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Adaptive Leadership for Complex Decision-making in Extraordinary Times

Ken Mitchell, EdD
Editor
AASA Journal of Scholarship and Practice
Winter 2023-24

We are in a moment of opportunity. The struggle over who controls the future of America’s public schools may come down to a matter of trust.

Ken Mitchell

In a recent conversation, Chinese President Xi Jinping declared that democracy doesn’t work anymore. He argued that democracy requires consensus, which can be time-consuming in a fast-moving world. Xi’s remedy is that only autocracies are equipped to address the extraordinary challenges of modern times.

Every time has its extraordinary challenges, along with those leaders who contend that they alone can find and force a solution through an autocratic approach. Every time, however, also has those who embrace a democratic approach to governance. The tensions between these beliefs are universal and timeless. In current times, we are seeing them play out within our country and across the globe with great intensity.

Similarly, school organizations, not unlike larger governmental systems, are undergirded by implicit theories of leadership on a continuum from autocracy to democracy.

No matter the theory, educators within the system experience and understand how they are being governed. They also react and function in response to how they are being led. Repressive leadership generates resistance and recalcitrance. Collaborative leadership engenders engagement and esprit de corps that can assist in cultivating a climate for creative responses to problems facing the system.

Gifted leadership is a rarity. It is more common that those thrust into positions of authority must develop their leadership skills, which do not come with formal appointment or self-proclamation. It takes work to become a forward-thinking leader. It also takes humility through acceptance that one does not always have the answers.

Leaders who engage their staff thrive. They gain insights through multiple lenses that autocrats fail to access. Diverse insights enhance the leader’s potential to adapt to
challenges to make creative forward-thinking decisions. Democratic leadership relies on the engagement of multiple voices bringing forth debate and multiple ideas. Whereas the autocrat employs command and control, relying on the perspectives of a limited and narrowed group. The former approach is complex and time-consuming, requiring consensus, which increases the likelihood of successful and enduring implementation.

Pinker (2018) cautions that “Problems are soluble, and each particular evil is a problem that can be solved. An optimistic civilization is open and not afraid to innovate and is based on traditions of criticism. Its institutions keep improving, and the most important knowledge that they embody is knowledge of how to detect and eliminate errors” (p. 7).

Autocrats rely on fear-induced compliance and expediency, often advancing solutions easily implemented but substantively flimsy. Again, Pinker (2018) suggests that for such leadership, “…the appeal of regressive ideas is perennial, and the case for reason, science, humanism, and progress always has to be made” (p. 452).

In her book, Emotions, Learning, and the Brain: Exploring the Educational implications of Affective Neuroscience, Dr. Helen Immordino-Yang, an associate professor of education, psychology, and neuroscience at the Brain and Creativity Institute and Rossier School of Education at the University of Southern California, presents evidence around the science behind the cognition-emotion link and why learners benefit when instruction reflects an integration of this essential relationship.

She warns against devaluing “emotion” in learning through tangential SEWL programs. Instead, her research reflects that emotion is essential for learning. Learning begins with it. Emotion serves as a basis for creativity, which influences one’s academic and eventually adult decision-making. Immordino-Yang makes the case that traditional academic subjects, such as math, engineering, or physics, rely on deep understanding that depends on one’s ability to make emotional connections between concepts.

Her research has implications for leaders. How do leaders support the professionals by motivating them through a sense of agency? How can school leaders and teachers use an understanding of the effects of emotion and narrative on cognition? How do we create safe spaces for adults working on the front lines of our schools to solve the extraordinary challenges of our times? Our leaders, if they truly want to innovate, need to be attuned to a science of collaboration and engagement.

Leaders towards the autocratic end of the leadership continuum are possessed by a fear of knowing, exacerbated by aversion to engagement with those who hold opposing viewpoints.

They become trapped in silos of confirmation bias, limiting their ability to make innovative and impactful decisions. Heifetz (2009) warned, ”The improvisational ability to lead adaptively relies on responding to the present situation rather than importing the past into the present and laying it on the current situation like an imperfect template” (p.199). Today’s decision makers face extraordinary challenges. To overcome them, they will need to lead with innovative and collaborative approaches.

The Winter 2024 issue of the AASA Journal of Scholarship & Practice examines a set of complex and common challenges related to equity, technology integration, effects of the pandemic, and the design of future-oriented
instruction. While topics may seem disparate, all intersect around a common theme of leadership’s ability to adapt and innovate through collaboration.


Asserting that the issuance of devices to all students does not address a “digital divide,” the authors call for superintendents to interrogate whether technology used for instruction is a continuance of inequitable instruction or is being used to transform student learning through a culturally responsive model.

They encourage leaders to move beyond a micro-focus on academic gaps to find how well they are incorporating technology to achieve a “compelling instructional vision for equity,” and from there use these new tools to consider students’ lived experiences, cultures, and identities in the instructional design.

In “The Influence of COVID-19 on Campus Leaders’ Curriculum Integration, Perceptions Towards, and Acquired Expertise in Technology,” Martinez, Corrales, and Peters present their research on how effective technology integration comes from teachers sensing a closer presence of school leaders in everyday pedagogical activities.

Their study describes the importance of not only a principal’s acceptance of instructional technology but the leader’s support of related professional development. Again, readers will see how the engagement of leaders with their staff, especially in fostering a learning organization, brings success.

Following the statement that “Public schools and the public-school systems are complex, and a leader cannot apply a single leadership style to all situations while producing positive results,” Flanders-Dick, Hood, Hebert, and Shrub state that “school systems consist of multiple levels, including the classroom, school, district, and state.

The decisions at one level affect other levels and the stakeholders within a system.” In their study, “Multi-Level Educational Leadership Model: Meeting the Needs of the 21st Century Classroom,” these researchers emphasize the importance of leadership in attending to the complexity of a school system’s multi-level structure to avoid the risk of ignoring influence within its complex layers. Without such engagement, incorporating technology into instruction will be hampered: “Teacher efficacy is directly linked to school leadership and culture.”
References


Multi-Level Educational Leadership Model: Meeting the Needs of the 21st Century Classroom

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Abstract

Technology-enhanced teaching and learning (TETL) is the integration of technology into teaching and learning practices to improve the quality of learning outcomes. This is an essential strategy for improving educational quality. School leaders significantly affect the integration of effective TETL in classrooms, and the International Society for Technology in Education (ISTE) provides Standards for Leaders that serve as a framework for innovation in education. This study employed a qualitative, multi-level, multi-case study to investigate highly effective TETL public school districts in a southern state. Results of this study lead to the development of the Team Empowered Leadership Model, a multi-level leadership focused on encompassing the following key elements: vision, curriculum focus, student-centered, foster growth, empower future leaders, and support.

Key Words: technology-enhanced teaching and learning, TETL, multi-level leadership, school leadership model, leadership model, K-12, qualitative, educational leadership
Introduction

Technology-enhanced teaching and learning (TETL) is the integration of technology into teaching and learning practices to improve the quality of learning outcomes (Law et al., 2016). It is an essential strategy for improving educational quality, and school-level leadership directly affects TETL (Ghavifekr & Rosdy, 2015; Law et al., 2016). Despite research validating the benefit of TETL to aid and support student learning, integration of technology differs vastly between classrooms, schools, and districts (Ghavifekr & Rosdy, 2015).

Public schools and the public-school systems are complex, and a leader cannot apply a single leadership style to all situations while producing positive results (Blanchard et al., 1993; Hersey, 1985). School systems consist of multiple levels, including the classroom, school, district, and state. The decisions at one level affect other levels and the stakeholders within a system.

Attention must be paid to the school system's multi-level structure to avoid the risk of ignoring influence within its complex layers (Law et al., 2016; Liu et al., 2016). Due to school complexity, one leadership style cannot be applied to all leadership tasks (Hersey, 1985), including effective technology-enhanced teaching and learning in the classroom.

The problem studied in this investigation was school leadership characteristics that increase teachers’ abilities to integrate technology into their classrooms effectively. This qualitative study investigated highly effective TETL public school districts in a southern state. The district and school leaders were interviewed to explore TETL, leadership, perception, skill, and self-efficacy to uncover characteristics needed to promote and foster TETL.

Literature Review

Technology-enhanced teaching and learning

Technology-enhanced teaching and learning (TETL) is the integration of technology into teaching and learning practices to improve the quality of learning outcomes (Law et al., 2016). Effective TETL is an essential strategy for improving educational quality (Ghavifekr & Rosdy, 2015; Law et al., 2016; Trentin, 2012). TETL is more effective than a traditional classroom because it provides an active learning environment with more engaging and beneficial lessons for both students and teachers.

School leaders significantly affect the integration of effective TETL in the classroom (Chang, 2012). TETL is considerably beneficial for both teachers and students (Ghavifekr & Rosdy, 2015) and has been identified as an essential strategy for improving educational quality (Law et al., 2016).

TETL is significantly influenced by various factors including the educator’s perception (Cope & Ward, 2002), skill, and self-efficacy (Ghavifekr & Rosdy, 2015). Educators’ perception of technology is vital to successful TETL (Law et al., 2016). One of the most substantial barriers preventing effective TETL is the lack of educator’s skills (Ertmer et al., 2012). Ghavifekr and Rosdy’s (2015) study found that teachers are not given enough time to learn and be comfortable using technology in the classroom; this time could be provided by school-level leadership.

Teacher efficacy is directly linked to school leadership and culture (Ghavifekr & Rosdy, 2015). Therefore, school leaders are
crucial in the school system’s multi-level infrastructure to promote and foster TETL (Kincaid & Feldner, 2002; Law et al., 2016).

**International and National Focus on TETL**

Various international and national agendas and standards promote the effective integration of TETL. The 2015 World Education Forum resulted in the adoption of the Incheon Declaration for Education 2030, which set a new vision internationally in education for the next 15 years. Education 2030 aims for inclusive and equitable lifelong learning for all, promotes children’s and adults’ urgent needs to build life skills aligned to our technology-driven world, and promotes lifelong learning and indicative strategies that include TETL (UNESCO, 2015).

