



Education Focus Report: **Top District Priorities and** **Shifts in PK-12 Education**

District Leader Considerations for School Year 2022-23



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Introduction

Through the Prism of the Pandemic: Key Impacts and Trends in PK-12 Education

Turbulence. Rollercoaster. Blind corners. Whatever the analogy, the past two years compelled adaptation and learning shifts for PK-12 educators, students, and families.

For many educators, the pandemic forced rethinking existing education models and ideas. Technology now plays a more central role in the educational experience than ever before.¹ The technological transformation of schools in the past two years coincided with a growing push to rethink how schools engage students to elevate their voice and choice in learning.

Additionally, nationwide tapering enrollment trends² and doubled rates of chronic absenteeism compared to just three years ago³ moved educators to ask:

- What can we do to activate students' innate curiosity and desire to learn?
- In what ways can we partner more effectively with families and communities?
- How can technology help us enhance teaching and learning through unified data and tools?

Suddenly, the modern possibilities of personalized learning approaches coupled with learning technology—long hampered by inconsistent device access, tight budgets, and disparate software solutions—were seriously reconsidered. New mindsets and generous federal relief funding for schools inspired change. This was a key silver lining of the pandemic. Flexible instructional approaches and increased digital literacy shifted

personalized learning from possible to plausible in the minds of many educators.

In conversation with school and district leaders for this report, we heard that personalized learning starts with knowing each child, having strong individual relationships, and elevating student choice in learning. Many leaders described technology as a tool to help inform and enable individual learning journeys.



Communities that had challenges using technology during the pandemic—some want to go back to normalcy with desks in rows, teachers teaching in front of the room, and students taking notes. It's very passive learning. Technology is a powerful tool for the future of education, but I'm not sold that everyone wants to use technology to enhance learning after the pandemic. Yet you and I could not discuss scaling personalized learning across the country without districts going one-to-one.

DR. TODD KERUSKIN

Superintendent, Elizabeth Forward School District, PA

“Technology is neither good nor bad. It's really about the user and what they do with it,” insists Marlo Gaddis, Chief Technology Officer of Wake County Public School System in North Carolina.

Tony Campbell, Director of Learning and Media Technologies at Washington County Schools in St. George, Utah, shared, “Using technology magnifies things, for better

or worse. Good practices are so critical to effective use of technology.” In the 2021-22 school year, schools and districts turned their focus to using technology with intention and impact.

The pandemic also triggered immense logistical, staffing, and student wellbeing challenges. For some education leaders, navigating these challenges overwhelmed

their capacity to innovate. Technology became a pain point in some cases due to the abrupt transition to remote learning. Districts made staffing and resource shifts to deliver more equitable access to devices and achieve more complete internet connectivity at school and home while scrambling to achieve software and cybersecurity coherency and adequately support instructional staff.

During this time of rapid change, educators found technology opened new doors to student engagement, strengthened family involvement, and prioritized modern professional learning needs that were long overdue. Educators and school leaders learned quickly what works and what doesn't for their students and families, spurring investments in robust student supports and interoperable digital systems.

In the shift to virtual learning, the urgent and central role of technology highlighted vast inequities in student access to quality broadband and devices.⁴ School and district leaders undertook herculean efforts to channel relief funding toward needs. They achieved more in two years to advance student access to learning technology and close the homework gap than in the last two decades.⁵ Virtual learning expanded use of asynchronous instruction and flipped classroom approaches, while for many reinforcing new appreciation for the instant engagement of in-person learning.

We cannot discuss the impacts of the global COVID-19 pandemic and what the

future holds for PK-12 education without acknowledging the loss and struggle of so many students, families, and educators. The pandemic shone a new light on students' mental, social and emotional needs, the complexities and challenges of teaching, and the constant change management required of school and district leaders.

The pandemic response, combined with existing social and political conditions, led to fast-moving, charged education issues dominating news feeds. These consumed much of district leaders' and school board members' attention. Controversy piled new stressors onto educators and school leaders, overshadowing conversations about meaningful strategies to support student learning and wellbeing.

Over the past year, districts pivoted from emergency response to recovery of unfinished learning. Districts channeled federal relief funds to key interventions like tutoring, staffing, and expanded learning opportunities. In parallel, school leaders were navigating new technological terrain, asking how their systems and data can help advance student learning and achieve key strategic priorities.

