internships in which candidates can develop their espoused theories into their theories-in-use. Fifth, foster mentoring relationships between veteran superintendents and aspirant and beginning ones. We would add to Björk et al.’s fifth recommendation that our investigations suggest that as superintendents develop in experience and competence, the definition of mentoring broadens and a wider variety of individuals can provide mentor-like guidance (McClellan, Ivory, & Dominguez, 2008). Sixth, systematically push candidates to develop reflective-thinking processes. We must find ways to monitor our efforts, not in terms of whether they prepare graduates for every challenge they will encounter in the superintendency, but whether they prepare superintendents to continue learning to deal well with the challenges they will encounter.

As for research, we think the UCEA Voices effort from Kochan, Jackson, and Duke (1999) to the present is essential in enhancing understanding of the real work superintendents do, the challenges they face, and the way they think about them. We also believe research on the superintendency should focus at this point on in-depth case studies of superintendents’ problem-solving experiences. The UCEA Voices studies have enabled insights into how superintendents self-report their beliefs and work. Case studies can now draw on perceptions and reports of others to enhance our understanding of the complexity of the problems superintendents face, the variety
of efforts they make to solve them, the chain of events and effects that follow from their actions, and how superintendents see themselves learning from their experiences (Sosniak, 2006). We do not argue that superintendents’ actions should never be critiqued by academicians, and even if we as researchers do occasionally emphasize critique, our critique must be guided by our understanding of the need to help people carry out the superintendency more effectively.

Throughout the years of Voices research, we academics have been grateful to the practicing administrators who have given their valuable time to share with us their perspectives and opinions. We can show our gratitude most appropriately by making the guiding star of our scholarly work the need to support these leaders in their practical problem-solving efforts to develop schools that are effective for all who participate in them and all who are served by them.

References


Endnote

1 See the introduction to this special issue for a full description of the methodology of the Voices 3 project. Below is an excerpt describing the methodology for the superintendents’ focus groups:

"With regard to the articles in this issue, we have protected the confidentiality of participants but, at the same time, tried to give readers a flavor of their individuality. From the beginning, we were concerned that some states had such a small number of superintendents that they might be identifiable. As a result, superintendents' locations were identified only in terms of regions...Next, we randomly ordered the superintendent focus groups and numbered each superintendent consecutively from the first focus group to the last...In addition to a number and a region, superintendents were identified by the size of their district...Both superintendents and principals were identified by the year the focus group took place."

2 Space limitations force us to use definitions that oversimplify complicated stances, with long histories of their use in scholarship. We realize this, but we proceed as we do to clarify how we use the terms.
Commentary

Measuring and Reporting School and District Effectiveness

James L. Phelps

Introduction

The federal No Child Left Behind Act (NCLB), the 2001 reauthorization of Title I, requires states to assess students in grades three through eight in reading and mathematics, and students in three grades in science. NCLB further requires states to evaluate schools on the basis of their aggregate performance on these examinations. Specifically, schools are required to show “adequate yearly progress” (AYP) for each student subgroup represented in the school in each subject tested and, ultimately, bring every student to proficiency by 2013-2014.

Under NCLB, schools and districts failing to make AYP for two or more consecutive years are required to undergo a set of reforms and sanctions. These include the offering of transfer within the district to children whose parents desire a school change, the provision of supplementary educational services, the replacement of school staff, and the conversion of the school to charter status. Additional district sanctions include the withholding of Title I funds, replacement of district staff, and district reorganization. In response to these mandates, each of the 50 states has implemented an accountability plan that specifies curriculum content standards by grade level and achievement levels on tests to measure attainment of those standards. According to the U.S. Department of Education (2005, p. 7), no two state accountability plans are identical. As the U.S. Department of Education notes, “...within each state context—considering diversity of student populations, number of schools, size of schools, and other factors—states must strike a fair balance when making school accountability decisions. States must design accountability systems that are both valid (accurately identifying schools not reaching their academic goals for all students) and reliable (with accountability judgments based on sound data)” (U.S. Department of Education, 2005, p. 8)

In response to this federal mandate and the public’s call for incentives to improve the quality of teaching and learning in our public schools, states have adopted outcome goals for schools and students, implemented student testing programs, and used the test results to gauge school effectiveness. The stakes are high. Not only do states attach financial rewards and public recognition to superior school performance, but school and district enrollments and corresponding revenue are also contingent on school test scores; school choice programs often allow high performing schools to attract residents of neighboring districts.

The value of these school accountability programs as both indicators of school performance and incentives for school improvement depends crucially on several characteristics. The accountability program must be: (1) understandable by policymakers, practitioners, and the public; (2) statistically valid and reliable; and (3) operational by departments of education. Understanding of and confidence in an accountability system are essential. Policymakers, practitioners, and the public must have a general understanding of the key decision-making factors, how the system works, and where the respective schools stand on these key factors. While there will be large volumes of data available for analysis, these data must be reduced to the core—the key elements—while maintaining accuracy. In essence, the system cannot be so complicated that it cannot be easily implemented and reported.

State efforts have varied considerably in rigor and sophistication, ranging from simple school performance measures such as average student test scores or percentage of students surpassing a specified proficiency level to “change scores” and “adjusted performance measures” (APMs) that explicitly account for the often wide disparities in resources and student characteristics across schools. APMs are derived from school-level regression equations in which school performance measures, generally test scores, are regressed over a set of independent variables representing school and student characteristics beyond the school’s control. The APM is the residual obtained from the regression, or the difference between each school’s actual and estimated performance level. Clearly, the APM approach is preferred to simple performance measures once agreement is reached on a standard set of adjustment parameters.2 The calculation of APMs is also quite feasible for states refining their school accountability plans, requiring routinely collected school-level administrative data.3

In contrast, scant attention has been given to the task of identifying effective school districts, despite the considerable emphasis placed on district as well as school performance in NCLB.4 This joint focus on schools and districts raises the question: How much do district policies, leadership, and support services influence the quality of teaching and learning in public schools? These district attributes generally go unobserved in empirical studies of school performance and effectiveness, but their influence could be substantial.