The Education for All Act of 2016 in the United States promotes sustainable, quality basic education, which includes digital literacy and strategies built from effective practices and standards to achieve quality universal education (Education for All Act of 2016, 2016). The International Society for Technology in Education (ISTE) provides standards that serve as a framework for innovation in education. ISTE standards include standards for students, educators, leaders, and coaches (ISTE, 2018). The United States Common Core State Standards (CCSS) also include a focus on technology integration (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010). The Next Generation Science Standards (NGSS) include technology integration throughout the standards (NGSS Lead States, 2013).

According to the Technology Integration Matrix (TIM) framework, which was developed by the Florida Center for Instructional Technology (FCIT), there are five interdependent characteristics of meaningful learning environments: active, collaborative, constructive, authentic, and goal directed. Each characteristic has five levels of technology integration: entry, adoption, adaptation, infusion, and transformation. TIM is used to guide the evaluation of technology integration in the classroom that includes the following five characteristics: active, collaborative, constructive, and authentic (FCIT, 2019).

**School-level leadership**

School-level leadership improves teachers’ effective TETL (Chang, 2012), and there is a need for research in this area (Ghavifekr & Rosdy, 2015; Law et al., 2016). Current TETL research predominantly focuses on the classroom level. Valuable insight is lost without focusing on school-level leaders’ role in TETL (Chang, 2012; Law et al., 2016; Liu et al., 2016). School-level leadership must develop and implement a TETL vision and school plan (Chang, 2012; Ghavifekr & Rosdy, 2015; Law et al., 2016). The school plan should align with national, state, and district technology agendas (Raman et al., 2014).

The two greatest hindrances of TETL integration in the classroom found in Ghavifekr and Rosdy’s (2015) research were top management and lack of time to learn. School leaders are crucial in the school system’s multi-level infrastructure to promote and foster TETL (Kincaid & Feldner, 2002; Law et al., 2016). Future research needs to emphasize involvement and technology integration from leadership (Chang, 2012; Fisher & Waller, 2013; Raman et al., 2014).

**Barriers to effective TETL**

TETL provides numerous opportunities for effective teaching, but its effective integration
faces many barriers. Three factors that significantly influence TETL are the educator’s perception (Cope & Ward, 2002), skill, and self-efficacy (Ghavifekr & Rosdy, 2015).

Educator perception of technology is vital to successful TETL (Cope & Ward, 2002; Law et al., 2016). Desired perceptions are educators perceiving TETL as part of student-led teaching and tools that encourage deep learning (Cope & Ward, 2002). Educators have the ability to shape how students perceive technology (Pittman & Gaines, 2015). Leaders’ positive TETL perception have the ability to promote successful teacher integration in the classroom (Machado & Chung, 2015; Webb, 2011). Current research needs to broaden to include this factor (Cope & Ward, 2002; Law et al., 2016).

One of the most substantial barriers preventing effective TETL is the lack of educator’s skills (Ertmer et al., 2012; Ghavifekr & Rosdy, 2015; Raman et al., 2014). Increases in educators’ TETL skills improve teaching methods and promote learning infused with 21st-century skills (Ghavifekr & Rosdy, 2015). Almalki’s (2020) research found a direct correlation between educators’ TETL skills and technology integration, which was statistically significant.

School-level leaders’ TETL skill growth of one unit could increase the teachers’ technology use by .04 (Raman et al., 2014). Leaders who provide mentoring teachers with strong TETL skills promote higher levels of TETL on their campuses (Webb, 2011). Educators with high TETL skills have the self-efficacy needed to integrate the technology into the classroom (Hennessy et al., 2005).

Lack of educators’ TETL self-efficacy is another barrier in its successful integration (El-Daou, 2016; Ghavifekr & Rosdy, 2015; Liu et al., 2016). Limited self-efficacy in TETL restricts its integration in the classroom (Liu et al., 2016).

A strong relationship (r=0.99) between educators’ self-efficacy and TETL was found in El-Daou’s 2016 study. Educators are not given enough time to learn and be comfortable using technology in the classroom; time that can be provided by school-level leadership (Ghavifekr & Rosdy, 2015).

**Methods**

This study used a qualitative, multiple-case design to adequately understand the complex nature of exploring school systems. The case study method facilitated the in-depth investigation of school leaders within their natural settings within a southern state.

**Sample**

Sampling was conducted in four stages to select, first, school districts that would each constitute a study case and, second, schools within the selected districts. First, three clusters of all potential school districts in the state were created based on district student enrollment and were used for embedded cluster sampling within the purposeful sampling to select the districts.

Each potential district was classified as 1) small (n ≤ 3,000), 2) medium (n = 3,001-9,999), or 3) large (n ≥ 10,000) based on student enrollment.

Second, board of directors’ members of the state’s leading educational technology association informed purposeful sampling of one district per cluster by ranking districts based on their knowledge of highly effective TETL. The highest-ranked district in each cluster was selected as a study case.
Finally, each district’s TETL leader, defined as the district-level employee who supervises all educational technology initiatives in the district, engaged in selecting schools in the district for highly effective TETL.

Of the board members, 75% participated in the study. District 1 was selected by 72.7% of the respondents as the large district. District 2 was selected by 100% of the respondents as the medium district, and District 3 was selected by 90% of the respondents as the small district. Each district TETL leader provided three schools within the district recognized for highly effective TETL, and, when possible, the three schools represented the P-12 spectrum (see Table 1).

Each school leader from those schools was invited to participate, and the participant sample consisted of each district’s TETL leader and three school leaders, one from each identified school, for a total of 12 participants.

Table 1
Participants by School District and School Site Grade Levels

<table>
<thead>
<tr>
<th>TETL Leader</th>
<th>School 1</th>
<th>School 2</th>
<th>School 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>District 1 (Large)</td>
<td>n/a</td>
<td>Grades PK-5</td>
<td>Grades 6-8</td>
</tr>
<tr>
<td>District 2 (Medium)</td>
<td>n/a</td>
<td>Grades K-8</td>
<td>Grades 3-5</td>
</tr>
<tr>
<td>District 3 (Small)</td>
<td>n/a</td>
<td>Grades 2-5</td>
<td>Grades 6-8</td>
</tr>
</tbody>
</table>

Data collection
Data were collected through multi-level interviews. The multi-level interview approach was selected due to the complexity of school systems in order to avoid the risk of ignoring influence within its complex layers (Law et al., 2016; Liu et al., 2016). Pseudonyms were used for districts, schools, and participants participating in the study to ensure confidentiality.

A structured interview approach was taken to increase the ability to compare responses between the various school districts (Merriam, 2009). Questions and the questioning sequence were developed, and questions included the six types of questions to help generate quality interview responses suggested by Patton (1990). Those six were: experience/behavior, opinion/value, feeling, knowledge, sensory, and background/demographics.

As suggested by Patton, the sequencing of the questions began with more comfortable, straightforward questions that encourage descriptive responses to elicit greater detail. The questions were “open-ended, neutral, singular, and clear” (Patton, 1990, p. 295). The interview protocol consisted of 14 questions for district TETL leaders and 13 questions directly for school leaders. Each question was aligned with the constructs of TETL, leadership, perception, technology skills, and self-efficacy that drove the research. Interviews were conducted virtually and recorded with the permission of the participants and transcribed.
**Data analysis**

An analysis strategy of the constructs was followed to analyze the study’s data (Yin, 2018). Constructs drove the objectives, design, and research questions of this study and thus have analytic properties. The constructs to analyze for this study were TETL, leadership, perception, skill, and self-efficacy. Each of these was analyzed per case (district). As suggested by Stake (1995), deductive manual coding was used to analyze the interview transcripts of each interview by case.

First, the data were read as an initial review. Next, the data were color-coded for keywords and phrases representing the predefined set of codes. Then, coded data were categorized and grouped to generate themes. After each case analysis was complete, a cross-case comparison was conducted to identify common themes across districts. All data analyses were evaluated for analytical generalizations on which the school leadership model was developed.

**Trustworthiness**

To ensure this study’s trustworthiness, various strategies suggested by Merriam (2009) were employed for validity and reliability to minimize threats. To minimize threats of confirmability, multiple-level (district and school) were collected throughout the multiple-case study. Triangulation of data was achieved through the ability of findings to be confirmed through various sources of data (Merriam, 2009). To reduce threats of credibility, pattern matching was included in the data analysis procedures (Yin, 2018).

To minimize transferability threats, ethical considerations included explaining the purpose of the methods selected, case study protocol, confidentiality, and informed consent (Merriam, 2009). Finally, dependability was emphasized through clear communication with participants about the case study protocol to reduce the undependability of treatment implementation (Muijs, 2010). The same procedures and tools were utilized for both district and school-level interviews.

**Team Empowered Leadership Model**

A multi-level approach to TETL leadership which includes both a district and a school leadership team was created from the findings of this study. The district and school leadership teams need at least one person to create a direct link between the school and the district. This multi-level team approach is included in the Team Empowered Leadership Model (TELM) (see figure 1).
**Team**

The multi-level team approach included the superintendent, district leaders, school leaders, and teachers. The TETL leadership team in each district began with the superintendent. Descriptions of the district superintendents in connection with TETL included promote the importance of technology, forward-thinking, and makes sure [technology] budget is well funded, within reason. The study district leader was identified as key to the success of promoting and fostering TETL in the schools. A common theme about the TETL district leaders was providing support through numerous professional development opportunities and assistance. Highlights of participants’ perceptions of the study’s TETL district leader included second to none and always at the forefront of what’s out there.

Another shared layer of the leadership team is that at least one person directly connected the district and the schools. This position looked different in each district because some districts have multiple direct connections between the district and the schools.

