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Sponsorship and Appreciation

The AASA Journal of Scholarship and Practice would like to thank AASA, The School Superintendents Association, and in particular AASA’s Leadership Development, for its ongoing sponsorship of the Journal.

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The unique relationship between research and practice is appreciated, recognizing the mutual benefit to those educators who conduct the research and seek out evidence-based practice and those educators whose responsibility it is to carry out the mission of school districts in the education of children.

Without the support of AASA and Kenneth Mitchell, the AASA Journal of Scholarship and Practice would not be possible.
Parts = Wholes: Collaboration in the Complex System

Ken Mitchell, EdD
Editor
AASA Journal of Scholarship and Practice

In his recent blog (May 1, 2021), “Nested Organizations: Public Schooling Is Complex,” the venerable Larry Cuban compared Russian stacking dolls to various organizational levels influenced by policy decisions. Cuban cautioned that teachers and parents often lack an appreciation for system complexities that affect K-12 policy—the micro and the macro. Such underestimation often presents policy and organizational challenges for leaders at the building and district levels. Hence, leaders who oversee complex systems—the parts and wholes of them—will benefit from periodic recalibrations of their perspectives about the work. Cuban’s observations about these complexities, along with the findings of researchers in this issue, will assist in that process:

• “… elaborate blueprints, technical experts, strategic plans and savvy managers simply are inadequate to control complex systems with thousands of reciprocal ties between people to operate effectively in such constantly changing and unpredictable environments.”

• “What does happen in these web-like complex systems of interdependent units is that they adapt continuously to turbulent surroundings.”

• “At the minimum, knowing that working at any level in a complex system means adapting to changes, dealing with conflicts, and constant learning. These are natural, not aberrations.”

References to “reciprocal ties between people to operate effectively”; “interdependent units”; and “constant learning,” offer clues to the leadership work that is essential for surviving or even thriving within turbulent environments. Successful leaders of large systems also find ways to balance the need for the independent sub-units (teams, academic departments, schools) to maintain their identities while ensuring that each one has a simultaneous and reciprocal connection to the larger system. Such balance, which has to potential to strengthen organizational coherence and unity, derives from the leader’s cultivation of interdependent and collaborative learning systems—part and whole.

The learning is the thread that runs through and connects the parts of the system.
This issue’s researchers examine how and why today’s school leaders can adapt to the inevitable and constant turbulence within both the smaller units and the whole system to advance their work.

In their exploratory qualitative study, “Leading Deep Learning,” Boren, D., Backman, J., Miner, A., & Owens, M. (2021) strive to understand what happens when principals take a system-wide perspective in three areas of leadership: vision for learning, leadership approach, and mindset toward others to strengthen engagement for deeper student learning. They pose two questions:

- **Do district leaders approach their work with principals and teachers by appropriately empowering them as equal collaborators, building shared vision and ownership for deep learning and other priorities, or do they rely on more traditional leader-centric and top-down approaches?**

- **Similar to leaders of highly engaged schools, do district leaders embrace a we-we mindset in their leadership with principals and teachers or the we-they mindset so often used by principals of less-engaged schools?**

Their findings suggest that students cannot be empowered unless the adult learners—teachers and principals—become empowered themselves. Such empowerment emerges from the collaboration of the adult learners in the organization. The parts make up the whole but remain whole within their own contexts. As Cuban reminded us, “… working at any level in a complex system means adapting to changes, dealing with conflicts, and constant learning.”

In their correlational quantitative study, “The Relationship Between Distributive Leadership, School Culture, and Teacher Self-Efficacy at the Middle School Level,” Demarco & Gutman (2021) examine the extent to which relationships exist between distributed leadership, school culture, and the self-efficacy of teachers. The middle school organization, the central cog in the larger K-12 system, is a whole unto itself. Contemporary philosopher Ken Wilber reminds us that every part is a holon—a part that replicates the whole.

Demarco and Gutman describe a need for school leadership to adopt a holistic framework for leading large complex organizations such as middle schools. And again, we see evidence that success to whole scale reform comes from leadership’s approach to systematically construct a learning organization through a systemic lens:

- A school leader is more likely to experience success if they focus their role on promoting interactions between stakeholders that are consistent with best practice rather than focusing on their sole actions as a leader.

This addresses the organizational complexity that Cuban warned “elaborate blueprints, technical experts, strategic plans and savvy managers” cannot resolve and can lead to an unintended consequence of inefficiency.
Achieving a collective efficiency comes from stewarding collaborative learning at district and building levels:

A principal failing to construct such a framework and relying instead on a traditional top-down, authoritative structure has the potential to create an environment in which the school leader becomes overwhelmed by all-consuming tasks and distracted from their professional responsibilities.

The premise that the whole is reliant upon or equal to the part is also the focus of a new textbook, *Developing the Organizational Culture of the Central Office: Collaboration, Connectivity, and Coherence* (2021) by Sally J. Zepeda, Mary Lynne Derrington, and Philip D. Lanoue. In her review, Brenda Myers conveys the authors’ recommendations that “Understanding the totality of the system allows central office leaders to leverage their collective resources effectively towards school and district improvement.”

Wilber’s observation that “the micro is in relational exchange with macro at all levels of its depth,” reminds the leader of the importance of understanding and facilitating the interdependence of the parts yet accepting and supporting each as its own entity. This issue’s authors provide us with examples of how this is applied in the complex and turbulent K-12 organization.
References

Research Article

Leading Deep Learning

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Abstract

The purpose of this exploratory qualitative study was to better understand how the leadership of 11 principals impacted their schools’ level of engagement in a district-wide deep learning initiative. Findings clustered in three primary areas of principal leadership: vision for learning, leadership approach, and mindset toward others. Principals leading highly engaged schools placed equal emphasis on students’ acquisition of knowledge, skills, and dispositions; distributed school leadership widely; and spoke about their work with other-centric language. Principals at less engaged schools placed more importance on content knowledge acquisition, were either disengaged or top down in their leadership approaches and spoke with more egocentric language. This article provides implications for schools and districts interested in pursuing deep learning and leadership, along with recommendations for future research.

Keywords

21st-Century learning, deep learning, distributed leadership, shared leadership, school leadership, principal leadership, skills, dispositions
Introduction
Many schools, districts, and education systems that were originally designed to prepare students for economies based on industry and information are seeking to redefine student learning for complex societies that are increasingly focused on global and humanitarian issues (Collins, 2017). Many of these revised definitions of student learning have encouraged educators to help students acquire academic content knowledge through deep learning frameworks (Bloom, 1956; Hess et al., 2009; Webb, 2006). In addition to deep content-knowledge mastery, some schools and systems have reconceptualized deep learning to include essential skills and dispositions (Fullan et al., 2018; Levin, 2012; Marzano & Heflebower, 2012). Rather than approaching skills and dispositions as byproducts of a strong school academic emphasis, they see knowledge, skills, and dispositions to each be essential school outcomes with the potential to be synergistically developed in mutually beneficial ways (Kay & Greenhill, 2013).

Many school systems that go after such balanced deep learning for students face myriad cultural, structural, and institutional challenges and barriers in that pursuit. Interestingly, despite experiencing similar challenges, some schools are finding success in their pursuit of deep learning, while other demographically similar schools are not (Darling-Hammond & Oakes, 2019; Dintersmith, 2018; Fullan et al. 2018; Mehta & Fine, 2019; Payne, 2010). And while it is well established that principal leadership significantly influences student academic achievement (Rivkin et al., 2005; Seashore-Louis & Leithwood, 2010), research is still emerging on the principal’s influence on deep learning and the nature of that influence. The purpose of this study was to specifically explore how principal vision for learning, leadership approach, and mindset differed between schools that are highly engaged in deep learning differed from those that are less engaged.