The strategy for this project was selected after a review of other more complicated alternatives: Data envelopment analysis; mathematical programming; and hierarchical linear modeling (HLM). The strategy also evolved from an earlier effort. This model is based on what is commonly called “fixed effect estimation” in econometrics for which there are several alternatives (Schwartz & Zabel, 2005). This model was developed as a hybrid to meet the criteria identified above.

The purpose of this article is to illustrate how a valid and reliable state accountability system could be developed that identifies effective schools and school districts in a comprehensive, understandable, and practical way. Section two presents an overview of the strategy used in the analysis. The third discusses the use of education production functions and to assess school effectiveness. Section four presents a model of education production. The data are described in the fifth section while the analysis process is described in section six, and the empirical results are presented in section seven. The

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results from the presented method are contrasted with results from a “change score” approach in the eighth section with conclusions and implications for school accountability policy are presented in the final section.

**Strategy**

The strategy for building the accountability system is largely based on the several definitions of the word “Par.” The components of the accountability system are identified and converted to a common and understandable “currency” to form an educational profile. The profile includes the various components of achievement, school resources, and student/community characteristics. A unique target achievement score is then determined for each school based upon the school resources and student/community characteristics contained in the profile. The target achievement score is compared with the actual score over time to determine what schools consistently under- or over-perform their individual “Par.” Those schools consistently performing better than expected—better than their unique par—are considered effective. The degree to which schools exceed or fall short of “Par” becomes an index of effectiveness. All the key information regarding the accountability system is contained in an educational profile: it is the centerpiece for reporting to policymakers, practitioners, and the public.

**Accountability**

Once a potential measure of effectiveness is constructed, it is critical to determine if the measure is valid. In this case, the question is whether the effectiveness measure identifies individual schools randomly or systematically based on their performance. Schools should be held accountable only for those actions under their control and not for random occurrences. Distinguishing between random and systematic occurrences is accomplished by evaluating the performance of individual schools over time; one observation is insufficient. The difference between random and systematic may be best illustrated by a golfing analogy. Because the objective is to putt the ball into the hole, an individual who consistently misses the target to the same side is performing systematically and it is reasonable to expect a corrective action. On the other hand, someone who consistently puts the ball into the cup (hits the target) and only sometimes misses just a little to either side is performing randomly with no specific corrective action indicated (except more practice).

As a consequence, if the effectiveness measure is judged to be a random occurrence, it is an inappropriate accountability measure because it is uncontrollable by school officials. If, however, the effectiveness measure is determined to be systematic, it is a valid and reliable accountability measure because it indicates that “effectiveness” is indeed under the control of the school organization (and corrective action is warranted). In sum, the occurrence is considered random when there is an equal likelihood of performing above or below the expected level. The occurrence is considered systematic when the performance is consistently either above or below the expectation. The systematic/random likelihood is estimated through regression analysis comparing school performance over time.

**Conceptual Categories**

The data variables for the accountability system are selected purposefully: because they fit into the conceptual categories of student/community characteristics (SES or socioeconomic status), staff quantity, staff qualifications, and instructional materials. States regularly collect data in the categories of staffing roles, staff qualifications, instructional material expenditures, and student characteristics because these categories are commonly acknowledged as being related to student achievement. (The non-instructional and facilities categories are not included because they are thought not to make a substantial contribution to achievement and they would add undue complexity.) In other words, the individual variables for possible use in the analysis were not selected because of their unique conceptual value; they were selected only because of their membership in one of the compelling categories.

The justification for grouping individual variables into conceptual categories, what is hereafter called “factors,” is based on factor theory, a fundamental principle of regression. Briefly, the statistical variance of conceptually and statistically related variables is divided into three types: (1) the common variance shared by all variables (sometimes called the g-factor); (2) the unique variance of each individual variable; and (3) the error variance. When measuring and reporting individual variables, it is not clear how much of the variance is “common” and how much is “unique” because some of the variance is shared by other variables. Instead of trying to distinguish among the common and unique variances for each individual variable, a better alternative is to measure and report the total variance—common and unique—for the entire factor. Operationally, the total contribution of the regression equation is reported as being the factor rather than the contribution of the individual variables.

The individual variables within each of the previously identified school factors are substantially correlated because they share common variance (g-factor). This is supported by the general observations: (1) all instructional staff roles combine to produce a comprehensive instructional environment; (2) teacher qualifications are an integrated combination of traits; and (3) instructional materials work as an amalgamation. All these are reasonable illustrations of gestalt, a set of variables working together conceptually, operationally, and statistically to produce a larger product.

SES is commonly reported in research papers as a single factor even though it is most certainly comprised of several variables. Individual variables are combined via regression to represent the concept of SES as a proxy. Similarly, there is no single data variable representing the other factors: Staff quantity; staff qualifications; and instructional materials. Individual variables must be combined to form proxies for the factors. The variables identified for inclusion in each proxy and their weightings are based first on their membership within the conceptual category, and then on their relationship with achievement and their inter-correlations as a part of the regression process.

This strategy evolved based on the shortcomings of a previous analytical effort, which utilized individual variables rather than related variables combined into factors. In the previous analysis, different combinations of variables accounted for the relationship with the several achievement outcomes. This was due to the high correlation among the explanatory variables causing the order of entry into the regression equations to change frequently. The assumption that an ever-changing set of variables with an ever-changing set of weights explains student achievement was difficult to sustain. It is more reasonable to assume that consistent variables with consistent weights are related to achievement. Therefore, it was prudent to use a common variable set with common weightings to form factors across the various achievement equations. By inspecting the regression results.
for each factor, those variables consistently making a contribution are easily identified because the weightings were similar. These are the reasons why this analysis is conducted in terms of factors rather than individual variables.