The TELM multi-level focus encompasses the following key elements derived from the study’s findings: vision, curriculum focus, student-centered, foster growth, empower future leaders, and support.
Vision
A shared vision developed by stakeholders and adopted district-wide is needed for effective TETL. Goals aligned with the vision should include using technology to enhance learning, meeting students’ current and future needs, and connecting directly to the curriculum.

Leadership in each district, along with TETL team members, develop the TETL vision. Clear communication and buy-in are evident throughout each district. They speak the same language. In addition to the district vision, each school-level leader has additional TETL vision and goals specific to their school. An example of school-specific goals is the purposeful data collection and guidance by the administration at a district 1 school through Snap Throughs using the Bullseye program. Development and promotion of a TETL vision align with ISTE Standards for Leaders 3.2 Visionary Planner: 3.2a and 3.2b (ISTE, 2018, para. 2).

Curriculum focus
Curriculum content is immersed throughout each element of effective TETL. Vision development should include the curriculum department. The district leadership team should also include someone from the curriculum department. Student-centered teaching strategies are to be modeled using curriculum content along with technology as a tool to enhance learning. Study participants agreed that technology should be used to enhance learning, not just used for technology’s sake. Technology integration is directly connected to the curriculum.

The district TETL leader in all three districts also had direct communication and collaboration with the curriculum department for the district, as well as each of them is in charge of both educational technology and IT. An example of this is district 3 leader who has worked hard to blend curriculum and technology in the district, supporting each other working toward one common goal in the district. A school leader in district 3 stated, “[DL3] is one of the big reasons we’re so successful” promoting and fostering effective TETL. The ISTE Standards for Leaders (2018) which align with the curriculum focus mentioned include 3.2a and 3.2b.

Student-centered
Student-centered teaching strategies focusing on students being active participants in learning versus passive receivers of information are essential to effective TETL. Integration of student-centered strategies can be aided by incorporating a framework such as TIM to help communicate and model the vision of 21st-century learning. Providing the resources needed for effective TETL links directly to the ability to provide the student-centered strategies found throughout the districts.

Technology provides the opportunity to shift instruction from the traditional classroom with teacher-led lessons to student-centered lessons focused on the active learning environment, which integrates the 21st-century skills of collaboration, creativity, critical thinking, and communication (Berlinguer, 2012; Law et al., 2016). This building of life skills requires pedagogical sound teaching and learning methods supported by technology (UNESCO, 2015). Implementations of this study are the need for school leadership to understand TETL methods and strategies. Numerous student-centered strategies were documented by both district and school-level leaders.

Highlights of the student-centered strategies are aligned below with the TIM framework provided by FCIT (2019):

- Active examples from the study of students being actively engaged in using technology include a virtual scavenger hunt,
visiting space, jig sawing information, and providing and receiving feedback.

- Collaborative examples from the study of students using technology to collaborate include collaboration using NearPod, discussion boards, and team virtual activities.
- Authentic examples from the study of students using technology to link to the world beyond the instructional setting include VR, digital citizenship, and STEM.
- Goal Setting examples from the study of students having goal-setting experiences were students using Microsoft Teams or Seesaw to track their own data and set their goals.

The ISTE Standards for Leaders (2018) which align with the student-centered strategies mentioned include 3.1a, 3.1b, 3.1c, 3.1d, and 3.3e.

**Foster growth**
Promoting and modeling growth in TETL is a crucial element of effective TETL leaders. Fostering of TETL growth includes a variety of professional learning opportunities and formats, avenues to share and collaborate with others, networking through social media, and involvement in professional organizations such as ISTE, TCEA, and LACUE. This also includes fostering personal growth of the leaders to stay connected.

Professional development is a focus in all three districts. This focus along with the study sample being effective in TETL aligns with Campbell et al. (2015) findings of the positive impact of professional development supporting TETL. Professional development opportunities in each district and school varied including both face-to-face and virtual. Examples found throughout the study included Twitter Chats, traditional face-to-face with extended duration and support through Microsoft Teams, virtual trainings, and bit size professional development opportunities distributed by newsletters. TETL professional development aligns with ISTE Standards 3.2e, 3.5b, and 3.5a for Leaders 3.2 Visionary Planner and 3.5 Connected Learner (ISTE, 2018, para. 2).

**Empower future leaders**
Leaders empower future leaders by building confidence through recognizing leadership characteristics and encouraging leadership roles such as leading professional development.

Each district empowers teachers to become future leaders. Interviews included current leaders that were in their current position due to the TETL district leader’s intentional encouragement and preparation from the time they were in the classroom. District 1 incorporates a building leadership model in the structure of their TETL team, visionary leader who works to empower others vision, and goals. District 2 leader is a by encouraging presentations, networking, and branding. Promotion and development of future leaders align with ISTE Standards 3.3a and 3.3b for Leaders 3.3 Empowering Leadership (ISTE, 2018, para. 3).

**Support**
Resources including equipment, software, and tools are one support element needed to promote and foster effective TETL. Additional supports include troubleshooting assistance, IT team, and methods and strategies coaching.

This research found an abundance of equipment and tools in all three districts. For instance, the standard equipment in most classrooms in each district includes an interactive front of classroom display, one-to-one student devices, and a variety of software programs. Including an interactive display aligns with Yang et al. (2015) study, finding students regularly engaged through an IWB exhibited significantly better learning.
effectiveness. The IWB group participants also had more positive attitudes towards their learning environment.

In addition to the provided classroom equipment and resources, each district had avenues for borrowing or ordering additional resources. Districts 1 and 2 provide a check-out system for equipment and tools, and district 3 shares equipment and tools between schools. District 1 awards points for professional development training in which teachers can purchase equipment and tools for their classrooms. School leaders in each district also shared the ability to communicate with the district TETL leader additional resource needs within their schools, which were typically able to be met. Providing resources directly connects with ISTE Standards for Leaders 3.1 Equity and Citizenship Advocate 3.1b and 3.4b (ISTE, 2018, para. 1 and 4).

The availability of equipment and tools also aligns with Education 2030 promoting the urgent need for children building life skills aligned to our technology-driven world (UNESCO, 2015). This finding connects also with the Education for All Act of 2016 in the United States by providing the needed resources to promote sustainable, quality basic education, which includes digital literacy (Education for All Act of 2016, 2016).

The additional supports found throughout the districts involved in the study included the IT department, help desk, on-campus troubleshooting assistance as well as methods and strategies coaching.

Implications for Practice
Based on the results of this study, educational leaders should employ a team approach in their district and school leadership that encompasses the following key elements derived from the study’s findings: vision, curriculum focus, student-centered, foster growth, empower future leaders, and support.

While this research identified an effective school leadership model, there may be value in identifying characteristics of ineffective TETL. The Team Empowered Leadership Model developed through this study could be used to discover which elements are missing from an ineffective TETL district.

These insights would provide a list of what not to do in addition to discovering how missing parts of the leadership model affect a district’s integration. Additional future research could include expanding the sample of this current study. The findings are generalizable but need consideration of independent school district structures that may differ from the current study sample.

Conclusion
Technology provides the opportunity to shift educational instruction from teacher-led to student-centered lessons focused on the active learning environment integrating 21st-century skills (Berlinguer, 2012; Law et al., 2016). An essential strategy for improving educational quality is effective TETL (Ghavifekr & Rosdy, 2015; Law et al., 2016; Trentin, 2012). Despite research validating the benefits of TETL to aid and support the student’s learning, integration of technology differs vastly between classrooms, schools, and districts (Ghavifekr & Rosdy, 2015). School-level leadership improves teachers’ effective TETL (Chang, 2012).

Current research reveals a significant need for additional research on school-level leadership in relation to effective TETL (Ghavifekr & Rosdy, 2015; Law et al., 2016). The complexity of a school system drives the need for a multi-level approach in research to avoid the risk
of ignoring influence within its complex layers (Law et al., 2016; Liu et al., 2016).

Educational leaders must understand their role to promote and foster effective TETL in classrooms throughout their district. TELM provides the foundation necessary to employ the needed team approach in district and school leadership which encompasses the following key elements derived from the study’s findings: vision, curriculum focus, student-centered, foster growth, empower future leaders, and support.

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References


Abstract

The purpose of this study was to examine the influence of COVID-19 on campus leaders’ curriculum integration, perceptions towards the usage, and acquired experience in technology. A purposeful sample of 171 Texas K-12 campus administrators completed the Principal’s Computer Technology Survey. Of those, 10 lead campus administrators participated in one-on-one semi-structured interviews. Findings indicated campus leaders’ curriculum integration and perceptions towards technology were significantly influenced by COVID-19. Campus leaders admitted that COVID-19 had an impact on relying more on technology regarding communication, teachers requiring more in terms of emotional, behavioral, and technological support, and the use of technology as a replacement versus creation.

Key Words: curriculum integration of technology, use of technology, acquired expertise in technology, campus administrators, emotional support, behavioral support, technological support
Introduction

During spring 2020, educators, students, and parents around the world felt an extraordinary ripple effect on student learning when schools were closed amid a public health emergency (McCarthy, 2020). The coronavirus (COVID-19) is a disease caused by the virus SARS-CoV-2 discovered in 2019 (Centers for Disease Control and Prevention, 2019). COVID-19 quickly spread around the world and forced educators to replace in-person, classroom learning with a virtual model.

While higher education institutions had been increasing virtual learning opportunities even before the pandemic closed schools, K-12 schools had to quickly adapt to virtual learning (Govindarajan & Srivastava, 2020). Leaders scrambled to provide guidance in what became the new normal for instruction and learning. The role of campus leadership in supporting teachers during this time varied from school to school (Govindarajan & Srivastava, 2020).

The pandemic required an immediate response and further complicated the work of campus leaders (Gigliotti, 2020). There were new concerns related to enrollment, instruction delivery and quality, and the physical, mental, and emotional well-being of the teachers and students. During times like those of the pandemic, campus leaders were required to focus on addressing immediate needs while also making decisions that had long-term impact on their school.

The need for change provided an opportunity to revamp strategies and practices used in the classrooms that have positively affected student learning.