Methods
Peak School District (pseudonym) in the Intermountain West region of the United States was seeking to provide deep learning experiences for its more than 75,000 students. Consistent with more holistic definitions of deep learning as cited in the literature above, Peak School District defined deep learning as “the acquisition and application of core knowledge, skills, and dispositions for the wellbeing of all students … deep learning is deliberately created through effective pedagogical practices, new learning partnerships, inclusive learning environments, and by leveraging digital resources to prepare students to thrive in career, college, and society.” Peak has invested heavily in professional development, coaching, and leadership mentoring to ensure that teachers and school leaders have the capacity to help students learn deeply.

Study purpose
Over the few years that Peak has supported this reform, several schools have embraced and invested in this deep learning initiative, while others have been reluctant and less engaged. Through this exploratory investigation, we wanted to better understand the differences in vision, approach, and mindset of principals in these schools. This research specifically examined how principal leadership has differed between schools that were highly engaged in deep learning, despite being offered similar support from their school district. We asked the following research question: How do principal vision, leadership approach, and professional mindsets differ in schools that are highly engaged in deep learning reform compared to those that are less engaged?
**Research design**
Qualitative methods have been effective for better understanding the context of deep learning leadership.

Because the relevant constructs are highly contextual, a methodology permitting inductive discovery seems most appropriate for this research (Guba & Lincoln, 1994; Strauss & Corbin, 1998). Hallinger and Heck (1996) suggest that when researchers “focus on specific issues through more flexible, qualitative methods … [they uncover] the more subtle processes that underlie expertise in leadership behavior” (p. 36).

Employing a purposive, positive-deviance sampling approach (Patton, 2015), we consulted with Peak School District’s leadership to identify schools that they perceived as highly engaged and less engaged in deep learning reform. Schools identified as highly engaged in deep learning were proactively pursuing all four elements included in Peak’s definition of deep learning (see Figure 1).

<table>
<thead>
<tr>
<th></th>
<th>Disengaged</th>
<th>Highly-Engaged</th>
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<tbody>
<tr>
<td>Pedagogical Practices</td>
<td>Narrow range, highly traditional, &amp; teacher-centered</td>
<td>Wide range, highly student-centered, &amp; active</td>
</tr>
<tr>
<td>Learning Partnerships</td>
<td>Collaboration limited to own classroom, team, &amp; schools</td>
<td>Rich collaboration within &amp; outside of own classroom, team, &amp; school</td>
</tr>
<tr>
<td>Learning Environments</td>
<td>Hierarchical, low-energy, risk-averse, fixed-mindset</td>
<td>Inclusive, positive, trusting, innovative, risk-taking, growth mindset</td>
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<td>Leveraging Digital</td>
<td>Technology drives pedagogy &amp; distracts from learning</td>
<td>Technology as a tool to support pedagogy &amp; engaged deep learning</td>
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<td>Resources</td>
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*Figure 1. Engagement in deep learning.*

Approaching the selection of schools with a positive deviance orientation and wanting to better understand what was working and why, rather than what wasn’t working (Cameron, 2012), we identified 11 schools that were highly and less engaged in deep learning. Seven of the schools were highly engaged in deep learning, and four were less engaged. We did not include any schools that were totally disengaged in deep learning. This sample was
stratified by principal gender (3 female, 8 male), experience as a principal (4 with 1-4 years; 3 with 5-8 years; 4 with 9+ years), and school size (3 schools with 250-500 students; 6 schools with 500-1,000 students; 2 schools with 1,000+ students). All of the schools in this sample have 10-40% economically disadvantaged students and 10-30% English language learners.

We conducted a semi-structured interview with the principal of each school, grounded in the following broader, exploratory research questions: How do you define deep learning (vision)? How have you led deep learning in your school (approach)? How do you describe the work of deep learning reform (mindset)? The interviews were transcribed and coded for emerging themes. Initial coding was completed by a blind reviewer who had no experience with the selected schools and was not aware which schools were designated as highly or less engaged in deep learning (Strauss & Corbin, 1998). Throughout the coding process we anticipated and provided for new variables that would emerge in the process of answering the research questions. Based on coding of the interview data, we identified several emerging themes and patterns associated with the initial questions.

Findings
Three findings emerged that may partially explain the relationship between a school’s level of engagement in deep learning and principal leadership. First, the principal’s own personal vision for learning and the relative priority and balance placed on student acquisition of knowledge, skills, and dispositions. Second, the leadership approach principals took in sharing and pursuing that vision, particularly with their school-level leadership team. Third, the way principals talked about and viewed their own and others’ contribution to the work of deep learning. Clear patterns emerged that partially explain how principal vision, approach, and mindset influence corresponding levels of school engagement in deep learning.

Principal vision for deep learning
Principal vision for deep learning emerged as a major finding from the data, including ways principals define deep learning as well as their cited purposes for deep learning. Principal vision also includes the priority and balance given to knowledge, skills, and dispositions. Because Peak School District’s vision for learning included knowledge, skills, and dispositions, all of the principals referred to these three categories in the interviews. However, the weight and priority attributed to each differed among schools. We found three distinctive patterns of priority, as represented in Figures 2-4.

Although Peak District’s vision for student learning delineates knowledge, skills, and dispositions as equally weighted priorities, district and state accountability and structural supports do not yet fully reflect those priorities. Thus, it was not surprising that some of the interviewed principals of less-engaged schools defined deep learning as students acquiring deeper content knowledge mastery with very little reference to skills and dispositions (see Figure 2).
One representative comment reflecting this knowledge-focused mindset described deep learning as follows:

I am still struggling [with the vision for learning] from a philosophical standpoint because I feel like the surface learning has to happen first, and I don’t know that we are making sure that the surface learning is happening as much as it needs to before we move on to deep learning.

Another principal acknowledged the importance of skills and dispositions while still placing priority attention on knowledge:

We can’t let go of knowledge, and we are still chasing success, especially in reading. We still have those goals and that is our main goal. I feel like the district’s vision for learning has given us the freedom to feel less guilt about spending time on skills and dispositions.

Rather than seeing deep learning as a balanced pursuit of knowledge, skills, and dispositions, several principals believed that deep learning was primarily about improving the acquisition of content knowledge. While each principal acknowledged the importance of skills and dispositions, principals with a knowledge-oriented vision placed heavier emphasis and priority on knowledge while viewing skills and dispositions as desirable byproducts.

In contrast to a knowledge-oriented vision, several principals at more highly-engaged schools referred to a vision with greater emphasis on skills and dispositions. These principals suggested that skills and dispositions deserved greater emphasis and viewed content knowledge as the means to ensure students would acquire skills and dispositions (see Figure 3).
One principal noted:

“We try to emphasize dispositions by trying to come up with ways to help kids practice and learn skills. Who they are becoming becomes as important as what they are learning.”

Another principal claimed:

“If they don’t feel like they can do it, they’re not going to be able to do it—even if they have the skills and ability. How they feel about that is super, super important, and so I just have learned that no matter what we do, that needs to be the number one focus.”

These principals acknowledged the importance of content knowledge but seemed to hold a vision heavier on skills and dispositions.

Finally, some of the principals at the most highly engaged schools described their vision for learning as a balanced approach to developing knowledge, skills, and dispositions. For example, one principal stated that “deep learning is knowledge, skills, and dispositions” (see Figure 4).
Another suggested that deep learning provides a common language and framework and in fact gives permission for a balanced approach:

“The vision for learning suggests that skills and dispositions are a purposeful pursuit alongside knowledge learning aims. We need to make sure we’re integrating those and chasing them simultaneously.”