The goal is to develop a single number for each factor that is a “good” predictor of achievement. The first step is to build a series of regression models predicting the various grade/subject achievements for each of the factors across the several years identifying the variables with consistent predicting powers. Using only these variables, the next step is to select the weightings producing the “good” predictor factor formulae. This is accomplished by combining (averaging) the respective variable weightings. The weightings can be combined for only years, resulting in a unique set of factor formulae for each achievement variable, or combined for years and grade/subject achievements for a common factor formula across the multiple achievement measures. The common factor set alternative was selected in order to reduce the number of comparisons required to present the results. In addition, it avoids the question of why individual schools would rank differently on each of the factors for each of the grade/subject achievement tests. The final step is to insert the data for each of the observations into each factor formula to obtain the factor scores. Now, a few key numbers “explain” achievement, rather than too many numbers to contemplate.

Importantly, the actual school values of the factors are different for each year because the data change every year, even though the definitions remain constant. Most importantly, what little explanatory variance is “lost” by combining the variable weightings is later “recouped” when the factors are entered into the equations predicting the achievement levels for each grade and subject. In essence, the explanatory variance is moved from the individual variables to the factors. With this transformation, the results are easily understood as the product of four achievement measures against four common factors (16 comparisons), rather than sixteen factors (different each year) against the four achievement measures (64 comparisons), or a multitude (23) of individual variables and the achievement variables (92 comparisons).

Before being used in the equations, the factors scores are first transformed into standard scores and then into percentiles (area under the normal curve), standard statistical procedures. (Standard regression coefficients are produced when the variables are in standard scores.) In addition to normalizing, the transformation adjusts for the undue influence outliers may have on the results. This process creates a consistent, common, and easily understood measurement scale for every factor—the common “currency” of percentiles. All the elements in the educational profile are then directly comparable.

Testing the Transformation

The amount of explanatory variance was calculated for the transformed (factors) and non-transformed (variable sets) forms of the equations, and the results were virtually identical (.02 or less in the amount of explained variance). Therefore, the transformation process neither materially diminished nor augmented the statistical results. Thus, the factors are available as a comprehensive and comprehensible profile of school performance and resources.

Analysis Strategy

The factors were entered into the regression equations. Using the factors, regressions yielded the predicted achievement levels and residuals. Residuals (the difference between the predicted and actual levels) are normally reported in terms of standard scores so the transformation to percentiles is straightforward. Therefore, all of the factors are in a standard “currency” or index.

The next part of the strategy is to analyze the residual. By definition, the residual is normally distributed around the standard score of zero; the chance of being above or below the mean is virtually equal. However, the residual is actually comprised of random and systematic error. There is a critical difference between random and systematic error: random error is random over time; systematic error is not (Taylor, 1982, p. 81). Analyzing the residual for each observation over time identifies the systematic-error portion of the residual. In this context, the error analysis addresses the question, what schools consistently—or “on average”—perform above or below the expected level? Regressing the time-averaged residual against the dependent variable identifies the systematic portion of the residual. If the amount of variance explained by the averaged residual is zero, then there is no systematic occurrence. If the explained variance is not zero, then there is systematic occurrence. The random portion can be measured because the sum of the two types of error equals the residual.

In essence, this method is based on the identical algebra commonly known in econometrics as “fixed effect estimation,” with the systematic portion of the residual being the “fixed” or “school effect.” This portion of the residual is called “fixed” because of the assumption that it changes little, if at all, over a reasonably short period of time and can be best estimated by the average.

Econometric Models

There are specialized computer programs for conducting “fixed effect” analysis that are effective under certain conditions: (1) There are a small number of variables under consideration; and (2) the primary interest is in the statistical inference of the variables; and (3) the audience has a sophisticated understanding of econometrics. These conditions do not appear to be present in the situation at hand. So rather than using a “black box” computer model, the product from each step of the analytical process is presented in order to provide understanding and confidence to those who are in judgment of the final product—an index of school effectiveness. In other words, this method combines a myriad of variables into a comprehensible profile of school performance and calculates the components of “fixed effects estimation” for those individuals who are not knowledgeable in the field of econometrics. It culminates with an index of school effectiveness within the educational profile.

Assessing School Efficiency

One approach to developing school effectiveness measures relies upon the concept of production efficiency and techniques for measuring such efficiency. This approach utilizes the economist’s notion of a production function.3 Production models have three parts: The outcomes sought; the necessary ingredients or inputs; and the process transforming the inputs into outcomes. These three parts are linked together by a mathematical function. This production function reveals the maximum amount of outcome possible for various combinations of inputs. If the levels of the inputs and the function are known, the maximum level of outcome (i.e., production) can be determined. Anything short of maximum attainable output indicates technical inefficiency.
A second dimension to production efficiency involves input costs. Assuming an organization makes the best possible use of a set of inputs—that is, it is technically efficient—the least-costly input combination is required to achieve allocation efficiency. Put another way, production efficiency requires both technical and allocation efficiency.

A third dimension of production efficiency involves the process portion of the production function. Assuming that technical and allocation efficiency have been achieved, the process must also be efficient before the maximum attainable outcome is achieved. This aspect is discussed in more detail later. Together these three dimensions combine to yield production efficiency. For a more detailed discussion of the educational production function, see Monk (1990). Notwithstanding some difficulties, various notions of the production function receive political support across the states and serves as the basis of many school accountability systems.

An accurate estimate of the effectiveness or “quality” of a school (the school’s contribution to student learning) must account for the relative contributions of SES and school resources to student learning. Put another way, accountability systems should not confound school quality with other fundamental determinants of student performance, particularly when assessments of school quality trigger school rewards and sanctions.

The production function approach estimates the marginal educational contributions of identified educational inputs, both “controllable” and “uncontrollable,” and identifies those controllable inputs with positive marginal weightings. These estimated weightings can then be compared with corresponding input costs to improve allocation efficiency. The production function approach can also be used to identify school districts and schools that consistently produce levels of student achievement that exceed (or fall short of) levels predicted by the identified inputs. These consistently higher or lower than predicted performance levels can be attributed to the process component of the production function for which data are usually unavailable.