While once reserved for higher education, virtual instruction is becoming more prevalent in K-12 settings (Schroeder, 2019). Virtual education was made more accessible with the invention of the World Wide Web in 1992 (Harasim, 2000). Harasim (2000) predicted technology would alter global civilization as educators and learners adopted and adapted virtual collaborative learning. The researchers stated virtual technology has increased access to education and the number of opportunities for students, such as full-time working parents, who need virtual learning options.

It is important to recognize the role of a campus leader in the different modes of instructional delivery for education and learning; a role that evolved as education changes and student learning transforms over time (Cruz-Gonzalez et al., 2021).

The world-wide pandemic caused a major interruption in students’ learning and educators’ teaching (Burgess & Sievertsen, 2020). As instruction was forced to move virtually, campus leaders were forced to revisit their roles and become virtual leaders.

To provide teachers with the support needed to deliver instruction virtually, there was a need for this study to examine effects of COVID-19 and the impact it has had on how campus leaders have changed in their curriculum integration, perceptions towards the usage, and acquired experience in technology.

Review of the Literature

The United Nations Educational, Scientific and Cultural Organization estimates that the pandemic disrupted over 290 million students’ education worldwide (McCarthy, 2020). With educators being forced to deliver instruction virtually during the mandated timeframe, social distancing protocols were necessary to protect the health of citizens, while district and school leaders scrambled to provide guidance regarding the use of technology. These leaders
relied on their own attitudes and opinions towards technology to make decisions. Current research indicates there are many factors that can influence campus leaders’ attitudes towards acquired experience in technology. These are curriculum integration, perceptions of technology, and acquired expertise in technology.

Research suggests that to have more effective technology integration, teachers should feel a closer presence of school leaders in the teachers’ everyday pedagogical activities (Claro et al., 2017; Thompson, 2021). Principals accept technology and agree that technology is necessary and useful (Jiang et al., 2017; Masibo, 2017; Sterrett & Richardson, 2020; Thannimalai & Raman, 2018; Ugur & Koc, 2019).

When teachers are provided with more professional development related to technology, more technology is integrated into their classroom lessons (Thannimalai & Raman, 2018).

Furthermore, teachers feel more supported when campus leaders build teacher knowledge and exhibit the need to develop technology skills (Alward & Phelps, 2019; Christensen et al., 2018; Edwards, 2020; Sterrett & Richardson, 2020). Successful leaders believe that training and development helped those that they manage because they felt that they are better able to assist others, students, and teachers, during virtual learning. These researchers concluded that the role of campus leaders is to collaborate with teachers and support the growth of their teachers as technology leaders. Vyas (2020) extended the research into district leadership when he found that district leaders also play a role in improving technology integration into the curriculum.

Campus leaders’ perceptions towards technology also greatly influences their ability to provide effective leadership in technology acceptance and integration (Beytekin & Arslan, 2018; Claro et al., 2017; Perkins-Jacobs, 2015). Research suggests that campus leaders need to get more involved in planning and demonstrate their support for the use of technology on their campuses. Beytekin and Arslan (2018) recommend prioritizing teacher development and support in technology integration for those campuses that want to increase technology in the classrooms.

Although most campus leaders agree that they need to stay up to date in technology, many admit that they only use technology for managerial tasks (Aziz et al., 2020). Leaders who create positive beliefs and perceptions among their employees or teachers see more technology usage in the workplace or classrooms (Aziz et al., 2020; Kapucu, 2021; Omar & Ismail, 2020).

Recent studies have depicted that campus leaders with acquired expertise in technology integration and those who use and receive training are more effective in motivating teachers in integrating technology in the classroom and in lessons (Garcia et al., 2019; Gumusoglu & Akay, 2017; Nam, 2019;). Campus leaders and teacher participants agreed that a training program improves a participant’s competence and proficiency in technology. Campus leaders who are capable and confident in handling technology seem to positively affect the school, teachers, and students regarding success (Gerald, 2020; Hosnan, 2019; Taylor, 2019; Yost et al., 2019). Research shows a positive correlation between campus leaders’ usage and the use of technology within the campus (Aziz et al., 2020). A lack of consistent technology leadership could potentially contribute to
inconsistent technology implementation within the campus (Ellis et al., 2021; Gerald, 2020; Sahoo & Panda, 2021). Research suggests that campus leaders’ support and technology usage increases technology integration in their campuses. In a time, such as that of a pandemic like COVID-19, the challenges and barriers needed to be overcome as the delivery of virtual instruction was the only option for many schools and universities (Center for Disease Control and Prevention, 2020).

While responding to the challenges in their schools and the changes in their operations and structures, campus leaders also needed to take care of their teachers’ and students’ well-being (Harris & Jones, 2020).

Social distancing, providing extra space, and avoiding close contact with others, meant campus leaders had extra work and pressure to provide a balance between technology and pedagogy (Hargreaves & Fullan, 2020). There was a new need to transform campuses and the policies to focus on supporting students, parents, and teachers to maintain student learning and achievement.

When the Yale Center for Emotional Intelligence surveyed teachers in 2020, the five most-mentioned feelings among over 5,000 teachers were anxious, worried, fearful, sad, and overwhelmed (Cipriano & Brackett, 2020). The most common word was anxiety.

Teachers explained that they were frustrated and stressed with trying to meet the students’ learning needs and still maintain a work-life balance. According to their research, Yale reported that 85% of teachers reported that the lack of work-life balance was greatly impacting their ability to teach. The research showed that campuses need more social emotional learning training and support, not just for students, but for teachers and staff. The pandemic caused a shift in the role of campus leaders and the needs of their staff.

Theoretical Framework
The relationship between the generative processes of meaning and behavior in relation to a person and their environment can be defined within Bandura’s social cognitive theory (Bandura, 1997).

The social cognitive theory was developed was developed in 1986 by Albert Bandura. This theory establishes the belief that environmental factors impact how people view themselves, most specifically how an educator might view themselves as an engaged learner within their school. This would imply that an environmental factor, such as a pandemic, affects behavior both directly and indirectly.

Furthermore, campus leaders impact teachers in professional development and growth through the quality of their interaction. Campus leaders also influence actions people might choose to pursue, how much effort they put forth, and the outcomes they might expect from their efforts (Claro et al., 2017).

Environmental factors can also influence a person’s ability to cope with difficult situations or environmental demands (Perkins-Jacobs, 2015). Teachers with supportive campus leaders are more likely to view taxing tasks, such as making the change from in-person learning to virtual learning, as something to be mastered, not to be avoided.

Research Purpose and Questions
The purpose of this study was to examine the influence of COVID-19 on campus leaders’ curriculum integration, perceptions towards the usage, and acquired experience in technology. The study addressed the following research questions: (1) Is there a statistically significant mean difference between a campus leader’s pre
and post COVID-19 integration of technology into the curriculum?, (2) Is there a statistically significant mean difference between a campus leader’s pre and post COVID-19 perceptions towards technology?, (3) Is there a statistically significant mean difference between a campus leader’s pre and post COVID-19 acquired expertise using technology?, and (4) What are campus leaders’ perspectives on how COVID-19 has impacted instruction on their campuses?

Method
Participants
Participants for this study consisted of a purposeful sample of 171 K-12 campus administrators working in public school districts across the State of Texas. The campus leaders consisted of 38.0% male and 60.8% female.

The majority of the campus leaders were White/Caucasian (55.0%), with 26.3% Hispanic/Latino and 15.2% African American. The participants were split between the different school levels where they served as administrators with 36.8% working at the elementary level, 26.3% at the high school level, and 19.9% at the middle school/intermediate level. The campus leaders were distributed between the ages of 30 and over 70 years old, with the majority participants (42.7%) between 40 and 49 years. Teaching experience varied with 36.8% having 6-10 years of experience, 26.9% 11-15 years of experience, and 19.9% 3-5 years of experience. Administrative experience also varied with 32.8% reporting 6-10 years of experience, 21.6% with 3-5 years of experience, 16.4% with 11-15 years of experience, and 13.5% with 16-20 years of experience. A purposeful sample of 10 campus leaders participated in one-on-one interviews; 50.0% male, 50.0% female, 50.0% working at the primary/elementary level, 50.0% at the secondary level, and 50.0% working at Title 1 campuses.

Instrumentation
The Principal’s Computer Technology Survey (PCTS) was first created by Hope and Brockmeier in 2002 and later modified by Brockmeier et al. (2005) to present further evidence of validity. The researchers examined the purpose statement, survey directions, and item clarity and decided to change the purpose statement to be more people-centered and rewrote to make the intent of the statements clearer to future respondents.

The survey consists of 40-items across five subscales; (a) curriculum integration, (b) perceptions, (c) acquired expertise, (d) needs assessment, and (e) professional development. Principals’ responses to items within the subscales were measured using a 5-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5). The internal consistency/reliability of the PCTS was measured using Cronbach’s alphas: entire instrument (α = 0.94), curriculum integration (α = 0.94), perceptions (α = 0.94), acquired expertise (α = 0.94), needs assessment (α = 0.94), and professional development (α = 0.94). For the purposes of this study, only the first three subscales (a-c) were utilized.

Data collection procedures
Prior to data collection, the researcher obtained IRB approval. Next, the participating campus leaders were contacted via email with information regarding the purpose of the study, voluntary participation, the timeframe for completing the survey, as well as ethical and confidentiality considerations. The researcher disseminated an email with the Qualtrics link containing the Principal’s Computer Technology Survey (PCTS). Participants were asked to reflect back prior to (pre) COVID-19 and then think about what was happening in terms of technology present day (post) when responding to the survey items. Participants were also solicited to participate in a 30-minute, semi-structured interview, which was
audio-taped and transcribed. Pseudonyms were used to protect the identity of the interviewees.