These principals acknowledged the balanced and mutually reinforcing nature of each of these aims, viewing each as critical to students’ ability to learn deeply.

Overall, principals of less-engaged schools held a knowledge-heavy vision for learning, while principals of the most highly engaged schools held a more balanced vision for learning. The relative balance a principal places on knowledge, skills, and dispositions seems to have an impact on their school’s level of engagement in deep learning.

**Principal leadership approach**
A second finding of the study suggested that a principal’s leadership approach has important implications for deep learning reform throughout the school. Existing distributed leadership research guided the initial research design and subsequent analysis (Copland, 2003; Gronn, 2002; Spillane et al., 2001; Wang et al., 2014). Distributed leadership theory looks at interactions among members of an organization, including ways that the collective knowledge and skills of a group are spread across many people and throughout the organization. Principals who both formally and informally distribute leadership help teachers feel less isolated and classroom-bound, and more connected and committed to the overall school organization (Baloglu, 2012; Hulpia et al., 2011). Considering this advantage of distributed leadership in schools, we explored the nuances of distributed school leadership for deep learning. We used DeFlamnis et al.’s (2016) levels of distributed leadership as a starting point to model the distribution of leadership at each of the selected schools, then adapted those models to more accurately reflect distributed leadership in practice in Peak School District.

**Less supportive principal**
Some principals at less engaged schools were not as involved with their leadership teams in adopting deep learning (see Figure 5). Overall, these principals expressed mixed levels of enthusiasm for moving their schools toward deep learning, leaving most visioning and implementation of deep learning to teacher leaders.

One principal remarked:

“I just think I’m not sure where it’s at right now. I guess the path has been a little cloudy to me … if anything I feel like my teachers have led out.”

Another principal explained how he invited his teachers to engage in the district’s deep learning training if they wanted, but then provided minimal support or follow-up for what was covered in those training sessions. He claimed that the “leadership team [members] are basically the ones that do all the work,” but without his active engagement and support, the work of the leadership team was not supporting deep learning throughout the school.
Top-down leadership
One of the principals at a less-engaged school described a top-down leadership approach with the school’s leadership team (Figure 6). When asked who had been responsible for planning a specific part of the deep learning initiative, he responded, “I did. Well not just me. So it was me, my assistant principal, my school psychologist … and then I presented it to the leadership team.” With an abundance of confidence in his own vision and expertise, this principal saw the leadership team as a helpful conduit of his vision and direction to the rest of the school, explaining that the teachers on the leadership team “have served as a great liaison between the classroom teachers and myself … so they just serve as that communication tunnel.” Both the disengaged and top-down principal leadership approach were more prevalent in schools that were less-engaged in deep learning.

Figure 6. Top-down leadership.

Principal-dependent collaboration
All principals at highly engaged schools relied extensively on distributing leadership in different forms. Leadership at a few of the schools depended heavily on the principal (Figure 7). While teachers on the leadership team collaborated frequently with other teachers, the deep learning collaborations depended primarily on the principal’s vision for deep learning. One principal asserted:

“My role has been to establish the vision, but I can’t maintain that by myself really, so maybe I initially establish the vision, but then it’s helping that to grow. Being the
lead visionary is fine as long as you don’t stay by yourself—it just doesn’t work. Maybe establishing a vision to begin with and then helping that to grow and become a culture.”

This principal acknowledged that his vision was a primary driver in moving his school toward deep learning, but desired to eventually transfer ownership to his leadership team.

**Principal as equal collaborator**

Several principals at highly engaged schools distributed leadership to the point of being considered an equal collaborator on a leadership team that created a shared vision of their deep learning work (see Figure 8). While consistently maintaining the power of the position, these principals felt that those on their leadership team shared the same vision for deep learning, which became the guiding force in making better learning decisions.

One specified:

“**We did a lot of work in building our ‘why’ and our purpose … our mission statement is providing 21st Century education for kids to become global citizens engaged in the world … everything that we do comes back to our purpose.”**

Another principal praised the leadership team:

“**Without them, I would be nothing. They bring in perspectives that I don’t have. They’re able to share things that come right from classrooms. Teachers feel validated, they feel like they’re on a team and things are working.”**

*Figure 7. Principal-dependent collaboration.*
**Principal-supported collaboration**

One principal at a highly engaged school described the leadership team as owning the vision so thoroughly that with principal support the teachers’ shared vision and expertise were the primary drivers of deep learning at the school (Figure 9).

The principal engaged fully with the team, worked to build shared vision and capacity so that teachers had the capability to be the primary drivers of deep learning at the school. This principal explained:

“So we got together as a leadership team, where I was really honest and open with them about my weaknesses, and my leadership team is awesome and my teachers are great … and [I was able to tell] them ‘This needs to be your vision’.”

**Figure 8. Principal as equal collaborator.**

**Figure 9. Principal-supported collaboration.**
While principal leadership cannot be neatly categorized into a single model or approach, these findings seem to suggest that principals of schools more highly-engaged engaged in deep learning rely on the purposeful distribution of leadership more than principals at less-engaged schools.

**Principal mindset**

In addition to the concrete and noticeable findings respecting a principal’s vision for learning and leadership distribution, we had a sense that something more fundamental should be considered with these principals.

While the difference was initially difficult to specify, it seemed to attach to ways principals talked about leading deep learning reform. We referenced Pennebaker’s (2011) research in conducting a word analysis from the interview transcriptions identifying personal pronouns used when illustrating the thoughts, feelings, motivations, and connections in the principal narratives.

We looked for how principals used I-words (first-person singular) such as I, me, and my as compared to we-words (first-person plural) such as we, our, and us in their descriptions of leading deep learning. The pronouns reflected both principals’ leadership approach and their ways of representing their school’s involvement, ownership, and engagement in a shared vision of deep learning.

Overall, the principals at highly engaged schools seemed much more other-centric in their focus toward leading deep learning, expressing more reliance on and deference toward their colleagues. When examining the ratios of we-word usage and I-word usage, it became clear that principals of highly engaged schools had a much higher ratio of we-word usage. The average we:I usage ratio for principals of highly-engaged schools was 1.96:1, while the ratio for principals at less-engaged schools was 0.93:1.

We acknowledge that analyzing words alone is a limited way of seeing into principals’ we-I orientations. For instance, this method does not consider irony, sarcasm, context, and body language. However, as Pennebaker (2011) commented:

> [By] listening to, counting, and analyzing stealth words, we can learn about people in ways that even they may not appreciate or comprehend. At the same time, the ways people use stealth words can subtly affect how we perceive them and their messages. (p. 38).

While it could be tempting to conclude that principals at the less engaged schools have narcissistic tendencies toward acclaim and control, this does not seem to be the case (Rosenthal & Pittinsky, 2006). Interestingly, principals with a lower we:I ratio also tended to largely have a knowledge-oriented vision for learning and a less distributed approach to leadership. Conversely, principals with a higher we:I ratio tended to have a more balanced vision for learning and more distributed approach to leadership, suggesting that principal mindset is related to both principal vision for learning and approach to leadership.

**Discussion**

As in previous research considering the influential role of principal leadership in levels of student academic achievement (Rivkin et al., 2005; Seashore-Louis & Leithwood, 2010), these findings suggest that principals’ vision, leadership approach, and mindset notably impact their school’s subsequent engagement in deep learning. Hambrick and Mason’s (1984) upper echelons theory asserts that an
organization’s vision, actions, and mindsets often closely reflect those of the formal leader.