This report focuses on those key priorities of schools and districts, elevating educator voices to inform ongoing dialogue about key educational opportunities and challenges ahead. The information that follows promises to help positively shape the educational experience for educators and students in the years to come.

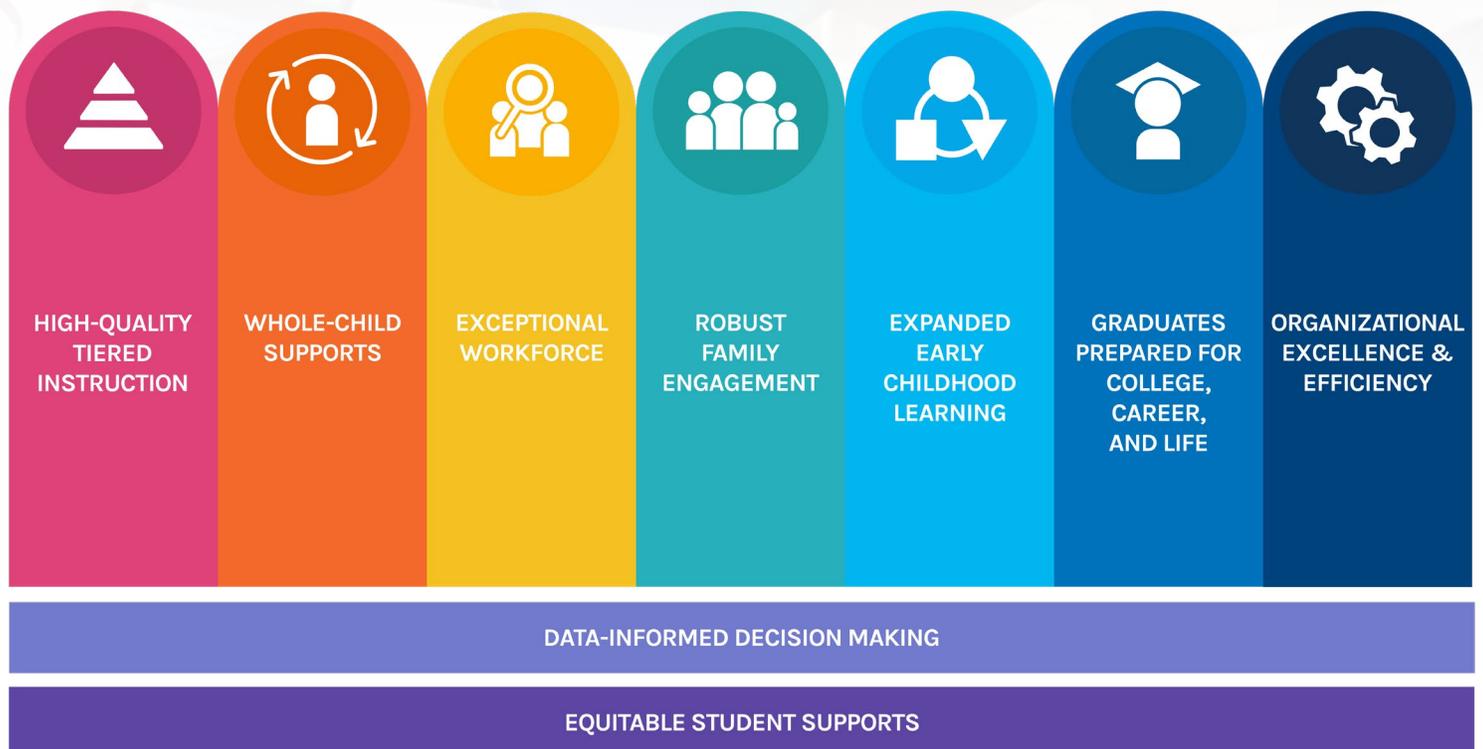
Recentering the Conversation: Top Education Priorities

This report intends to recenter PK-12 conversations starting with what’s most important to school districts—their priorities to better support students.

PowerSchool conducted a national scan of 25 mid-sized to large districts’ strategic plans, identifying seven common strategic priorities and two grounding concepts. We then invited leaders to reflect on these priority areas with an eye to lessons learned, hurdles, and insights about what the future holds.

These common district priorities reflect schooling both before and during the pandemic. In many ways, they are familiar, mirroring everyday dialogue about schools and key areas of work.