**Data analysis**

Following the data collection, the data were downloaded from Qualtrics, using Microsoft Excel, into IBM SPSS for further analysis. To answer questions one through three, examining the mean differences between pre- and post-COVID-19 curriculum integration of technology, perceptions towards technology, and acquired expertise in using technology, data were analyzed using a two-tailed paired t-test. Effect size was calculated using Cohen’s and coefficient of determination ($r^2$). To assess for any statistically significant mean differences from pre- to post-survey items, a Wilcoxon signed rank test was conducted. A significance value of .05 was used for this study.

The qualitative analysis process includes validation by using a triangulation of the responses from each of the participants. As a part of member checking, participants were provided a transcript of their interview to ensure the validity of the dialogue gathered. Following the transcription process of the recorded interviews, the qualitative data were analyzed using thematic analysis. The transcripts were coded to identify patterns and themes.

The researcher looked for commonalities in all the responses, looked for commonalities in elementary campus leaders’ responses, and finally looked for commonalities in secondary campus leaders’ responses. Once commonalities emerged, the researcher re-coded the transcripts and reanalyzed the codes to refine the overarching themes. The emergent themes were used to describe how campus leaders feel instruction has changed because of COVID-19. Once themes were established, the researcher began to collect quotes from the interviews that would support the themes.

**Findings**

**Curriculum integration**

The curriculum integration subscale of the PCTS was designed to identify the amount of technology integration into the curriculum that a campus leader supports within their campus.

The results of the paired t-test indicated there was a statistically significant mean difference between pre- and post-COVID-19 curriculum integration of technology, $t(170) = 4.28, p < .001, d = .70$ (large effect size), $r^2 = .25$. The average curriculum integration increased 45.6% from prior (M = 14.9) to post-COVID-19 (M = 21.7) indicating that the integration of technology into the curriculum increased. COVID-19 had a large effect on the integration of technology into the curriculum and 25.0% of the variance in their integration of technology can be attributable to the COVID-19 pandemic.

Additionally, the results of the Wilcoxon signed rank test indicated that statistically significant mean differences ($p < .001$) existed between all nine pre/post items.

The greatest increases in agreement from pre- to post-COVID-19 were in *I allocated a significant amount of time to assist teachers in integrating computer technology into their instruction* (36.3%) and *Facilitating computer technology integration into the teaching and learning process was one of my important instructional tasks* (38.0%). This suggested that campus leaders have increased the amount of time and effort that they have given to teachers in supporting and training their teachers in integrating computer technology into their instruction. The smallest increase in percentages between the pre- and post-COVID-19 responses was for the
statement I encouraged teachers’ use of computer technology to meet learners’ individual needs (8.2%) indicating that campus leaders were already encouraging teachers to integrate technology in their classrooms pre-COVID-19.

**Perceptions of technology**
The perceptions of technology subscale of the PCTS was designed to identify the attitudes a campus leader holds regarding technology. Results of the paired t-test indicated there was a statistically significant mean difference between pre- and post-COVID-19 perceptions of technology, $t(170) = 7.26, p < .001, d = .53$ (large effect size), $r^2 = .43$.

The average perception of technology increased 106.1% from prior ($M = 9.8$) to post-COVID-19 ($M = 20.2$) indicating that the perception of how useful technology was increased. COVID-19 had a large effect on curriculum integration and 43.0% of the variance in their perception of technology can be attributable to the pandemic.

Additionally, the results of the Wilcoxon signed rank test indicated that statistically significant mean differences ($p < .05$) existed between all eight of the pre- to post-COVID-19 items.

The greatest increases in agreement from pre- to post-COVID-19 were in Principals’ professional development to use computer technology was a focus of the district’s efforts to infuse computer technology into schools (24.6%) and My computer technology expertise contributed to me being viewed as a technology leader in the school (21.7%) indicating that campus leaders viewed districts’ efforts as more focused on integrating technology within curriculum and more awareness and emphasis for campus leaders to assume the role as technology leaders on their campus.

**Acquired expertise**
The acquired expertise subscale of the PCTS was designed to identify the acquired expertise campus leaders hold regarding technology. Results of the paired t-test indicated there was no statistically significant mean difference between pre- and post-COVID-19 in terms of acquired expertise in technology, $t(170) = 0.63, p = .528$.

The average acquired expertise reported by the campus leaders was similar prior to and post-COVID-19 indicating COVID-19 did not have an influence on the frequency of technology usage. The acquired expertise, or use of technology, by campus leaders did not change significantly when comparing prior to COVID-19 and present day.

**Campus leaders’ perceptions**
Interview participants were asked questions regarding the impact of COVID-19 on instruction on their campuses. The qualitative inductive coding process identified three major themes across the campus leaders: (a) Communication, (b) Support, and (c) Replacement versus Creation.

**Communication**
All administrators, regardless of whether they were non-Title 1 or Title-1 leaders, elementary and secondary school leaders, felt that technology should be used for communication. All the interviewees talked about how they were already using technology for things like weekly newsletters and building connections through social media.

Just as in a study by Akbaba-Altun in 2001, these campus administrators accept technology and agree that technology is necessary and useful, but then hesitate to use it. There were some differences between the different ways technology was being used at each of the different school levels. While administrators at the junior high and high
school were already using some sort of learning platform or school messenger to communicate school-wide with parents, during the pandemic, the teachers began to rely heavily on technology to communicate classroom needs and information.

Jacob, a junior high assistant principal, explained, “Teachers are seeing the benefits of using [Learning Platform] to effectively communicate with parents. They are able to build rapport virtually.”

Administrators at the elementary level felt like the pandemic brought more of a focus on using technology to communicate school and district information to the parents and communicating from the district to teachers to parents.

Stan, an assistant principal of a K-5 school explained, “I have become primarily the means of communication. Communicating from the district to the staff to the parents.”

Different from the secondary level, administrators at an elementary campus also felt like technology helped but came second to phone calls and paper mailings. This was especially true in those that work at a Title-I campus.

Shauna said the following:
I think that [Learning Platform] is great for certain populations, but it’s not the best option for us in communicating to our parents. We try to be diligent and send them information electronically. Some of our parents check their email, some of them don’t. Nothing beats calling a parent.

Roy agreed:
My campus sends out everything through [school messenger], but when we need something completed or communicated, I have the teachers send home fliers and then follow up with parents that have not responded. Most of the time they tell us that they didn’t see the email or didn’t have time to respond when they read it.

These statements would imply that although administrators agree that technology helps with communication, those in elementary feel that more effort is needed to reach parents.

Support
In terms of the support necessary to meet the needs of the teachers, campus leaders spoke on three types of supports they provided: emotional, behavioral, and technology.

Teachers were having to work harder and come up with ways to engage students virtually and at times their efforts were met with failure. Once students were allowed back on campuses, teachers seemed to struggle with being able to balance their workload with in-person and virtual students and everything that comes from having blended classrooms.

Melissa, a junior high principal, explained: I support my teachers a lot. Sometimes I have to remind them that they need to find balance in their lives. I value them being at their doors, greeting their students more than having them stress over how great their course page looks. Does it have everything the students need to learn and be successful, then who cares if it’s cute?

Craig, the elementary principal, also shared, “I feel like a counselor. I have teachers crying in my office worried that they are doing what’s best for kids.” The role of this principal seems to have shifted towards a supportive role implying teachers need more support during challenging times, such as during the pandemic. This supportive role goes beyond providing teachers with instructional guidance.
The campus administrators stated that both teacher and students were overwhelmed with the changes.

Stan, an elementary assistant principal at a Title 1 campus, spoke of becoming a support for his teachers, but in a different way. He said, “I spend my time helping teachers find resources because they seem stressed about tools. I make sure they are clear with our virtual look-fors, so that we can take that stress off of them.”

Another Title 1 elementary principal, Shauna, described how she was helping students behaviorally below:

Attendance and engagement [are] where I spend most of my time. Lack of engagement when they are on camera or not showing up for virtual class is a really big issue. I spend a lot of time calling and checking on students. I am constantly emailing parents letting them know how their students are doing virtually - many of them seem surprised to hear that their student is struggling.

While teachers provided students and parents guidance with the curriculum and content required, the elementary administrators felt that they were also worried about making sure students were provided with behavior support such as routines and structures while they were at home. Stan and Shauna both spoke of example schedules that they provided to teachers and to parents to follow during virtual learning.

Administrators were split in terms of supporting their teachers with technology. Elementary administrators focused more on implementation of strategies and delivery of curriculum, while secondary administrators were providing more technology support around a learning platform, more to parents and less to teachers. There was no major difference between the school administrators based on campus economic designation.

Craig explained, “Delivery of curriculum. While we were off campus, helping teachers with how to instruct online was my sole role. I was helping them with that learning curve.”

Elementary teachers seemed to struggle with trying to recreate their classrooms while online learning was required. Many of their teaching techniques were no longer safe or possible, so they needed help with finding new tools or ways to engage with their students to teach them foundational skills.

On the other hand, secondary teachers were most used to and able to transition into online learning. Students and parents were struggling to keep up and learn the different platforms.

Prithvi described his experience as a junior high school principal during school shutdowns below:

I tasked my admin team in trying to take student technology problems or issues off of the teachers’ plates. [The assistant principals] were in charge of calling students and zooming with them and making sure they were familiar or able to access [Learning Platform]. They were responsible for showing students how to submit work, how to log into meetings, and how to communicate with their teachers if they had questions.

Although schools were expected to provide students with their technology devices for virtual learning, the administrators interviewed also spoke of providing families technology support. The administrators explained that
although teachers provided their students with passwords and communication, they also felt that families needed more than what the teachers had time to do for each student. As stated in the quote above, campus administrators took on this task to help alleviate some of the stress from teachers.

**Replacement versus creation**

Very much like in terms of technology support, administrators were split in how to use technology during online learning. In elementary schools, administrators felt that their teachers were using technology more for replacement, since in person was not available.

Erica, an elementary assistant principal, explained, “Technology used to be more for reinforcement. Now, it is more for trying to do what we used to do in the classroom, virtually.”