Similarly, Ellwood Cubberly, a pioneer in the field of educational leadership, remarked over a century ago, “As is the principal, so is the school” (1919, p. 351).

Principal leadership is critical not only in supporting student academic achievement, but also in increasing schoolwide deep learning engagement.

Our findings suggest that principal vision for learning, leadership approach, and mindset are each important facets of principal leadership that seem to have a subsequent trickle-down influence on whether a school fully embraces deep learning.

While this data set does not identify a precise correlation of the principal’s vision for learning, leadership approach, and interpersonal mindset, these aspects do not seem to operate in isolation from each other in their influence on a school’s deep learning.

Pertinent relationships seem to occur when principals are placed on a matrix differentiating vision, leadership approach, and mindset (see Figure 10). Principals 1-7 were leading highly engaged schools while principals 8-11 were leading less-engaged schools.
<table>
<thead>
<tr>
<th>Knowledge Orientation</th>
<th>Skills &amp; Disposition Orientation</th>
<th>Balanced Orientation</th>
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<tbody>
<tr>
<td><img src="image1" alt="Knowledge Orientation Diagram" /></td>
<td><img src="image2" alt="Skills &amp; Disposition Orientation Diagram" /></td>
<td><img src="image3" alt="Balanced Orientation Diagram" /></td>
</tr>
<tr>
<td><strong>Principal 6</strong>&lt;br&gt;Highly Engaged&lt;br&gt;We:I Ratio, 2.3:1</td>
<td><strong>Principal 1</strong>&lt;br&gt;Highly Engaged&lt;br&gt;We:I Ratio, 2.5:1</td>
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<td><strong>Principal 2</strong>&lt;br&gt;Highly Engaged&lt;br&gt;We:I Ratio, 2.0:1</td>
<td><strong>Principal 4</strong>&lt;br&gt;Highly Engaged&lt;br&gt;We:I Ratio, 2.6:1</td>
<td><strong>Principal 5</strong>&lt;br&gt;Highly Engaged&lt;br&gt;We:I Ratio, 2.2:1</td>
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<td><strong>Principal 7</strong>&lt;br&gt;Highly Engaged&lt;br&gt;We:I Ratio, 0.8:1</td>
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<td><strong>Principal 8</strong>&lt;br&gt;Less Engaged&lt;br&gt;We:I Ratio 1.0:1</td>
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<td><strong>Principal 11</strong>&lt;br&gt;Less Engaged&lt;br&gt;We:I Ratio 0.9:1</td>
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<td><strong>Principal 9</strong>&lt;br&gt;Less Engaged&lt;br&gt;We:I Ratio 0.7:1</td>
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*Figure 10.* Principal deep learning vision, leadership structures, & mindset.
As this data set is cross-sectional, we affirm the possibility that over time, as principals’ vision, leadership approach, and mindset evolve, the engagement of their schools in deep learning may evolve as well.

It is important to acknowledge that effective school leadership for deep learning likely requires diverse leadership configurations, rather than a single approach or mindset in all situations (Gronn, 2009). We agree with DuFour and Eaker (1998) that “principals do not empower others by disempowering themselves … they must lead … empowered teachers and strong principals are not mutually exclusive” (pp. 187–188).

While there are certainly times when principal leadership needs to be more principal- and less team-centric, it seems overall incompatible for principals to ask teachers to more fully engage students’ minds, hands, and hearts through deep, more distributed classroom learning while using traditional top-down, principal-centric leadership approaches with their teachers (Elmore, 2004).

It would seem that for those interested in leading deep learning, “the fundamental role of leader is shifting. It is moving away from a model where the leader knows, directs, and tells and toward one where the leader sees, provokes, asks, and unleashes the capability of others” (Wiseman et al., 2013, p. 167).

These findings invite district leadership to reflect on their vision for learning, leadership approach, and mindsets. As Fullan and Kirtman (2019) explain: “Students cannot be empowered by unempowered teachers, and principals cannot empower teachers without being empowered themselves” (p. 69). What is a district’s vision, approach, and mindset? District leaders should carefully consider whether their measures of success, celebrations, and resource allocation empower a balanced vision for learning or a more traditional knowledge-heavy vision for learning. Do district leaders approach their work with principals and teachers by appropriately empowering them as equal collaborators, building shared vision and ownership for deep learning and other priorities, or do they rely on more traditional leader-centric and top-down approaches?

Similar to leaders of highly engaged schools, do district leaders embrace a we-we mindset in their leadership with principals and teachers or the we-they mindset so often used by principals of less-engaged schools? In addition to indirectly empowering principal deep learning leadership by creating the conditions and modeling, districts should more directly build principal’s vision and capacity to lead a highly engaged deep learning school through ongoing, targeted, job-embedded professional development that is supported by consistent principal coaching.

More broadly, the findings of this study speak to our larger purposes as educational leaders to motivate and share responsibility for deep learning with all members of our educational communities.

Educators’ capacity to work together as genuine communities of professional learners (rather than as token members of so-called PLCs) correlates with their success at improving deep learning and other desirable school outcomes. This success comes from all parties contributing to a vision for learning, working together as teams, and seeing themselves as integral to those teams’ success, not just cogs in the detached institutional machine built to serve the principal’s or district’s vision (Buber, 1970).
It means seeing at a deep level the individual contributions and capacities of each member of a school community and working together in ways that ensure that team members’ efforts are closely aligned to a shared purpose, for surely “Leadership brilliance is expressed more in ‘we together’ cooperation than in an ‘I alone’ delusion, particularly as organizations grow and become more diversified” (Schein & Schein, 2019, p. 114).

The most influential leadership challenge in this endeavor is to see and acknowledge individual contributions and then to hone those efforts toward mutually shared outcomes (Kellerman, 2008).

**Future Research and Conclusion**

The cross-sectional and exploratory nature of this data set prevented us from adequately understanding the possible developmental nature of leading deep learning and the possible relationships of principal vision, approach, and mindset as a balanced model of leading deep learning.

Some of the principals who had been involved longer with the district’s deep learning initiative seemed to have a more balanced vision for learning, a more distributed leadership approach, and a more inclusive mindset. More specifically, focused longitudinal investigations would likely result in an integrated model that further clarifies developmental progressions and construct correlations that might be involved as principals extend their deep learning leadership.

In addition, future research could address impacts of deep learning on student, teacher, and principal wellbeing. We conducted a simple, qualitative wellbeing analysis using Seligman’s PERMA framework and found evidence suggesting that according to principal perception, individuals in the highly engaged schools in this study experienced higher levels of positive emotion, engagement, relationships, meaning, and accomplishment (Seligman & Adler, 2018). Adults as well as students seemed to experience higher overall wellbeing, suggesting a positive relationship between improved deep learning and increased wellbeing (Murphy & Seashore-Louis, 2018; Seligman & Adler, 2018).

Principals of less engaged schools did not seem to perceive a similarly high level of wellbeing within their schools. More robust research is needed to better understand the possible relationship between principal vision, leadership approach, mindset, and wellbeing.

Another area ripe for future research is the impact of the principal’s vision, approach, and mindset on teacher leaders, individual teachers, and their students. In what ways do principal vision, approach, and mindset influence team leader vision, approach, and mindset in their work with teachers on their collaborative teams? How does principal vision, leadership, and mindset influence subsequent teacher vision, classroom leadership, and mindset in their work with students?

If a principal holds a balanced vision for learning, pursues distributed leadership approach, and is other-centric, do her team leaders tend also follow these same leadership patterns? Considering Hambrick and Mason’s (1984) upper echelons theory and a potential trickle-down influence, we recommend more research of this type.