The process component is difficult to measure and thus is generally excluded in educational production function studies. Staff and organizational behavior are frequent process topics. Murnane and Phillips (1981), in a study of elementary schools, included a set of teacher behavior variables in a model of vocabulary test performance. The variables included the percentage of time the teacher used subgroups, demonstrations, and individualized work, and whether the teacher felt responsible for explaining the subject matter. These authors found that the process behaviors explained a larger proportion of test score variance than teacher qualification characteristics. School climate, another process variable, may also enhance the quality of teaching and learning (Mortimore, et al., 1988).

Leibenstein’s (1966) seminal article on X-efficiency in businesses contends that incentives and other generally unmeasured organizational attributes of the firm make a greater contribution to process efficiency than the marginal reallocation of inputs. Building on the same idea, Levin (1997) suggested that unmeasured and often unobserved school practices and organizational characteristics—the process component of the production function—can be very important to school performance. Levin did not provide estimates of the magnitude of X-efficiency. Actually, there are few empirical studies regarding X-efficiency in schools. While there are some general ideas as to why some schools consistently produce higher or lower than predicted performance, the specific behaviors and organizational characteristics are largely unknown.

A Model of Education Production

In this section, a production function model is used as an approach to estimate the magnitude of the unobserved school characteristics influencing student performance—the X-efficiency factor. The basic notion of the model is:

\[ \text{Output} = \text{Input} + \text{Process} \]

Hanushek proposed a framework for an educational production function that distinguishes among family background, peer, and school inputs (Hanushek, 1979). A simplified version of this production function is:

\[ A = f(B, P, S) \]

where \( A \) represents outcomes; \( B \) represents family background inputs; \( P \) represents peer inputs; \( S \) represents school resources; and \( f(\ ) \) is the function, or production process transforming the inputs into outcomes. This framework is modified slightly, combining the family and peer inputs into a single SES element and includes the process X-efficiency factor. The theoretical school-level model of education production becomes:

\[ A = f(S, E) \]

When the different aspect of school resources are identified and the process portion or X-efficiency is included, the expanded production function becomes:

\[ A = f(S, QN, SQL, IM, X, E) \]

where \( A \) is the school achievement level; \( SES \) represents the student/community characteristics; \( SQN \) represents the staff quantity; SQL represents the staff qualifications; IM represents the funding for instructional materials; \( X \) represents the unobserved X-efficiency behavior and policy attributes; and \( E \) represents the random error. The SES and school resource factors are the inputs, for which there are data, and the unobserved X-efficiency factors along with the error are in the residual (i.e., the difference between actual and predicted performance levels for each school). Additionally, prior school resources and SES could have an influence on later achievement levels and could be considered a part of the production function. These prior values were incorporated into the production function analysis, discussed later.

What is not measured directly is concealed in the residual term along with the measurement error. Of particular interest is the portion of the residual term attributable to a missing variable; that is, X-efficiency. Accordingly, the model is estimated and the residuals divided into random and X-efficiency components. In essence, this analysis measures indirectly the “process” portion of the production function from estimates of the outcomes and inputs based on the following logic:

If \( \text{Outcome} = \text{Input} + \text{Process} \), then \( \text{Process} = \text{Outcome} - \text{Input} \).

Data

A panel of school-level data was obtained from the Minnesota Department of Children, Families and Learning for elementary schools for the years 1998 through 2001. All schools reporting to the state.
were included in the study. Reporting of school-level data was optional in 1998, and 506 schools participated that year. Participation rose to 671 schools in 1999, 690 in 2000, and 694 in 2001, including all elementary schools in the state. Data for all variables were reported by participating schools, except for “teachers’ average years of teaching experience” for 1998. For that year, each school’s 1999 figure was used. A complete panel of data was available for 476 schools. Achievement data consisted of building-averaged scores on statewide assessments for reading and mathematics in grades three and five for each of the four years.6 Definitions for the set of school-level variables are given in Appendix A.

Analysis Process

The analysis process began with the construction of a set of indices based on the factors in the production function. Indices for staff qualifications, staff quantity, and instructional supplies and materials (non-personnel instructional expenditures) were constructed from sets of component variables. The purpose of the regression-based method was to maximize the proportion of variance in student achievement explained by the variance in the respective indices. Importantly, by maximizing the explanatory variance in the factors, the residual, and therefore the school effect is minimized to avoid any over estimation. These school resource indices and their component variables are summarized in Table 1.

Specifically, the achievement measures were regressed against the component variables of each index. The estimated coefficients for each variable were then averaged over the four years, and this average was used as the weighting for the variable in the construction of the index. For the same reason the “fixed” or school effect is assumed to be constant, the weightings are assumes constant and their best estimate of the “true” value is the mean over the time periods (Wooldridge, 2000, p. 441-2). (Analytical research cannot be conducted without the assumption that the same laws exist in space/time, also a basic principle in physics. The relationships between inputs and outputs were assumed to be the same wherever the school is located, the space component. Likewise, the relationships were assumed to be the same regardless of when the measurements are made, the time component.)

The amount of explanatory variance from each index was calculated and compared with the variance using the component variable sets in order to verify that the indexing process did not substantially change the results. The comparisons were made for each index, for each achievement measure, and for each year, for a total of 16 comparisons per index. The actual variance values for the respective indices were similar and the average differences between the two methods (indices and component variable sets) were small: .024 for staff quality; .018 for staff qualifications; and -.013 for instructional materials. The average weighting method for SES, however, produced a larger difference, .062. Because this level was considered too high, an alternative method was tested; instead of averaging the regression coefficients, the individual variables were weighted based on the inverse of the standard deviations.7 This method produced a result more similar to the average variable set method, the difference being .014.

Finally, each school’s index and achievement levels were converted into a percentile ranking. This scaling did not change the statistical character, but did reduce the undue influence of outliers (Wooldridge, 2000). At this point, there was a profile of four school achievement measures and four resources measures in a common scale or “currency,” meeting the two previously identified criteria of an accountability model: The components of the accountability system are understandable by policymakers, practitioners, and the public; and they are statistically valid and reliable. Without the factors and indexing, there would still be four achievement measures, but twenty-three explanatory variables all in different metrics are hardly “user friendly.”