Another elementary assistant principal, Roy, expanded:

My teachers were more concerned with finding tools, like a sketchpad that they could use like a chalkboard. [Technology] was not about creating or doing new things, just for substituting what they could not do in person. They seemed to be grasping for straws in finding ways to mimic what they did during in-person learning.

Campus administrators at the secondary level felt that teachers were using technology for creation and more project-based learning. Both assistant principals from Title 1 campuses and non-Title 1 campuses seemed to agree that technology was getting more students involved in their learning.

Theresa, a junior high assistant principal at a Title 1 campus described what technology looked like in a social studies classroom:

Students are able to cater their experience to their own interests. If they are working with non-fiction or historical fiction, they can do research on their projects. They have more options of things to choose from: their own articles, authors...They take more ownership of their learning and create products.

Elementary and secondary administrators felt there was a big difference in the ways technology was being used. One could venture out and say it is because those at the secondary level, grades 6-12, could work more independently using their devices. In elementary, the teachers were simply trying to recreate the experiences from their classroom in a virtual setting, while the secondary teachers were trying to extend students’ experiences while at home.

**Discussion**

Campus leaders have the opportunity to impact student learning through their influence on teachers (Bush, 2018). Principals and assistant principals are trained in educational strategies and best practices that can maximize this student learning through effective teaching (Meyer & Rowan, 2006).

Campus leaders must be better prepared to be efficient in supporting teachers in their classrooms, both in-person and virtually (Gigliotti, 2020). To provide teachers with the support needed to deliver instruction virtually, there is a need for this study to examine effects of COVID-19 and the influence it has had on how campus leaders have changed in their integration, perception, and expertise in technology.

The first three research questions addressed campus leaders’ curriculum integration, perceptions of technology, and their acquired expertise in technology.
Findings indicated there was a statistically significant mean difference in curriculum integration and perceptions of technology between the pre- and post-COVID-19 responses, but not a statistically significant mean difference in campus leaders’ acquired expertise technology pre- and post-COVID-19. Given that over the years the use of technology in schools has dramatically changed, the items on the PCTS may require some revisions to ensure alignment with current practices.

The interview responses indicated campus leaders find great benefit to technology in its use for communication and meeting the needs of the students on their campus. Although there were differences in the roles and how technology was perceived, campus leaders generally accepted technology and acknowledged its integration as a necessary part of education, especially when delivering instruction virtually.

The study revealed that all campus leaders believed technology to be a great tool to communicate with the parents and community but differed in their opinions as how their teachers should be using it within their classrooms to provide instruction.

The campus leaders agreed that at the beginning of the COVID-19 pandemic, teachers and students were overwhelmed with the change from in-person to virtual instruction. At both the elementary and secondary level, campus leaders felt their roles transformed into those of a support for their teachers as they learned how to balance their workload with in-person and virtual students.

The campus leaders were split in how teachers should use technology as elementary leaders felt that their teachers were using technology more for replacement. Secondary campus leaders felt their teachers should integrate more technology into curriculum as a means for creation, such as project-based projects.

**Implications**

As a result of this study’s examination of the influence COVID-19 had on campus leaders and the integration, perceptions, and use of technology on their campuses, implications for all stakeholders involved with staff professional development emerged. Previous research and the findings of this study implicate that policy makers, principal preparation programs, and district administrators are charged with preparing campus leaders for their roles as instructional technology leaders because of their direct influence on the success of their teachers in technology integration and usage.

**Policy makers**

This study has found that campus leaders play a critical role when trying to increase technology integration and usage within a campus. Policy makers, such as the Texas Education Agency (TEA), may want to consider an in-depth analysis of the specific criteria for hiring campus assistant principals and principals and considerations for required training and coursework to provide guidance to school districts and principal preparation programs.

Texas Education Agency’s current guidance in principal preparation programs includes several focus areas related to curriculum, behavioral, and relational skills that individuals must obtain to be successful as building leaders. In addition to the current coursework required, it would be in the best interest of students and teachers to certify that these future leaders are skilled in ways that technology and technology integration can increase student engagement and success.

Within these recommendations, it is important to highlight the positive correlation between campus leaders’ perceptions or attitudes towards technology and technology
integration within a campus (Dogan, 2018). An increase in campus leaders’ technology usage indicates a more effective use of technology within their campus (Hosnan, 2019). Making sure future campus administrators can support teachers in education specific platforms or applications would seem beneficial.

The key would be to make sure these leaders understand that they do not necessarily need to be experts in educational or instructional technology, but they need to provide the resources that will create an environment where teachers are comfortable learning and expanding their knowledge in ways to integrate technology into their classrooms. This would help administrators be able to support their teachers in new initiatives and ensure that they are feeling successful as they grow as learners and teachers. Perhaps including instructional technology as a larger piece of the principal’s certification test would be a small step in the right direction.

Higher education/principal preparation programs
A significant amount of time and professional development is spent by colleges, universities, and principal preparation programs in training future campus leaders. Coursework and training required for principal certification should be evaluated to ensure campus leaders understand the benefits and importance of integrating technology within the classrooms.

Campus leaders should receive professional development in supporting their teachers during unforeseen changes and acknowledge that the professional growth of teachers and student achievement result from their leadership. Principal certification programs should consider training campus leaders in examining their roles as instructional and digital leaders. Aligning campus leaders with the world’s prominence of using technology in the workplace could expand the possibilities of growth in technology usage and expertise in their teachers’ classrooms (Ellis et al., 2021).

As mentioned under the section, Policy Makers, the intent is not to make all future campus leaders technology experts. Preparation programs should focus on teaching campus leaders how to support their teachers as they learn and explore new initiatives and strategies. This study revealed the need for administrators to support their teachers behaviorally and emotionally.

The shift in leadership skills that focus on staff morale and community building is becoming more prevalent as more and more teachers leave the profession (Ryan et al., 2017). In their study, which directly relates to the need for more support, teachers claimed that stress and lack of support were the main contributors to teacher attrition. Making sure future campus administrators know how to support their teachers should be a priority in principal preparation programs, as maintaining teachers in classrooms continues to be a challenge.

District administrators
District administrators need to understand their role in affecting campuses and campus leaders’ influence on teachers in their buildings. A significant investment in time and training should be invested by district administrators to provide professional development on all levels regarding technology integration.

Research shows that campus administrators are more likely to assist their teachers if they have a general awareness of the technology standards and how to better support their campuses and teachers in digital learning (Ellis et al., 2021). If districts are going to mandate professional development for teachers, they should also provide professional development for their campus leaders in how to
support their teachers. The cost to replace a teacher costs a district anywhere from $9k to $21k depending on the years of experience and training the teacher received while working for the district (Learning Policy Institute, 2021).

Especially during a time, such as the pandemic, when staff is limited and shortages are prevalent in almost all job industries, districts should invest in creating an awareness within their campus administrators. This awareness would include the need to support their teachers and improve their working conditions. District administrators should understand the need to develop their campus leaders by providing them with learning opportunities that support their ability to create efficient and productive work settings that are needed to prevent teacher attrition.

Many campus instructional teachers and paraprofessionals cite lack of support from the district and their principals as the top reason for leaving the profession. They also share that they feel limited in the input in decision-making and time to collaborate with colleagues. Possibly making collaboration between educators and providing paid time for staff to share and work together should be a goal for all districts. The tradeoff of having to pay staff to train and work together would be less than having to retrain campus leaders and staff.

**Recommendations for Future Research**

Despite the limitations of this study, the results yield insights into the effect COVID-19 has had on instruction and technology integration and usage within public school classrooms. One future research opportunity would be to consider a study in terms of student perceptions when comparing in-person and virtual learning. Replicating this study but using students in K-12 schools would provide additional data to further develop the contributions of this work and how COVID-19 impacted instruction.

Although teachers were at the front line of the pandemic and its effects on their classrooms, students can also provide valuable insight as to how their learning changed when instruction was only offered virtually. Adding this component could provide some insight as to how students felt their teachers kept them engaged and learning during the pandemic. In addition, some understanding of how students felt they learned best could provide more strategies to teachers and campus leaders on how to better support students.

A second recommendation for how this study could be used in future studies would be to continue improving principal preparation programs. As programs continue to change and provide training and professional development to campus leaders, a longitudinal study would allow researchers to establish best practices and strategies on how to better support teachers through unexpected changes.

The findings of this study could provide more coaching to campus leaders in behavior or mental health support that principals and assistant principals are having to provide to their teachers. Principal preparation programs need to prepare campus leaders in being more than just instructional leaders. More and more, the role of campus leaders is evolving and becoming more of a support role as teachers are becoming more efficient in engaging learners and building problem solvers, with a lesser focus on curriculum.

A final recommendation would be to explore the perceptions of businesses and community partners and the effectiveness of public schools in preparing students for jobs and careers. Research in this area could include investigating the needs of the community and how schools are preparing students beyond academics. Gaining this insight into the needs of the workplace could guide instruction and curriculum in ways that
teachers can prepare students with skills they can use beyond the classroom. Campus leaders would need to assess the modifications to the curriculum and prioritize the type of learning and experiences their staff are providing to their students based on how to better prepare students for their futures.

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References


Moving Beyond “Digital Divide”: Three Steps for An Anti-racist Approach to Equitable Participation in K12 Schools

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Abstract

While many school districts now issue devices to all students and feel they have addressed the “digital divide,” it is time to move beyond one-to-one access and take an anti-racist approach to technology integration. Superintendents must start asking if instructional technology is being used to replicate inequitable instructional practices or to transform student learning via student-centered, culturally responsive practices. Schools must stop analyzing data that repeatedly shows academic gaps without also finding promising practices that shrink those gaps. Instead of having a global approach to the digital divide and a microfocus for instruction, school divisions must provide a clear and compelling instructional vision for equity and then zoom in to determine if the use of devices are supporting that vision.

Key Words: superintendents, anti-racism, educational technology, digital divide, culturally responsive practices, gap gazing
During the move to remote learning during the COVID-19 pandemic, the issue of the “digital divide” got prominent attention from the national media. As students were asked to log into school from home, it was clear that not all students had the same access to digital tools for learning and that inequities fell along income and racial lines (Halderin et al., 2021).