Ultimately this research suggests that perhaps school and district leadership need to reflect the type of learning that we as leaders hope is happening in classrooms. When schools were preparing students for assembly
lines in factories, the top-down, command and control-focused teaching and leadership consistent with theories of scientific management were perhaps useful (Taylor, 1911; Wheatley, 1997). But the findings of this study and results of other current research suggest that “deep learning changes the nature of leadership” (Fullan & Kirtman, 2019, p. 106). The purpose and goals of this study have been to examine and share a few of those needed changes and to call for future research to extend and expand understanding of effective leadership for deep learning. We are optimistic that teachers, principals, districts, and communities can thrive as they lead the work of deep learning.

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References


The Relationship Between Distributive Leadership, School Culture, and Teacher Self-Efficacy at the Middle School Level

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Abstract

The purpose of this correlational, quantitative research study was to examine the extent to which relationships exist between distributed leadership, school culture, and the self-efficacy of teachers within public middle schools in central New Jersey. This study was informed by Spillane’s and Elmore’s theoretical frameworks concerning distributed leadership, Bolman and Deal’s framework concerning school culture, and Bandura’s framework for self-efficacy. This study identified significant relationships between distributed leadership, school culture, and teacher self-efficacy. The results indicate the need for school leadership to adopt a holistic framework for leading large complex organizations such as middle schools.

Key Words

leadership, distributive leadership, self-efficacy, reframing, decision making
Introduction
The task of leading today’s schools has become so multifaceted and complex that one individual cannot be expected to accomplish the task alone (Grenda & Hackmann, 2013). To study leadership practice, one must examine the interplay between leaders, followers, and the elements of the situation (Grenda & Hackmann, 2013). One approach in examining that interplay is by examining the relationship between distributed leadership, culture, and self-efficacy.

The purpose of this study was to replicate Davis’ (2014) study to determine the extent to which a relationship exists between distributed leadership, school culture, and the self-efficacy of teachers in public middle schools in central New Jersey. Although Davis' study demonstrated a positive correlation between distributed leadership and both school culture and teacher self-efficacy—as well as a positive correlation between school culture and teacher self-efficacy—the study was limited to K-5 elementary schools in Pinal County, Arizona.

There is a need to continue this research to include middle schools that house Grades 6–8 in different geographical regions of the United States to determine if there are similar findings.

The purpose of Davis' research was to contribute to the literature regarding distributive leadership that goes beyond the limited focus of school performance and student achievement to include school culture and teacher self-efficacy. This study adds to the empirical research on distributed leadership by advancing the understanding of the relationship that exists between distributive leadership, school culture, and teacher self-efficacy at the middle school level. Further, the findings of this study contribute to the literature on school leadership and its impact on school culture and teacher self-efficacy. If a positive correlation between distributed leadership, school culture, and teacher self-efficacy can be established at the middle school level, further research could be conducted and action could be taken to promote a shift away from thinking that an authoritative, top-down leadership structure is what is required for principals to be successful in the current educational environment.

Literature Review
In many schools, the authoritarian model for leadership is used to govern learning (Nystrand, 2009). In an authoritarian model, there are specific boundaries that dictate job duties, the role of leadership, and how various stakeholders communicate with each other (Nystrand, 2009).

Research has shown that this top-down style of leadership is not conducive to the needs of 21st-century middle schools, especially regarding how this style pertains to the role of the principal as a school leader (OECD, 2009). Increased accountability measures have placed pressure on middle school principals, resulting in leadership structures that are in direct conflict with best practice.

Although an authoritative, top-down structure may seem like the path of least resistance to principals, the impact of such a structure may create an environment where school leaders become overwhelmed by all-consuming tasks and are distracted from their professional responsibilities (Beisser, Peters, & Thacker, 2014).

Chance, Cummins, and Wood (1996) assert that the school principal has an influence
on the establishment of the school-work culture. It is the responsibility of the principal to develop an understanding of the characteristics that define the culture of their school. “A positive and progressive school culture propagates morale, staff performance and student enrichment” (McKinney, Labat, & Labat, 2015, p. 155). Fullan (2014) suggests that principals should assume the role of mediators by creating motivating conditions that encourage teachers to learn and optimize their practice.

The desire to establish what Chance, Cummins, and Wood (1996) described as an effective school-work culture implies and necessitates a system for continuous improvement on the part of the school and its members. “Epstein et al. (2011) conclude with the results of their study the suggestion that shared school endeavors, evaluation of student outcome data and shared collaborative leadership in a school will promote an academic and social equity for improved school culture” (McKinney et al., 2015, p. 154).

Although a model of shared leadership is consistent with the establishment of a positive school culture, the implementation of this model requires a significant initial investment of time and resources.

Unfortunately, society is changing much more quickly than many educators would prefer, and outside political pressures drive school leaders to focus on short-term goals, often tied exclusively to data from standardized assessments, rather than investing in establishing a positive school culture.

There is evidence to suggest that middle school teachers feel less efficacious than elementary or high school teachers (Eccles, Wigfield, Midgley, Reuman, Iver, & Feldlaufer, 1993; Midgley, Anderman, & Hicks, 1995). Albert Bandura (1998) defined perceived self-efficacy “as people’s beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives.”

“Self-efficacy beliefs determine how people feel, think, motivate themselves and behave” (Bandura, 1998). Schwerdtfeger, Konermann, and Schonhofen’s 2008 study involving German teachers found teacher self-efficacy to have a positive influence on teachers’ attitudes and behavior toward their students as well as observable classroom practices. “Moreover, greater self-efficacy has been found to positively affect teachers’ psychological health with respect to job satisfaction and burnout, as well as better physical health as evidenced by physiological indicators of stress” (Wang, Hall, & Rahimi, 2015, p. 122). Bandura (2000) asserts that people are partly the products of their environments.

By transforming the culture of schools, building principals have the power to create an environment in which teachers are empowered to transform their circumstances and be producers of environments that they believe can positively influence students.

Robinson (2008) argues that distributive leadership allows for greater expertise to be made available to those who possess the relevant expertise for carrying out the wide range of educational tasks now demanded of schools.

The adoption of a distributive approach to leadership “is not only more suited to building higher order competencies and capacities among teachers and students alike, but it also enhances work-life balance by ensuring the burdens of leadership do not rest on one set of shoulders” (Hargreaves, Halasz,
General Motors CEO, Mary Barra, states that “if you let people own policies themselves—especially at the first level of supervision—it helps develop them” (Fessler, 2018). As CEO of General Motors, Barra replaced the company’s 10-page dress code to two words: “dress appropriately.” Barra’s policy decision was driven by her thought that if her managers could not handle a simple policy such as “dress appropriately,” what other decisions might they struggle with? Barra states that people will live down to overly prescriptive policies and procedures (Fessler, 2018).

Through the implementation of a distributive leadership framework, a principal can share responsibilities with qualified staff while promoting a building-wide culture of trust that empowers teachers. Spillane and Sherer (2004) argue that a distributed perspective on leadership means more than acknowledging that multiple individuals lead. “A distributive perspective presses us to consider the enactment of leadership tasks as potentially stretched over the practice of two or more leaders, followers, and their situation” (Spillane and Sherer, 2004, p. 6).

The concept of “stretching” leadership over different individuals in the organization is what moves the distributed leadership framework beyond the model of the single charismatic leader who transforms an organization (Angelle, 2010).

“With distributed leadership, decisions about who leads and who follows are dictated by the task or problem situation, not necessarily by where one sits in the hierarchy” (Copland, 2003, p. 378). This leadership framework is a challenge for leaders who have experience only in primarily top-down structures.