Using the achievement and school resource indices of the profile, the model was estimated by ordinary least squares (OLS).8 Separate

<table>
<thead>
<tr>
<th>Index</th>
<th>Component Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Qualifications (Teachers)</td>
<td>(1) Average length of teaching experience; (2) average salary; (3) average age; (4) percentage with a Master’s degree; (5) percentage of new teachers</td>
</tr>
<tr>
<td>Staff Quantity (Instructional Staff Only)</td>
<td>(1) Administrative staff (licensed and unlicensed); (2) licensed staff (teachers); (3) licensed support staff; (4) non-licensed instructional staff (teacher aides), all per 1,000 students</td>
</tr>
<tr>
<td>Non-Personnel Instructional Expenditures (Instructional Materials)</td>
<td>(1) Supplies and materials; (2) capital outlay and debt; (3) other instructional non-personnel expenditures</td>
</tr>
<tr>
<td>Student/Community Characteristics (SES)</td>
<td>(1) Percentage of children in the school who are eligible for free or reduced-price lunch; (2) percentage of children who are minority; (3) percentage of children who are in special education; (4) reported disciplinary incidents as a percent of building enrollment; and (5) intra-district mobility rate. Four other variables were excluded because they did not add to the explanatory power.</td>
</tr>
</tbody>
</table>
regressions were run for each of the outcome measures (READ3, READ5, MATH3, and MATH5) for each of the four years. Because the focus was on the residuals and not the estimated coefficients of the indices, the complete regression results are not reported. Moreover, there is no attempt to make statistical inferences regarding the indices. At this point, the school profile is further developed; a predicted achievement level, in percentiles, is added in order for it to be compared with the actual achievement level. The other byproduct of the regression is the residual, the dwelling of the school effect—the final piece of the profile puzzle.

**Analysis of Residuals**

The object of the residual analysis is to partition the explanation of the achievement levels across the factors of the production function. This is accomplished by first partitioning the amount of variance (the $R^2$ or coefficient of determination) explained by the SES and school resource factors from the residual, and then separating the random error from the systematic error within the residual. The systematic error portion of the residual is considered to be the school effect. An upper bound for the magnitude of the residuals is: 1 minus the coefficient of determination ($1-R^2$). The $R^2$ for each outcome measure, averaged over the four years, was: MATH3 = .532; MATH5 = .635; READ3 = .712; and READ5 = .706 with an average of .646. Therefore, the random and systematic error must share the difference between this number and 1, or .354.

To obtain an estimate of the magnitude of the systematic error, the residuals were examined to identify schools and districts that consistently over- or under-performed compared with predicted outcome levels. A school that consistently exceeded its target performance, as predicted by its students’ characteristics (SES) and resource levels, was presumed to benefit from unobserved school attributes, or X-efficiency. Specifically, the averaged residual represents the systematic error and is the estimate of school X-efficiency. School residuals were averaged for each outcome (i.e., grade level and subject) over the four years. In essence, the averaged residual became a new variable representing the effectiveness of each school. The effectiveness variable was entered into the regression equations to determine if it was associated with the achievement variable, controlled for the other factors. The magnitude of the association was measured.

If the effectiveness variable (the four-year averaged residual for each school) represented only random error, the regression coefficient would be zero, and it would account for no additional variance ($R^2$). In other words, schools had the same chance of being above the target level as below. If this were the case, the conclusion must be that the effectiveness variable has no statistical validity. If, on the other hand, the coefficient was greater than zero, the magnitude of statistical validity of the effectiveness variable is measured by the percent of variance explained ($R^2$). In this case, the conclusion must be that there is some underlying reason why schools consistently either under-achieve or over-achieve their predicted targets. The statistical results are substantial. By including the effectiveness variable in the equations, the percent of variance explained ($R^2$) increased for all subject/grade combinations, with an average increase from .646 to .928 and a change of .282 out of a maximum possible .354 (see Table 2).

The effectiveness variable has the same distinctive properties as the residual. It has no correlation with the other variables in the equation; i.e., it is not associated with SES or any of the school resources variables. If, for example, a variable representing staff qualifications is incorporated into the regression equation, it must be substantially independent of the other qualifications variables (experience and training) included in the staff qualifications index in order to have an impact on the results. No candidates for variables associated with the factors with statistical independence come immediately to mind. Therefore, additional variables and better data will improve the predictions, but it is highly unlikely that they would account for a major portion of the amount of variance that can be explained by the effectiveness variable. Put simply, a better specification of the model may reduce the influence of the effectiveness variable but would not eliminate it.

Of equal interest is the relationship between the effectiveness variable and achievement. For any single time period, there is no correlation between the residual and achievement. For any single time period, there is no correlation between the residual and achievement. Only when the residual

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Coefficient of Determination ($R^2$)</th>
<th>Difference</th>
<th>Error ($1-R^2$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Without Residual</td>
<td>With Residual</td>
<td>District</td>
</tr>
<tr>
<td>MATH3</td>
<td>0.532</td>
<td>0.913</td>
<td>0.212</td>
</tr>
<tr>
<td>MATH5</td>
<td>0.635</td>
<td>0.932</td>
<td>0.155</td>
</tr>
<tr>
<td>READ3</td>
<td>0.712</td>
<td>0.935</td>
<td>0.128</td>
</tr>
<tr>
<td>READ5</td>
<td>0.706</td>
<td>0.932</td>
<td>0.107</td>
</tr>
<tr>
<td>Mean</td>
<td>0.646</td>
<td>0.928</td>
<td>0.151</td>
</tr>
</tbody>
</table>
student achievement, the regressions were re-run for each achieve-
and one for the district. As a result, there were two effectiveness variables, one for the school and one for the district.

To estimate the magnitude of these school and district effects on student achievement, the regressions were re-run for each achievement measure with the school and district effectiveness variables, the SES factor, and the school resource factors. The contributions these effectiveness variables made to the coefficient of determination (R^2) are presented in Table 2.