FIGURE 1
Seven Common Strategic Priorities and Two Grounding Concepts



In other ways, there are subtle surprises. For example, the emergence of whole-child support as paramount to the academic success of students is a key development. The increasing local push for early childhood education to provide students with more equitable opportunities is also an encouraging trend. Organizational excellence and efficiency—designing data systems, protecting student information, ensuring budget transparency, and achieving a modern technology

infrastructure—shifted from the back of the office to front and center. Indeed, a dynamic era of technological innovation and pandemic funding converged, enabling systems change.

Although personalized learning was not an explicit headline in all strategic plans, we found the concept embedded within instructional goals and whole-child strategies. Personalized learning also



The benefit of a unified approach to technology across the district is that we have an opportunity to look at the whole student learning cycle. When more resources become digital, when we have more access to data and it is interoperable and visible across systems, we get a much better picture of how students are achieving. With the analytics that go behind that, we see how teachers are using digital resources to support students and draw inferences about where the effective application of technology can make a difference.

MICHELLE BOURGEOIS

Chief Technology Officer, St. Vrain Valley School District, CO

arose in conversations with instructional and technology leaders—illuminating modern education frameworks and questions of scaling. As a result, personalized learning as a cross-cutting concept receives focus in this report.

The two grounding concepts—equitable student supports⁶ and data-informed decision making⁷—are also noteworthy. Ten to 20 years ago, these concepts were

on education advocacy banners across the nation to bring needed attention and resources to underserved students. Now, after countless conversations between families, educators, school boards, district leaders, and policymakers, they are largely accepted as foundational to impactful schooling. This speaks to the power of data and the necessity of equitable resource allocation in the work of meeting student needs.





Guiding Questions and Methodology

Gathering Input from Thousands of Educators

We used the strategic priority areas above to structure conversations with educators, chief technology officers, academic leaders, and district superintendents, among others. Using a mixed method combining qualitative and quantitative insights, we engaged scores of education practitioners and leaders in roundtable dialogues, conducted interviews with thought leaders, and gathered thousands of individual perspectives via an online survey.

We are excited to share our learnings and inspire conversations as educators and leaders head into the 2022-23 school year.

Guiding Questions

Five key questions drove this report:

1. **What are the top common priorities among districts, and how is the work going?**
2. **How has COVID-19 prompted education leaders to reconceptualize key priorities and work?**
3. **What does the future of personalized learning look like?**
4. **How is technology helping or hindering students', teachers', and families' educational experiences?**
5. **What should district leaders consider as they prepare for the 2022-23 school year?**

Finally, we asked: How can PowerSchool help?



Methodology

In addition to reviewing district strategic plans and leading education research, we solicited insights from educators via roundtables, a national online survey, and interviews with thought leaders.

Roundtables

Our research team convened five virtual and two in-person roundtables. Conversations included more than 65 educators representing districts across the nation using a common question protocol. Roundtable participant roles included:

- Classroom Teacher
- Chief Academic Officer
- Assistant Superintendent
- Chief Information Officer
- Chief Operating Officer
- Director of Student Services
- Executive Director of Digital Learning
- Instructional Technology Coordinator
- Director of Human Resources

National Survey

To gather perception data on key topics relevant to this report, we conducted a survey that opened May 9 and closed May 25, 2022. The survey limited responses to the U.S., U.S. Territories, and Canada.

Respondents were asked to identify their role, state or territory, years worked in education, and size of school district. To promote survey completion, respondents could opt into a nominal sweepstakes prize by submitting an email address. Ten winners were selected after the survey closed. Personally identifiable information, beyond the optional email address submitted for purposes of the sweepstakes prize selection, was not collected from respondents to promote anonymity and genuine responses.

We solicited perspectives from educators, support staff, school leaders, and an array of district leaders on dozens of questions related to the key priorities that surfaced in district strategic plans. We disseminated the survey via email and social media platforms (LinkedIn, Twitter).

Upon survey closing, we received 3,535 responses, 2,383 of which were complete survey responses—a 67.4% completion rate. We included partial and full responses in the findings of this report (e.g., if the respondent was able to complete one out of three sections, we included responses to the completed section). We were glad to see the depth of experience of survey respondents; 34% of educators were 20+ year veterans, and 19% boasted 16-20 years of experience in schools.