Distributed leadership will challenge school leaders to relinquish some of their control over the empowerment of others. Bennett, Wise, and Woods (2003) found that conceptions of distributed leadership involve recognizing expertise, rather than formal position, as the basis of leadership authority in groups.

**Theoretical Foundations for Research**

There are many theoretical perspectives regarding distributed leadership, school culture, and teacher self-efficacy. The theoretical framework for this study was grounded in the theories of distributed leadership developed by Spillane (2006) and Elmore (2000); the theory of self-efficacy developed by Bandura (1997); and the theory of school culture developed by Bolman and Deal (2013). These frameworks were chosen for this study based on their prominence in their respective subject areas.

**Participants**

Five middle schools within Middlesex and Mercer Counties in New Jersey were identified for the study. At the time of this study, each of these suburban middle schools had a diverse student population exceeding 1,000 students.

The participating schools each possessed features that are commonly found in middle schools, such as common planning time, flexible scheduling, team autonomy, and an overall structure that encourages collaboration and growth among teachers (Valentine, Clark, Hackmann, & Petzko, 2002).

The participants in this study were teachers of students in Grades 6–8 from each of these five schools. The participants completed 68 questions concerning distributed leadership within their school, school culture, and their self-efficacy. The study collected quantitative data utilizing the following three instruments, the Distributed Leadership Inventory (DLI), the School Culture Survey (SCS), and the Teacher...
Self-Efficacy Scale (TSES).

**Research Questions**

**Question 1.**
What is the relationship between distributive leadership and the self-efficacy of teachers in suburban public middle schools in central New Jersey, as measured by the Distributed Leadership Inventory (DLI) and Teacher Self-Efficacy Scale (TSES)?

**Question 2.**
What is the relationship between distributed leadership and school culture in suburban public middle schools in central New Jersey, as measured by the Distributed Leadership Inventory (DLI) and School Culture Survey (SCS)?

**Question 3.**
What is the relationship between school culture and the self-efficacy of teachers in suburban public middle schools in central New Jersey, as measured by the School Culture Survey (SCS) and Teacher Self-Efficacy Scale (TSES)?

**Method**

The purpose of this correlational research study is to replicate Davis’ (2014) study, which aimed to establish whether and to what extent there exists a relationship between distributed leadership, school culture, and teacher self-efficacy. Davis’ study focused on elementary school teachers in southern Arizona. The focus of this study will be on teachers in public middle schools in Central New Jersey.

The study also sought to clarify the field’s understanding of important phenomena through the identification of relationships between identified variables. A quantitative research design was best suited to answer the research questions as prior research has been primarily qualitative in nature—based around interviews and observations regarding distributed leadership activities (Leithwood et al., 2007; Smylie et al., 2007; Spillane, 2006). This study is a non-experimental, relational study with a correlational design and a cross-sectional time dimension.

**Instrumentation**

Primary data were collected through an online survey using SurveyMonkey. The survey included three already existing, validated data collection instruments.

The three surveys measured the variables of distributed leadership, school culture, and teacher self-efficacy. All three surveys included Likert-scale items ranging from 1 = strongly agree to 5 = strongly disagree. Each of the three surveys was structured using an identical Likert scale. The survey consisted of 68 questions (the DLI has 23 questions, the SCS has 35 questions, and the TSES has 10 questions).

Additionally, questions were posed to respondents to obtain demographic descriptors including school, grade, role within the school, years of teaching, and gender.

The validated surveys include questions that focus on the factors of school culture, teacher self-efficacy, and distributed leadership. The Distributed Leadership Inventory (DLI) was used to measure teacher perceptions of distributed leadership; the School Culture Survey (SCS) was used to measure the variable of school culture; and the Teacher Self-Efficacy Scale (TSES) was used to measure the variable of teacher self-efficacy. Approval was granted to utilize each of these survey instruments.

**Data Analysis**

Research Question 1 focused on the relationship between distributed leadership and the self-efficacy of teachers. To determine an
individual score for each of the dimensions of distributed leadership, the scaled scores on each teacher survey were calculated for the three dimensions by adding up the points from the questions that corresponded with each dimension and calculating a mean for each dimension. To determine overall self-efficacy, the responses to each question were added together and then a mean was calculated. Standard deviations were also calculated. The correlational coefficient was calculated using the correlational coefficient with distributed leadership as the x value and self-efficacy as the y value.

Research Question 2 focused on the relationship between distributed leadership and school culture. To determine an individual score for each of the dimensions of distributed leadership, the scaled scores on each teacher survey were calculated for the three dimensions by adding up the points from the questions that corresponded with each dimension and calculating a mean for each dimension. To determine an individual score for each of the factors of school culture, the scaled scores on each teacher survey were calculated for the six factors by adding up the points from the questions that correspond with each dimension and calculating a mean for each dimension. The correlational coefficient was calculated using the correlational coefficient with distributed leadership as the x value and school culture as the y value.

Research Question 3 focused on the relationship between school culture and the self-efficacy of teachers. To determine an individual score for each of the factors of school culture, the scaled scores on each teacher survey were calculated for the six factors by adding up the points from the questions that correspond with each dimension and calculating a mean for each dimension. To determine the overall self-efficacy, the responses to each question were added together and a mean was calculated. Standard deviations were also calculated. The correlational coefficient was calculated using the correlational coefficient with school culture as the x value and self-efficacy as the y value.

A Bivariate Pearson’s Correlation Coefficient analysis was conducted on the obtained data regarding distributed leadership, school culture, and teacher self-efficacy. The individual respondents to the study were the unit of analysis. Both descriptive and inferential statistical data analyses were performed to identify relationships and correlations between variables and to answer the research questions. To determine if a particular subgroup was causing an inflated correlation coefficient, additional correlational analyses were conducted on subgroups with a response rate greater than 30.

Results of the Study
Research Question 1 focused on the relationship between distributive leadership and the self-efficacy of middle school teachers. The results of the correlational analysis indicate that there was a significant statistical relationship between the two variables. The correlation between the DLI and TSES was $.405 (r=.405, N=162, p=.000). This represents a moderate/low, positive degree of correlation and was statistically significant at the .01 level of significance.

Additional analysis was conducted using Pearson correlation between the various dimensions of the DLI and the TSES to determine if a particular dimension of distributed leadership had a stronger relationship with teacher self-efficacy. The correlation between the support dimension of DLI and the TSES was .373 (r=.373, N=162, p=.000). This represents a low positive correlation and was statistically significant at
the .01 level of significance. The correlation between the supervision dimension of DLI and the TSES was .200 (r=.200, N=162, p=.011). This represents little if any degree of correlation and was statistically significant at the .05 level of significance. The correlation between the coherent leadership dimension of DLI and the TSES was .384 (r=.384, N=162, p=.000). This represents a low positive correlation and was statistically significant at the .01 level of significance. Although the supervision dimension had the lowest degree of correlation among the dimensions, each of the individual dimensions had a lower correlation to the TSES when compared with the correlation between the DLI and the TSES.

Further analysis was conducted using Pearson’s correlation to determine the relationship between distributed leadership and teacher self-efficacy within the following subgroups: female, male, more than 20 years teaching experience, and special education/support teacher. The correlation between the DLI and the TSES for the female subgroup was .472 (r=.472, N=124, p=.000). This represents a moderate/low-moderate positive correlation and was statistically significant at the .01 level of significance. The analysis of the male subgroup for the relationship between the DLI and the TSES showed no statistically significant results.