At this point, another consideration was also addressed. Prior school resources may have an impact on the results because they could have a longer-term influence. This was tested. Regressions were run inserting prior SES, staff qualifications, staff quantity, and instructional materials factors into the equations as lag variables. There was a slight increase in the total R^2 and a small decrease of the R^2 for the X-efficiency effect. The increase in the total R^2 and the discounting for the X-efficiency amounted to about .010 for Math 3, .013 for Math 5, .008 for Read 3, and .005 for Read 5, for an average of about .009. While this is important to note, it increases the precision of the X-efficiency effect only slightly but has little effect on the substantial magnitude.

Discussion

As the results in Table 2 indicate, the district effect accounted for between 10% of the variance in measured achievement for fifth grade reading and 21% for third grade mathematics, averaging about 18% for mathematics and 12% for reading. The estimated school effect ranged from 10 percent for third grade reading to 17% for third grade mathematics, averaging about 16% for mathematics and 11% for reading.

The finding of greater school and district effects on math achievement than on reading achievement is intuitive. Parents may spend considerable time reading with their young children, while mathematics instruction is left largely to the school system.

These school and district effects are substantial. They reflect unobserved qualities of school administrators, faculty, support staff, and the educational climate they create, along with other unobserved variables. More importantly, the personal and professional qualities of these educators interact in ways that produce effective curricula, pedagogy, and instructional programs. The translation of these qualities into effective educational practice is important, but not illuminated by this quantitative analysis. The only way to identify these school effectiveness characteristics is to conduct case studies based on this type of analysis.

On the other hand, this analysis identifies the sources of much of the variation in elementary school student achievement. The R^2 changes associated with school and district effects can be added to the R^2 changes associated with SES and school resources to obtain an estimate of the total explained variance in student achievement (R^2_total). The unexplained variance is estimated as (1-R^2_total) and is attributable to noise in the data and random error. On average, the proportion of the variance in student achievement that remains unexplained is a mere 7%, a remarkably low figure when compared to other education production function studies.

One may expect that these unobserved school and district effects would be roughly consistent across grades and subjects; that is, a good elementary school is good in all grades and subjects. To further examine the consistency of these effects across subjects and grades, correlation coefficients were calculated across subjects and grades. These correlation coefficients are presented in Table 3.

The correlations are relatively high, confirming that the fixed effects, or levels of X-efficiency, within a school tend to be consistent across subjects and grades over the four-year period examined. The effects of such unobserved variables as climate, communications, leadership, and performance incentives appear to be reflected throughout the school and not restricted to particular grades and subjects.

More generally, this consistent pattern of effectiveness across district and school grades and subjects reveals a degree of stability in school and district influences on teaching and learning in the classroom. Not surprisingly, effective schools are found in effective

Table 3

<table>
<thead>
<tr>
<th></th>
<th>MATH3</th>
<th>MATH5</th>
<th>READ3</th>
<th>READ5</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH3</td>
<td>1.00000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH5</td>
<td>0.725443</td>
<td>1.00000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>READ3</td>
<td>0.656566</td>
<td>0.564673</td>
<td>1.00000</td>
<td></td>
</tr>
<tr>
<td>READ5</td>
<td>0.677272</td>
<td>0.902083</td>
<td>0.614691</td>
<td>1.00000</td>
</tr>
</tbody>
</table>

Educational Considerations
districts. The pattern reflects the effects of activities, policies, incentives, instructional practices, climate, and other inputs that are consistently present in the schools and districts but are not captured by the SES or school resource measures.

These results support the previously stated criterion of an accountability system: The method is valid (accurately identifying effective schools and school districts) and reliable (based on sound data and analysis). With the inclusion of the school and district effectiveness measures, the school profile is complete. In one easily understood profile, there is the necessary overview information of the accountability system, including school and student/community resources; the predicted achievement levels; individualized par; and the school and district measures of effectiveness. Schools exceeding par are effective and positive, while schools below par are negative. (See Figure 1 for a simplified illustration of a school effectiveness profile.)

The yearly production of this profile would provide policymakers, practitioners, and the public with an understandable report of school status and progress in a statistically valid and reliable form. The production of the profile, as outlined, would seem to be within the grasp of state departments of education, the final criterion of an accountability system.

Comparison with a Difference Model of Effectiveness

Many state accountability systems measure school performance by changes in achievement from one year to the next (Figlio, 2005.) Despite some demonstrated shortcomings, this method, sometimes referred to as “difference scores,” is attractive to states because it is relatively easy to administer and explain to the public.10 The “difference scores” methodology can be interpreted as measuring the production function during two time periods. Assuming the previously presented production function, a straightforward algebraic analysis demonstrates that difference scores is actually attributable to the changes in SES, staff qualifications and quantity, instructional materials, and X-efficiency, only a small part of which is under direct school control (Wooldridge, p. 422). This interpretation makes the justification of difference scores difficult to sustain.

Difference scores for Minnesota’s elementary schools were calculated and compared with the X-efficiency findings. In seeking to identify the preferred measure of school efficiency, the following criteria were applied: First, the efficiency measure should be neutral with respect to factors over which schools have little or no control (e.g., student SES and school resource levels); second, each school should have the same chance of improving (e.g., a school’s likelihood of improving in any given year should not be conditioned upon prior year performance).

Neutrality can be measured by the simple correlations between the efficiency measure and the uncontrollable SES and resource indices. These correlations are virtually zero for the X-efficiency measures by construction. The correlations of difference scores with the SES and resource indices are also near zero, indicating that difference scores satisfy the neutrality criterion.11

To assess the independence of difference scores from prior year scores, the Minnesota elementary schools were divided into deciles (ranked by prior year achievement level) and their difference scores were calculated. The findings are presented in Figure 2. There was an inverse relationship between school difference scores and prior year performance level. This result is intuitive, reflecting both an increasing marginal cost of improvement and a regression to the mean for these schools’ academic performance. To complete the analysis, correlations between the schools’ difference scores and the schools’ X-efficiency scores were calculated (both averaged over the four-year period). These correlations were: READ3 = .45; READ5 = .56; MATH3 = .46; and MATH5 = .52. As indicated, these alternative measures of school effectiveness were not closely comparable. The X-efficiency measure was clearly superior according to the criteria discussed above.
Discussion and Conclusions

The key to an accountability system is to separate those elements beyond the control of schools (SES and resources) and focus on the elements under their control.