In terms of geographic representation, we received responses from every U.S. state and all but one U.S. Territory, as well as responses from Canadian educators. Respondents were geographically distributed. No more than 8.7% of respondents identified from one state.

Classroom educators were the most represented respondents (34%), followed by school instructional specialists (28%), district data and accountability leaders (9%), and school leaders (8%). The remaining respondents identified with an array of roles.



FIGURE 2: Survey Respondents by Role

Survey Prompt: Select the role that best describes your work.

(N=3,535)

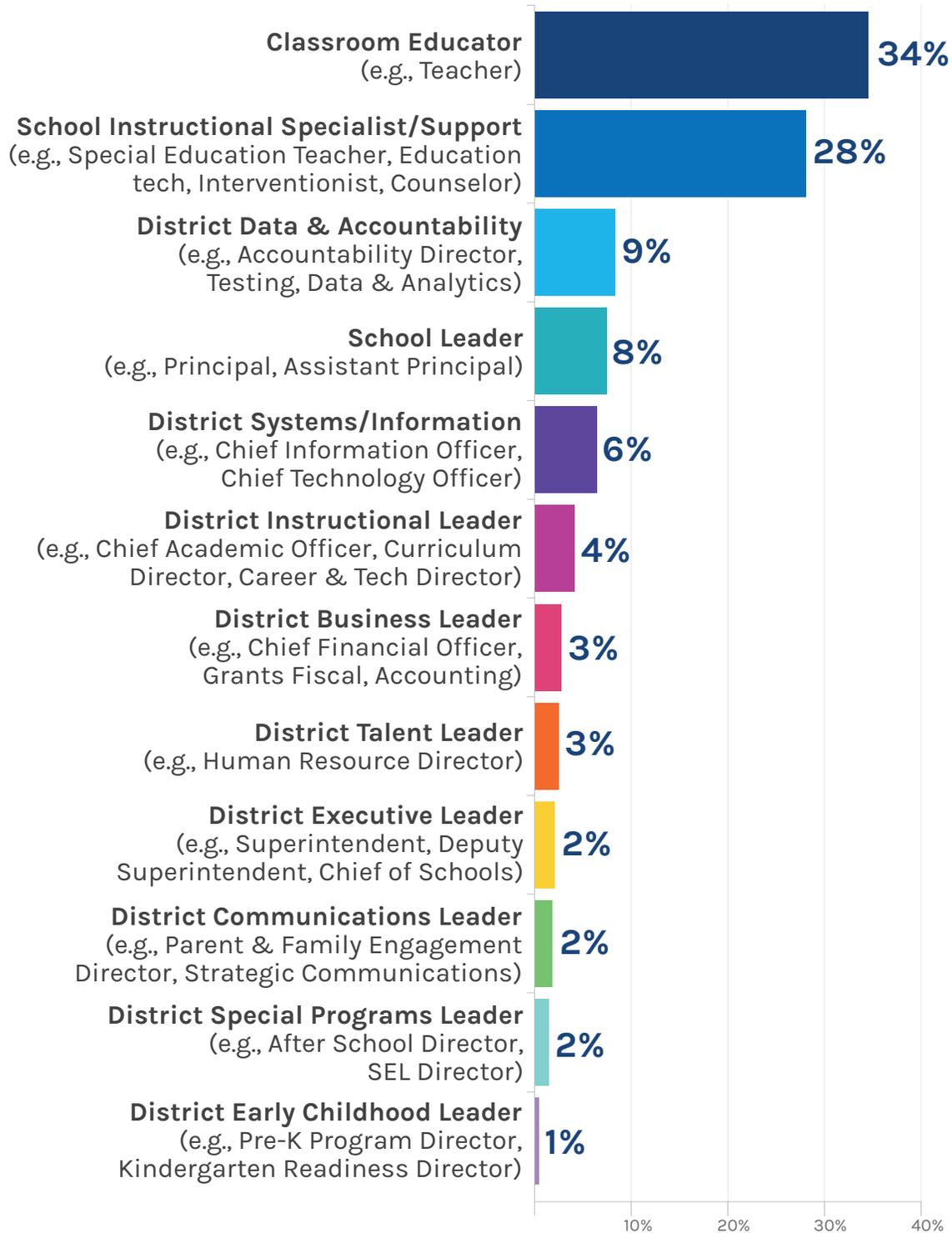