The correlation between the DLI and the TSES for the more than 20 years teaching subgroup was .389 (r=.389, N=43, p=.010). This represents a low positive correlation and was statistically significant at the .01 level of significance. The correlation between the DLI and the TSES for the special education/support teacher subgroup was .407 (r=.407, N=32, p=.021). This represents a low-moderate positive correlation and was statistically significant at the .05 level of significance.

Research Question 2 focused on the relationship between distributive leadership and school culture in suburban middle schools. The results of the correlational analysis indicate that there was a statistically significant relationship between the two variables. The correlation between the DLI and SCS was .769 (r=.769, N=162, p=.000). This represents a high positive correlation and was statistically significant at the .01 level of significance.

Additional analysis was conducted using Pearson’s correlation between the various dimensions of the DLI and the SCS to determine if a particular dimension of distributed leadership had a stronger relationship with school culture. The correlation between the support dimension of DLI and the SCS was .746 (r=.746, N=162, p=.000). This represents a high positive correlation and was statistically significant at the .01 level of significance. The correlation between the supervision dimension of DLI and the SCS was .489 (r=.489, N=162, p=.000). This represents a moderate positive correlation and was statistically significant at the .01 level of significance. The correlation between the coherent leadership dimension of DLI and the SCS was .667 (r=.667, N=162, p=.000). This represents a high-moderate positive correlation and was statistically significant at the .01 level of significance. Although the supervision dimension had the lowest degree of correlation amongst the dimensions, each of the individual dimensions had a lower correlation to the SCS when compared to the correlation between the DLI and the SCS.

Further analysis was conducted using Pearson’s correlation to determine the relationship between distributed leadership and school culture within the following subgroups: female, male, more than 20 years teaching experience, and special education/support
teacher. The correlation between the DLI and the SCS for the female subgroup was .771 (r=.771, N=124, p=.000). This represents a high positive correlation and was statistically significant at the .01 level of significance.

The correlation between the DLI and the SCS for the male subgroup was .781 (r=.781, N=38, p=.000). This represents a high positive correlation and was statistically significant at the .01 level of significance.

The correlation between the DLI and the SCS for the more than 20 years teaching subgroup was .715 (r=.715, N=43, p=.000). This represents a high positive correlation and was statistically significant at the .01 level of significance. The correlation between the DLI and the SCS for the special education/support teacher subgroup was .732 (r=.732, N=32, p=.000). This represents a high positive correlation and was statistically significant at the .01 level of significance.

Research Question 3 focused on the relationship between school culture and the self-efficacy of middle school teachers. The results of the correlational analysis indicate that there was a statistically significant relationship between the two variables. The correlation between the SCS and the TSES was .434 (r=.434, N=162, p=.000). This represents a low-moderate positive correlation and was statistically significant at the .01 level of significance.

Further analysis was conducted using Pearson’s correlation to determine the relationship between school culture and teacher self-efficacy within the following subgroups: female, male, more than 20 years teaching experience, and special education/support teacher. The correlation between the SCS and the TSES for the female subgroup was .483 (r=.483, N=124, p=.000). This represents a moderate positive correlation and was statistically significant at the .01 level of significance. The results of the analysis of the male subgroup for the relationship between the SCS and the TSES were not statistically significant.

The correlation between the SCS and the TSES for the more than 20 years teaching subgroup was .433 (r=.433, N=43, p=.004). This represents a low-moderate positive correlation and was statistically significant at the .01 level of significance. The correlation between the SCS and the TSES for the special education/support teacher subgroup was .548 (r=.548, N=32, p=.001). This represents a moderate positive correlation and was statistically significant at the .01 level of significance.

Summary of Analysis
The results of the investigation indicate that there is a statistically significant relationship between distributed leadership and teacher self-efficacy with a moderate/low positive correlation. There is also a statistically significant relationship between distributed leadership and school culture with a high positive correlation.

Finally, it was determined that there is a statistically significant relationship between school culture and teacher self-efficacy with a moderate/low positive correlation. The tables indicated below delineate that outcome more specifically.

Table 1 focuses on the relationship between distributive leadership and the self-efficacy of middle school teachers. The results of the correlational analysis indicate that there was a significant statistical relationship between the two variables. As displayed on
Table 1, the correlation between the DLI and TSES was .405 (r = .405, N=162, p = .000). This represents a moderate/low and positive degree of correlation and was statistically significant at the .01 level of significance.

Table 1

Pearson’s Correlation Between DLI and TSES

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<tr>
<td>DLI</td>
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<tr>
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<td>Sig. (2-tailed)</td>
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** Correlation is significant at the .01 level (2-tailed).

In terms of the relationship between distributive leadership and school culture in suburban middle schools. The results of the correlational analysis indicate that there was a significant statistical relationship between the two variables. As displayed on Table 2, the correlation between the DLI and SCS was .769 (r = .769, N=162, p = .000). This represents a high and positive degree of correlation and was statistically significant at the .01 level of significance.

Table 2

Pearson’s Correlation Between DLI and SCS

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<td>DLI</td>
<td>Pearson Correlation</td>
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<td>Sig. (2-tailed)</td>
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<td>SCS</td>
<td>Pearson Correlation</td>
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** Correlation is significant at the .01 level (2-tailed).
In terms of the relationship between school culture and the self-efficacy of middle school teachers the results of the correlational analysis indicate that there was a significant statistical relationship between the two variables. As displayed on Table 3, the correlation between the SCS and TSES was .434 (r = .434, N=162, p = .000). This represents a moderate/low and positive degree of correlation and was statistically significant at the .01 level of significance.

Table 3

Pearson’s Correlation Between SCS and TSES

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<th></th>
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<th>TSES</th>
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<tbody>
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<td>SCS</td>
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<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
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<td></td>
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<tr>
<td>TSES</td>
<td>Pearson Correlation .434**</td>
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<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
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** Correlation is significant at the .01 level (2-tailed).

Several additional results emerged from the study. First, the correlation between distributed leadership and school culture was much stronger than any of the other relationships (which were moderate/low). Second, when examining the specific dimensions of distributed leadership, each dimension had a statistically significant relationship to both school culture and teacher self-efficacy, but the supervision dimension had a relationship to school culture and teacher self-efficacy that was of a lesser strength than the other dimensions.

Finally, of the correlational analyses of the subgroups that were statistically significant, each of the subgroups performed within +/- .1 on the size or correlation ordinal scale, with the exception of the special education/support teacher subgroup for question 3—this subgroup had a correlation coefficient .114 greater than the total population resulting in a moderate, positive relationship between school culture and teacher self-efficacy. The minimal differences in correlation across the sample (n=162) and subgroup samples for each research question confirms that no subgroup led to an inflated correlation coefficient.

Conclusions, Recommendations, and Implications for Leadership Development

School leaders today face unprecedented challenges due to rising expectations, limited funding, and the task of preparing students for a world that is changing rapidly due to technological innovation and globalization (OECD, 2009). Principals are expected to be more than good managers, they are increasingly being viewed as the key to large scale reforms and educational outcomes (OECD, 2009). A
school leader is more likely to experience success if they focus their role on promoting interactions between stakeholders that are consistent with best practice rather than focusing on their sole actions as a leader (Spillane, 2006).

The structure of a large middle school, with characteristics such as interdisciplinary teaming, common planning time, departmental specialization, extra-curricular activities, and flexible scheduling requires a principal to intentionally construct a framework where people, materials, and organizational structures work in concert for a common cause (Spillane, 2006).

A principal failing to construct such a framework and relying instead on a traditional top-down, authoritative structure has the potential to create an environment in which the school leader becomes overwhelmed by all-consuming tasks and distracted from their professional responsibilities (Beisser, Peters, and Thacker, 2014).