In keeping with a vast research literature on educational productivity, this analysis confirmed that the socioeconomic characteristics of students remain the most influential factor in predicting achievement outcomes. SES exerted a large influence on academic achievement, about 55% of the variance.

Estimating the impact of school resources on student achievement is problematic. First is the simultaneity problem; low-performing schools are given additional, compensatory resources. Second, school resources are correlated with school SES in a U-shaped relationship, where resources are highest in extremely low and high SES schools. Correlations between school SES and school resource measures are: staff quantity, .393; staff qualifications, .320; and non-staff instructional financial resources, .427. Nevertheless, an estimate of the school resources is about 11% of the explanatory variance. This amount includes about 1% due to adding prior school resources as a lag variable into the analysis (the 1% is discounted from the school effect). No attempt was made to distinguish among the relative contributions of the three school resource factors.

The estimates of school district and building effects were substantial, 27% of the variance. This finding was consistent with Leibenstein (1966), who observed in his article on X-efficiency in organizations, that organizational characteristics have far greater implications for efficiency than the allocation of inputs at the margins. The finding was also consistent with Levin's (1997) statement, "...the potential gains from improved allocative efficiency in education are unlikely to be as large as those from creating schools with greater X-efficiency..." p 308.

By these estimates, unobserved district characteristics (district X-efficiency) exerted a substantial influence on achievement outcomes. High X-efficiency districts (i.e., three standard deviations above the mean) were about five to ten percentile points above the mean in achievement, while low X-efficiency districts (i.e., three standard deviations below the mean) were about five to ten percentile points below the mean in achievement.
deviations below the mean) were about five to ten points below the mean in achievement. These effects are depicted in standardized units in Figure 3.

Unobserved building characteristics (building X-efficiency) also exerted an influence on achievement outcomes, with about five to eight percentile points above the mean for buildings at the high end of X-efficiency and about five to eight points below the mean for buildings at the low end. These estimated effects are depicted in standardized units in Figure 4.

Most importantly, the combined X-efficiencies of the building and district were important determinants of student achievement, far exceeding the marginal impacts of observed school resources. (See Figure 5.) Further, the correlation between building and district X-efficiency was .733, strongly suggesting a synergistic relationship between school and district. Their joint influence on achievement ranges from 10 to nearly 20 percentile points at the high end of X-efficiencies and the same at the low end. Effective buildings in effective districts apparently improve student achievement with any given level of resources.

These findings hold several important implications for school accountability policies. First, holding schools accountable for levels of achievement is tantamount to holding them accountable for the SES of the community; unadjusted scores of student achievement say little about school quality. To ascribe high quality to schools in which children attain high scores on achievement tests is to confuse school quality with student attributes. Second, when SES and school resources are taken into consideration, high and low performing schools are found in all SES strata. Holding schools accountable for achievement outcomes after SES and school resources are considered is more logical and appropriate.

While it was not the purpose of this study to examine education costs, the analysis does suggest the availability of substantial efficiencies in education production through the exploitation of school and district X-efficiencies. On average, about 55% of achievement variance is attributable to the SES factor, 27% to school and district X-efficiency, 11% to observed school resources, and 7% to random error. Of course, these estimates are confounded by multicollinearity among the factors, particularly between SES and
observed school resources. These relative effects are depicted in Figure 6. Nevertheless, the magnitude of X-efficiency substantially exceeded those of school resources. Further, the achievement gains stemming from improved X-efficiency are likely low cost. Logic suggests that time and effort devoted to the identification and dissemination of these X-efficient policies and practices are far more promising for school improvement than increases in, or marginal reallocations of, school resources.

Socioeconomic status, clearly a key determinant of academic performance, is generally thought to be beyond the control of schools. However, not all of the variables commonly used as proxies for SES (e.g., family income, parents’ educational levels, etc.) are directly responsible for student achievement. Rather, the observed relationship between SES and student achievement is attributable to “achievement-friendly” behaviors (e.g., parents/guardians reading to their children and showing interest in their schoolwork, limiting television, etc.). Viewed this way, it appears possible for schools, in concert with their communities, to encourage these behaviors. Put another way, schools may have substantially more opportunity to improve student achievement than commonly assumed if families and communities are a fundamental part of any X-efficiency strategy.

A production function model of student achievement identifies school districts and buildings consistently exceeding the performance levels predicted by student and school characteristics. These schools and districts should be the subject of case studies to identify the sources of their X-efficiency. The school profiles, as suggested by this analysis, would be helpful in identifying potential schools for such case studies. Insights gained into school and district climate, policies, operations, and incentives would be invaluable, as states look for ways to improve teaching and learning in their schools in an economic environment that promises little in the way of increased resources in the near future. While leadership and teaching talent cannot always be replicated across schools and districts, effective practices and other elements of X-efficiency probably can. Case studies of this sort are not unusual in education research but are generally not conducted as part of an ongoing and systematic state-level effort to improve teaching and learning in schools. With a concerted effort between departments of education and universities, surely greater knowledge and school effectiveness is possible.

Currently, state departments of education generally do not gather information regarding the behavior, activities, policies, leadership, or instruction at the school district or building levels explaining the sources of the X-efficiency. The educational profile and school effectiveness index could serve as a template for identifying X-efficiency variables influencing student achievement. As these variables and relationships are identified, the accountability model will be enhanced.

The data historically collected by departments of education are mainly for administrative rather than educational purposes. It is the only data available for studies such as this and for implementation of NCLB. If however, the new goal were to emphasize educational purposes, educational-oriented data would be identified, collected, and integrated into the profile system outlined herein. The result would be an educational improvement profile rather than an accountability profile. It is not enough to tell schools “how they are doing,” it is more important to clear evidence regarding how they could improve. What a paradigm shift that would be!