Schools worked hard to get devices to more students and to increase the availability of high-speed internet for all learners (Reynolds et al., 2022). This work was critical to keep children connected and learning during an unprecedented time. However, with the return to pre-pandemic operations, we need to rethink how schools conceive of solutions to the “digital divide.”

We need a new call to action that goes beyond solely providing devices and instead addresses systemic solutions that can provide students equitable participation in K12 schools.

We cannot operate under the assumption that passing out laptops alone without adequate access to support, resources, and expertise on using the digital tools to support learning, will address systemic inequities in our schools.

Instead, we must take on an anti-racist approach to educational technology in K12 schools.

In this article, we propose specific steps that can serve as a beginning for that work. We believe that schools should: 1) examine existing instruction to ensure students from minoritized groups are receiving high quality instruction using approaches, such as project-based learning; 2) move away from testing data to find stories of promising practices; 3) move beyond device access to include support and resources on how to use the devices.

Below we expand on each of these steps by grounding it in existing research and providing concrete examples.

1. **Start by looking at the kind of instruction happening in classrooms.**

   Are students building a website with videos from the oral histories they’ve collected about the Civil Rights movement? Or are they playing review games that measure superficial knowledge?

   Decades of research has shown that in schools with lower socioeconomic statuses (SES) and classrooms with higher percentages of students of color, technology is used for recall of facts and procedures while in higher SES classrooms, with higher percentages of White students, technology is used for higher-order thinking and application of concepts (Warschauer, 2000; Margolis et al., 2008).

   This persistent problem, that the quality of the experiences students are having with technology is vastly different from classroom to classroom, needs to be addressed through an instructional equity lens. Specifically, it is important that technologies are being used in ways that engage students by putting them in charge of their learning rather than rote memorization (Reich, 2020).

   **Authentic, meaningful work increases achievement and engagement for traditionally marginalized groups**

   Instructional approaches such as project-based learning have been shown to increase student achievement and engagement for students from traditionally marginalized groups such as students from low SES groups and students of color (Halvorsen et al., 2012; Parker et al., 2013).

   Furthermore, increasing the use of project-based learning in classrooms is a
promising practice to engage all students with higher-order thinking experiences (Han et al., 2015; Liu & Hsiao, 2002; Marx et al., 2004). Given that technology is now widely available for student use (Bushweller, 2022), its classroom use could allow teachers to bring project-based learning into their core instruction.

Technology enriches these learning approaches by offering tools for research, documentation, collaboration, and sharing of results. For example, students investigating the problem of plastics in their local watershed can use online databases to learn about how plastics end up in the water.

After using the research to brainstorm solutions, the students can make videos about reducing plastic water bottles. These videos can then be shared on social media (CivicTREK ACPS, n.d.). Using technology for these authentic purposes is what schools should be striving for. Technology to support instruction for equity would have students using their devices for these types of real-world, engaging tasks. However, for this to come to fruition, schools need to provide teachers with professional learning opportunities as well as reduce the pressures associated with testing, which limits teachers' use of project-based learning (Dunbar & Yadav, 2022).

**Use technology for culturally sustaining practices**

Furthermore, to be anti-racist in our work, it is important to use technology in ways that center students' lived experiences, cultures, and identities in the classroom learning environment.

This culturally sustaining approach engages students in problem-solving and would also be doing so recognizing the social and political factors at play in the school and community (Ladson-Billings, 1995; Hammond, 2014). For example, students would be doing more than just making a video recalling the names and “accomplishments" of famous explorers, but evaluating the impact these men had on the lives of indigenous people and creating a video that expresses an opinion and could be used in a celebration of Indigenous People’s Day.

Kimberly Scott’s work with CompuGirls, a program in which girls identify community issues of importance to them and then use digital tools to analyze the issue and present results, is an excellent example of how technology can be positioned for social justice (Scott et al., 2015).

Similarly, the Digital Youth Divas use technology to address local histories of injustice and build sustainable, computational capacity in communities (Erete et al., 2019). By marrying project-based learning, culturally sustaining practices, and technology integration, schools can connect students’ interests, cultures, and communities while challenging inequities and injustices (Mills et al., 2021). Programs like these can be models for schools.

With an investment in professional learning and partnerships with culturally sustaining, project-based learning organizations, schools can develop programs modeled on CompuGirls and Digital Youth Divas that ensure that traditionally marginalized students are using technology for deeper learning not for regurgitation.

**2. Spend less time looking at testing data that show results that repeat past patterns and instead find stories of promising practices.**

In many school divisions, a great deal of time is spent analyzing school-wide and district-wide testing data. In many cases the results of data repeat patterns from prior years
in predictable ways and do not enable new, solution-oriented thinking. These meetings instead could be focused on developing and uncovering instruction and school climates in which all students are finding engagement, belonging, and academic success in schools.

With the advent of online standardized testing and one-to-one devices, students spend a great deal of their school time taking a test on a device (Hart et al., 2015). Similarly, teachers and school leaders also spend a great deal of time analyzing and communicating the results of these tests (Vinovskis, 2019). The ease with which students can take online exams and the magic of spreadsheet pivot tables mean that these test results are ever-present in conversations at the classroom, school, and division level (Shelton & Brooks, 2019).

In many cases, the data tell the story of systemic racism in schools and society, reflecting lower achievement scores for students of color in comparison to their White peers (Bennett et al., 2007). This “gap gazing,” repeated exposure to lower scores of traditionally marginalized students, brings its own set of problems. Mainly, “gap gazing” results in troubling thinking that a solution can be found in narrow, specific approaches such as a new reading or math program and that learning can be represented in the discrete tasks that are measured on these tests (Gutierrez, 2008).

These discussions lead to “pressure for teachers to teach a ‘stripped down’ and narrowed curriculum … that places greater importance on test scores than on real learning” (Margolis et al., 2008, p 125).

“Gap gazing” sustains deficit-based thinking
Furthermore, and perhaps more dangerously, by constantly reviewing data that show the same results for our students of color, we may be reinforcing a deficit-based approach to teaching these students. By focusing on students that are not “measuring up” we may be reinforcing a mindset in teachers that not all students can succeed (Kuchirko & Nayfeld, 2021).

While it is important to have data that demonstrate the ways that schools are not serving traditionally marginalized students, continually meeting and looking at the same data in the same way may be doing its own damage. Research has shown that when students belonging to a particular group - such as women or minorities - are told that their group has traditionally performed poorly on a standardized test, those students perform more poorly on that test than when not told of this gap (Steele, 2010).

By repeated exposure to the current difference in testing results, schools may be creating stereotype threat and sending students incorrect messages about their ability to succeed.

Use technology to identify, capture, and share promising practices
Instead, consider looking for within-group differences and finding stories of success. Drill down past the district- and school-wide data to find students and teachers that are successful (Gutierrez, 2008).

What is it that they are doing that is leading to this success? Can these strategies be scaled up? An anti-racist approach to data-driven instruction will look at data that are complex, ambiguous, and not easily captured by spreadsheets. Technology can be used to collect student artifacts, writing samples, video reflections, and lesson exemplars, not just multiple-choice answers.

EPortfolios that capture this rich variety of student learning, are student-centered, and are student-driven have been shown to increase
student GPAs, graduation rates, and persistence rates (Watson et al., 2016). Bennett and Gitomer (2009) called for an integrated assessment model that uses technology to probe for deeper learning, aligning more closely with what we know about student learning and growth. Advances in technology could be used to do more than create computer-adapted assessments; instead, it could broaden how we assess our students by creating EPortfolios or other integrated assessments for each student.

Consider taking the hours it currently takes to assemble test score data and use that time instead to document examples of student learning. You may still find that your division is falling short in instructional practices for marginalized students, but you will find yourself asking new questions that are more grounded in the types of instruction that you want to see (Tuck, 2009).

3. After considering these, then take a deeper look at access. It is still critical to make sure that all students truly have access to the tools they need to be successful.

Many schools now have 1:1 device programs for students in grades 4-12 (Bushweller, 2022) which is significant. We know that many students will not have access to technology for learning without these 1:1 programs. But the goal of equity does not end there.

School divisions must do an assessment of what happens with the devices after the initial roll-out. For instance, when you walk into any given classroom, what percentage of students have fully operational devices? Who are the students that don’t have working devices?

What barriers may exist for some students to get their devices repaired? An anti-racist approach to 1:1 device programs would include starting with the traditionally marginalized students in your school division and finding out what barriers they are continuing to experience with technology. From there your district may need to plan to hire technicians who speak languages other than English, ensure that there is a student help desk that has hours before or after school, or set up pop-up locations in student neighborhoods.

In Alexandria, Virginia, employees partnered with community centers to have hours at the community center where students could come for assistance with their school computer and personal WiFi devices (personal communication, January 14, 2021). By working with a trusted community partner, students could get support in their preferred language at a location and time that worked for them and their families.

Offering technology that families can’t use isn’t closing the “digital divide”

There has long been attention to the homework gap that exists. Students from lower SES have fewer resources and opportunities to complete homework which then puts them at a further disadvantage in the classroom. Technology has only increased this problem (Anderson & Perrin, 2018).

If homework requires use of the internet, students that don’t have easy access continue to be at a disadvantage. Many school divisions are working hard to address this by offering lists of free WiFi in the town, creating hotspots, advertising low-cost internet programs, or even issuing individual WiFi devices (Howard et al., 2018). This is an initial step.

However, if schools take an anti-racist approach, they need to go past passing out flyers about low-cost internet. Often these low-cost programs have barriers that will make it challenging for many families to overcome (Education Superhighway, n.d.).
For instance, they may require a social security number, which undocumented families do not have. They may also reject any applications in which the family has defaulted on a prior payment. Without investigating these programs, offering them is not actually addressing equity issues in your school division.