This research suggests that principals who are enabling in their bureaucratic approaches increase the probability of creating a climate and culture more conducive to transformational behavior. It is important that principals do not become prisoners to administrative demands and policies.

Through the implementation of a distributive leadership framework, a principal can share responsibilities with qualified staff while promoting a building-wide culture of trust that empowers teachers. Expanding decision making authority to teachers provides opportunities to improve school climate, teacher efficacy, and student achievement (Roney, Coleman, and Schlichting, 2007; Wahlstrom and Louis, 2008).

There is a relationship between school leadership, teachers’ views of the functioning of an organization, and their sense of self-efficacy. Research has shown that a distributive perspective plays a key role in influencing school climate, teacher capacities, and motivation (Feng, Hao, Iles, and Brown, 2017; Coladarci, 1992).

Principals need to develop strategies that facilitate the behaviors this study suggests. First, they need to arrange their time in more value-added domains related to staff support and instructional delivery. This requires a mindset of relationship building as opposed to relationship management. This research, although limited to middle schools, strongly suggests the utility of such an approach.

Author Biographies

Anthony DeMarco is a school principal in the Flemington-Raritan Regional School District and received his EdD from Seton Hall University. Email: tdemarco075@gmail.com

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References


District-wide leadership and systemic coherence are critical to school and student success. There is well-documented support for the importance of school leadership in improving outcomes for all learners but there is a need in the field for resources that build accelerated district-wide leadership focused on those same student outcomes. The complexity of the district office, coupled with an expansive range of functions, roles, and stakeholders, dictates an approach to leadership that ensures a strategic and collaborative focus on outcomes.

Developing the Organizational Culture of Central Office is an outstanding resource that includes a systems-based theory of action with concrete tools and resources. The text provides many entry points for multiple audiences.

The authors are clear on the importance of the superintendent’s leadership to intentionally, proactively, and publicly build a central office team to prioritize their work while understanding how each department is integral to the overall success of the entire district. The authors make this premise the central theme of the book, “Understanding the totality of the system allows central office leaders to leverage their collective resources effectively towards school and district improvement.”

Part one of the book is structured to help readers understand the importance of a collective efficacy that drives multifaceted interfaces of the district office. The second part breaks down and describes the key functions of each department, which rely on an articulated core set of functions while the organizational culture is represented by the totality of the departments serving as a collective unit.

Theory of Action
The authors selected three intertwined themes: collaboration, connectivity, and coherence. They define the organizational culture through the collective behaviors of everyone in central office. Visible norms, values, and actions drive the culture for every school building and show the wider community a focused plan of action. Embedded within the book is an understanding that change and transformation are required for school communities to improve but not without the intentional actions of a central office team that structures the tasks, routines, and celebrations to build new cultural norms.

Tools and Resources
Beyond a well-crafted description of central office leadership planning, strategies, and norms, the text’s chapters provide readers with a utility via letters, memos, and notes from Superintendents and central office leaders that show how voice is given to key issues in
system-building leadership. The sample memos, notes and letters are practical and provide exemplars and templates for the tone and texture needed when writing to a diverse audience. These examples make complex ideas, which are important to a wide range of stakeholders and often left unsaid, more accessible to readers. The book is also designed for a host of small and large group activities with prepared chapter insights, brief scenarios, and reflective pauses. It also includes key references, suggested readings, and additional research.

Audience
Although the text is a must read for new superintendents and those in leadership development courses, it also has value for promoting conversations among all central office leaders. The book could also serve as an excellent tool for school board members on the importance of a coherent approach to district-wide strategic planning. Collectively, the material is comprehensive in the understanding of organizational culture and central office leadership; however, each chapter in the book can be used individually to promote discussion, conduct self-analysis, and to build key shared understandings.

The week after I read this book, I was able to apply the text in meaningful ways. I used a chapter with a School Board Governance workshop, gave a copy to candidates for the position of Superintendent and Talent Management Director, and added the book to required readings for participants in a Superintendent’s Development Course. The book is well structured to use as a learning tool with multiple audiences for targeted purposes focused on collective school improvement.

Final thoughts
The book provides an elegant and compelling case for putting children at the center of school decisions and how to nest those needs inside the work of every department. Making complex ideas clear and visible is supported and modeled throughout the text, therefore, providing a resource every leader needs.

Reviewer Biography
Brenda Myers is a knowledgeable and passionate educator with over 20 years of experience as a school superintendent. She focuses her applied research on the development of learning theory and instructional design. She is currently an executive leadership consultant and works as an adjunct instructor for Manhattanville College and St. John Fischer. Follow her on twitter @bmyersbrenda

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Mission and Scope, Copyright, Privacy, Ethics, Upcoming Themes, Author Guidelines, Submissions, Publication Rates & Publication Timeline

The AASA Journal of Scholarship and Practice is a refereed, blind-reviewed, quarterly journal with a focus on research and evidence-based practice that advance the profession of education administration.

Mission and Scope

The mission of the Journal is to provide peer-reviewed, user-friendly, and methodologically sound research that practicing school and district administrations can use to take action and that higher education faculty can use to prepare future school and district administrators. The Journal publishes accepted manuscripts in the following categories: (1) Evidence-based Practice, (2) Original Research, (3) Research-informed Commentary, and (4) Book Reviews.

The scope for submissions focuses on the intersection of five factors of school and district administration: (a) administrators, (b) teachers, (c) students, (d) subject matter, and (e) settings. The Journal encourages submissions that focus on the intersection of factors a-e. The Journal discourages submissions that focus only on personal reflections and opinions.

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Below are themes and areas of interest for publication cycles.

1. Governance, Funding, and Control of Public Education
2. Federal Education Policy and the Future of Public Education
3. Federal, State, and Local Governmental Relationships
4. Teacher Quality (e.g. hiring, assessment, evaluation, development, and compensation of teachers)
5. School Administrator Quality (e.g. hiring, preparation, assessment, evaluation, development, and compensation of principals and other school administrators)
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Submissions
Length of manuscripts should be as follows: Research and evidence-based practice articles between 2,800 and 4,800 words; commentaries between 1,600 and 3,800 words; book and media reviews between 400 and 800 words. Articles, commentaries, book and media reviews, citations and references are to follow the Publication Manual of the American Psychological Association, latest edition. Permission to use previously copyrighted materials is the responsibility of the author, not the AASA Journal of Scholarship and Practice.
Cover page checklist:
1. title of the article:
   identify if the submission is original research, evidence-based practice, commentary, or book review
2. contributor name(s)
3. terminal degree
4. academic rank
5. department
6. college or university
7. city, state
8. telephone and fax numbers
9. e-mail address
10. 120-word abstract that conforms to APA style
11. six to eight key words that reflect the essence of the submission
12. 40-word biographical sketch

Please do not submit page numbers in headers or footers. Rather than use footnotes, it is preferred authors embed footnote content in the body of the article. Articles are to be submitted to the editor by e-mail as an electronic attachment in Microsoft Word, Times New Roman, 12 Font. The editors have also determined to follow APA guidelines by adding two spaces after a period.

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The AASA Journal of Scholarship and Practice maintains of record of acceptance rates for each of the quarterly issues published annually. The percentage of acceptance rates since 2010 is as follows:

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Book Review Guidelines
Book review guidelines should adhere to the author guidelines as found above. The format of the book review is to include the following:
- Full title of book
- Author
- Publisher, city, state, year, # of pages, price
- Name and affiliation of reviewer
- Contact information for reviewer: address, city, state, zip code, e-mail address, telephone and fax
- Reviewer biography
- Date of submission
Publication Timeline

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✓ Webinars for EdLeaders

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