References


Endnotes

1 The author acknowledges the substantial contribution made by Michael F. Addonizio; however, the analysis and conclusions are attributable exclusively to the author.

2 The regression equation may include the prior year’s test score as an independent variable to estimate the school’s “value added,” or contribution to student achievement over the past year. For a good discussion of APMs, see Stiefel, Schwartz, Hadj, & Kim (2005).

3 APMs are generally calculated with school-level data despite evidence that student-level data would yield more accurate estimates of school resource coefficients. Specifically, aggregation may exacerbate problems of omitted variables bias and overestimate the marginal contributions of school resources on student outcomes. See Hanushek, Rivkin, & Taylor (1996).

4 Bogart and Cromwell (1997) use revealed preferences to infer the value of public school districts from sale prices of houses in neighborhoods that are served by the same city but different school districts. The authors decompose the difference in mean house value across neighborhoods into a part due to differences in observable characteristics and an unobservable part due to differences in public services. Under a variety of assumptions about the degree of tax and service capitalization, the authors find that high-quality school districts provide services valued in excess of the higher taxes that they levy. The analysis, however, does not address school district impact on measured student achievement.

5 Considerable controversy exists as to whether educational phenomena can be adequately represented in a strict production function framework. For an overview of the debate about the existence of an educational production function, see Monk, 1990, especially chapter 11.

6 Individual student scores on Minnesota’s reading and mathematics assessments are based on a scale ranging from a minimum of approximately 50 to a maximum of approximately 2,500. The minimum and maximum scores vary slightly from year to year according to the performance of students at the extremes of the achievement range.

7 Each of these component variables was found to be statistically significant in regressions of student achievement for each of the four years. Each component variable was then assigned a weight inversely proportional to its variance averaged over the four years. With this weighting method, each component variable contributes approximately the same amount of variance to the total variance of the composite SES variable. The SES index is an inverse measure of socioeconomic status. That is, a higher index score reflects lower socioeconomic status. For a complete discussion of the construction of composite measures, see Guilford,1965, pp. 416-426.

8 A set of regressions was also estimated by weighted least squares (WLS), with each observation (school) weighted by the square root of the school’s enrollment. WLS is an appropriate estimation technique when one suspects that the error terms are not of equal variance for each observation (heteroskedasticity). The most common instance of heteroskedasticity is with aggregate data, such as the school-level data examined here, where the dependent variable is a mean value for the individuals in the observational unit. The accuracy of the dependent variable will be a function of the number of individuals in the aggregate; that is, observations for more populous units (e.g., schools) are presumably more accurate and should exhibit less variation about the true value than data drawn from smaller units. This leads to different values of the error term variance for each observation, the heteroskedasticity problem. In this analysis, this problem appears negligible. The unweighted regressions yielded slightly lower coefficients of determination in 14 of 16 equations as compared with the weighted regressions. The average difference was a mere .028, indicating nearly equal explanatory power across the two sets of regressions.
Such school and district level variables may also systematically influence the classroom practice of individual teachers, although such practice also undoubtedly varies idiosyncratically across classrooms.

See Kane & Staiger (2002). School rankings based on annual difference scores, however, are unstable due to measurement error. Tests have large stochastic components and results may be particularly volatile from year to year as different cohorts are tested (Figlio, 2005).

The coefficient matrix is given in Appendix B.

### Appendix A

**Data (school-level)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>READ3</td>
<td>Mean student achievement in grade 3 in reading</td>
</tr>
<tr>
<td>READ5</td>
<td>Mean student achievement in grade 5 in reading</td>
</tr>
<tr>
<td>MATH3</td>
<td>Mean student achievement in grade 3 mathematics</td>
</tr>
<tr>
<td>MATHS</td>
<td>Mean student achievement in grade 5 mathematics</td>
</tr>
<tr>
<td>SES</td>
<td>An index of family and peer characteristics</td>
</tr>
<tr>
<td>RLADMIN</td>
<td>Licensed administrators per 1,000 students</td>
</tr>
<tr>
<td>RLSUPPORT</td>
<td>Licensed support staff per 1,000 students</td>
</tr>
<tr>
<td>RLINSTRUCT</td>
<td>Licensed instructional staff per 1,000 students (Teachers)</td>
</tr>
<tr>
<td>RNLINSTRUCT</td>
<td>Non-licensed instructional staff per 1,000 students (Aides)</td>
</tr>
<tr>
<td>Tch_yrs</td>
<td>Teachers’ average years of teaching experience</td>
</tr>
<tr>
<td>Tch_sal</td>
<td>Average teacher salary</td>
</tr>
<tr>
<td>Tch_age</td>
<td>Average teacher age</td>
</tr>
<tr>
<td>Pct_mas</td>
<td>Percent of teachers with a master’s degree</td>
</tr>
<tr>
<td>Tot_adm</td>
<td>Average daily membership</td>
</tr>
<tr>
<td>Total PP</td>
<td>Total operating expenditures per pupil</td>
</tr>
</tbody>
</table>

### Appendix B

**Pearson Correlations Between School Difference Scores, SES, and Resource Indices**

<table>
<thead>
<tr>
<th>Test Scores by Subject and Grade</th>
<th>Socioeconomic Status</th>
<th>Instructional Materials</th>
<th>Staff Quantity</th>
<th>Staff Quality</th>
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</thead>
<tbody>
<tr>
<td>MATH3</td>
<td>.08</td>
<td>-.15</td>
<td>-.04</td>
<td>-.05</td>
</tr>
<tr>
<td>MATH5</td>
<td>-.04</td>
<td>.06</td>
<td>&lt;.01</td>
<td>.06</td>
</tr>
<tr>
<td>READ3</td>
<td>-.04</td>
<td>.06</td>
<td>&lt;.01</td>
<td>.06</td>
</tr>
<tr>
<td>READ5</td>
<td>-.11</td>
<td>.08</td>
<td>.04</td>
<td>.13</td>
</tr>
</tbody>
</table>
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