**Engage families to identify how technology can help them navigate school**
Parent engagement must be a part of any technology equity plan. Many schools have moved to online student information systems and learning management systems.

A technology for equity assessment would ask which parents are accessing these systems and how often. If there is an inequity found, schools should consider how the school can reach out to families that may need support understanding how the systems work.

Working with community partnerships is a good way to address this challenge. McIntosh and Curry (2020) found that a partnership between a public high school and a church minimized inequities at the school by fostering relationship-building and resource-sharing among the staff, students, and church members.

Schools can learn from this work and reach out to churches, shelters, and community centers, which often have parenting groups. School staff could work with these parenting groups to review how parents can use student information systems and learning management systems to monitor student attendance, assignments, and grades for more successful school experiences.

In addition, schools should create instructions and tutorials in many languages that can be distributed at these meetings in ways that are easily accessed by families.

**Critically examine the technology your system uses for implicit or explicit bias or racism**
Finally, any technology for equity assessment needs to critically examine technology used by schools for implicit or explicit racism. Many schools use Google as their platform for collaboration and communication tools in addition as the default search engine.

Google algorithms can contain racist results. In 2016, when searching the phrase “three Black teenagers” users were presented with mugshots (Benjamin, 2019). Similarly, WeVideo, a video-editing platform that many schools subscribe to, has struggled to keep their crowdsourced stock footage free of racist language and images.

When searching “Mexico,” a middle school teacher came across an image labeled “drunk Mexican” (personal communication, January 21, 2021). While WeVideo has a mechanism for users to report offensive images and labels, a program that schools are paying for should not rely on its users to filter out labels and images like this.

Internet filters have also been found to filter out content about LGBTQ+ issues (Harris, 2019). By blocking content that can be life saving for LGBTQ+ students, schools are discriminating against this vulnerable group of students. Part of the process for procuring technology tools should be an assessment of the extent to which that tool works to be free of bias and to evaluate any potential intended and unintended racism or homophobia.

**Provide a clear and compelling instructional vision for equity and then zoom in to determine if the use of devices are supporting that vision**
In this paper, we have presented specific steps schools can take for an anti-racist approach to technology integration.
The main takeaway that we want to highlight is that being neutral in educational technology is not an option (Selwyn, 2010). How we purchase, implement, and assess technology in schools will always fall somewhere along the anti-racist/racist continuum.

Passing out devices to end the “digital divide” equates to a “color blind” approach to racial inequities in schools. “The singular focus on access creates the sense that if children fail to learn when they ostensibly have all the tools they need for success, it is nobody’s fault but their own” (Ames, 2021, para. 20).

Instead of promising an end to inequities via more devices, to truly address systemic barriers to high quality education, educational technology policies must be firmly anti-racist. To engage in an anti-racist approach to the digital divide, schools must start asking different questions. Instead of asking, “Do all our students have a device?” we must ask “What type of instruction is technology being used for?”

We must stop noting and dissecting performance gaps on standardized tests and instead look for classrooms where all students are achieving and develop strategies to scale up those practices. And we must look past one device per student and look at how students can use those devices to effectively advance their education and stem racism and homophobia.

We’ve been using a global approach to digital divide—give all kids a computer, all classrooms an interactive whiteboard, and provide universal WiFi access.

What we need is a zoomed-in approach, supporting lessons that promote instructional equity, finding classrooms where students are successful, and examining the details of implementation with an anti-racist lens. Instead of having a global approach to the digital divide and a microfocus for instruction, school divisions must provide a clear and compelling instructional vision for equity and then zoom in to determine if the use of devices are supporting that vision.

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2. contributor name(s)
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10. 120-word abstract that conforms to APA style
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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. Also note, APA guidelines are changed so that one space is required after the period at the end of a sentence. Articles are to be submitted to the editor by e-mail as an electronic attachment in Microsoft Word, Times New Roman, 12 Font.

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AASA Resources and Events

➢ AASA Leadership Network, the School Superintendents Association’s professional learning arm, drives educational leaders’ success, innovation and growth, focused on student-centered, equity-focused, forward-reaching education. Passionate and committed to continuous improvement, over 100 Leadership Network faculty connect educational leaders to the leadership development, relationships and partnerships needed to ensure individual growth and collective impact. A snapshot of over 30 academies, cohorts and consortia is represented in the graphic below. To assist in navigating through the pandemic, AASA has produced and archived over 100 webinars since March 2020 on Leading for Equity and What Works at aasa.org/AASA-LeadershipNetwork-webinars.aspx.

➢ Contact Mort Sherman at msherman@aasa.org or Valerie Truesdale at vtruesdale@aasa.org to explore professional learning and engagement.
➢ AASA Learning 2025 Learner-Centered, Equity-Focused, Future-Driven Education Initiative Underway
Comprised of school system leaders and business and non-profit leaders, AASA’s Learning 2025 Commission was chaired by Daniel A. Domenech, executive director of AASA and Bill Daggett, founder of the Successful Practices Network. A network of educational systems now comprises a Learning 2025 National Network of Demonstrations Systems, whose chief objective is to prepare all students safely and equitably for a workplace and society for the future.

For additional information about Learning 2025 Network for Student-Centered, Equity-Focused Education, visit the AASA website www.aasa.org/content.aspx?id=45826 or contact Mort Sherman at msherman@aasa.org, Valerie Truesdale at vtruesdale@aasa.org or Debbie Magee, program director, at dmagee@aasa.org.

➢ Join AASA and discover a number of resources reserved exclusively for members. See Member Benefits at www.aasa.org/welcome/index.aspx. For questions on membership contact Meghan Moran at mmoran@aasa.org.

➢ Welcome materials may be found at www.aasa.org/welcome/resources.aspx

➢ Upcoming Program and Events
www.aasa.org/professional-learning/calendar-of-events

➢ School Administrator
School Administrator’s Updated Editorial Calendar Available
AASA’s monthly magazine has extended its editorial themes through the end of 2024. Also available is guidance for submitting story ideas to the magazine’s editor for consideration. Find both here.

AASA Member Bloglist
The staff of School Administrator magazine maintains a roster of AASA members (mostly superintendents) who manage a blog with periodic postings. Any additions or deletions should be reported to the editor at magazine@aasa.org. Find the bloglist at www.aasa.org/publications/all-publications/member-blogs

➢ Engage With @AASAAdvocacy
Superintendent effectiveness in federal advocacy is only as good as your ability to be succinct in communication of information, intentional in what you’re asking and strategic in how you make available the supporting evidence. Here are several ways you can engage with those at AASA who oversee the association’s legislative advocacy. You can use these steps to dip your toe or fully submerge.

The AASA Advocacy app keeps you informed about the most impactful changes coming from Congress and provides a curated selection of relevant news for school administrators. It
Empowers school leaders to shape educational policy. The app is available in the Apple App Store and on Google Play.

Bookmark the advocacy page. You find that aasa.org/advocacy has it all, from toolkits and talking points to information on upcoming conferences and calls to action.

Read the Leading Edge. This is AASA’s policy blog.

Follow the department on Twitter. Our feed is @AASAdvocacy, and the members of the team are @Noellerson, @SPudelski, @TaraEThomas1 and @K_Sturdevant.

Join the Legislative Corps. Sign up to receive our weekly advocacy update, published every week when Congress is in session. Contact Tara Thomas at tthomas@aasa.org.

Listen to PEP Talk podcasts. On AASA’s recently revamped podcast, you can listen to Public Education Policy Talk.

Attend the policy and advocacy strand at AASA’s National Conference on Education. Join us in San Diego in February for six topical sessions and our federal relations luncheon for the latest developments at the federal level.


➢ AASA Launches ‘Live Well. Lead Well.’ Campaign: Initiative to Focus on Mental, Physical & Emotional Health of School System Leaders
For more information about the Live Well. Lead Well. campaign, visit the AASA website: www.connect.aasa.org/livewellleadwell

➢ School District Spending of American Rescue Plan Funding, an AASA survey of hundreds of district leaders across the U.S. in July (2021) about their plans to utilize American Rescue Plan (ARP) and other federal COVID-19 relief funding to address the pandemic-related student learning recovery. Results: www.aasa.org/uploadedFiles/ARP-Survey-Findings-090121.pdf

➢ Resources on leading through COVID
COVID Guidance, Strategies, and Resources. www.aasacentral.org/covidguidance/

➢ AASA Releases 2022-23 Superintendent Salary Study for members only
www.aasa.org/content.aspx?id=45378

➢ Official Online Industry Suppliers for Educators
aasa.inloop.com/en/buyersguide
➢ **AASA Main and Advocacy App**
Both apps are designed for school superintendents, central office staff, principals, teachers, policymakers, business and community leaders, parents and more. The Advocacy app enables advocates of public education to connect, network, communicate with other members, access, and share important information directly from their devices.

www.aasa.org/app.aspx

➢ **Superintendent's Career Center**

aasa-jobs.careerwebsite.com/

➢ **2020 Decennial Study of the American Superintendent**

www.aasacentral.org/book/the-american-superintendent-2020-decennial-study

The study is for sale and available at www.aasacentral.org/aasa-books

➢ **Resources for Educational Leaders** may be viewed at AASA’s virtual library:

www.aasathoughtleadercentral.org

➢ Learn about AASA’s **Books Program** where new titles and special discounts are available to AASA members. The AASA publications catalog may be downloaded at www.aasacentral.org/aasa-books

➢ **Podcast: Beyond Self Care: Disconnect to Reconnect**


➢ **Webinar Recordings: A to Z: Getting Started with Electric School Bus Purchasing**

https://www.aasa.org/resources/resource/a-to-z-getting-started-with-electric-school-bus-purchasing

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**Upcoming AASA Events**

**STEM Leadership Consortium Meeting, February 14, 2024**

www.aasa.org/professionalearning/event/2024/02/14/defaulcalendar/stem

leadershipconsortium-meeting-nce24

**AASA 2024 National Conference on Education, Feb. 15-17, 2024, San Diego, CA**