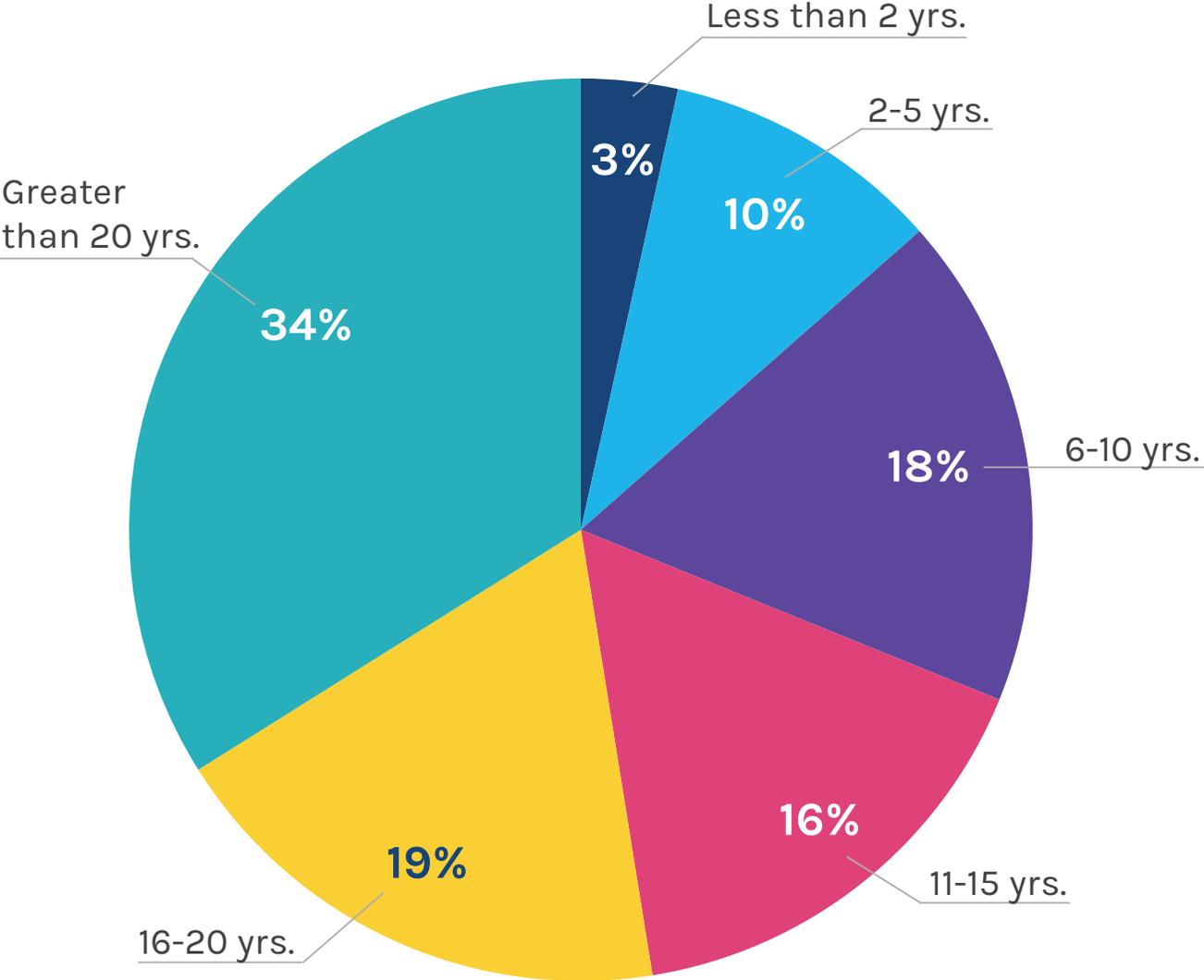


FIGURE 3: Survey Respondents by Years Worked in Education

(N=3,535)



System and Thought-Leader Interviews

We were privileged to pick some of the brightest brains in the PK-12 education sector for this report, and we extend a special thanks to the following leaders. Their reflections on lessons learned and ideas for the work ahead brought valuable insight into this report:

- Tessie Bailey, Director, Center on Multi-Tiered Systems of Supports, American Institutes of Research
- Bill Bass, Innovation Coordinator of Instructional Technology, Parkway Public School District, MO and Former President of the Board of Directors, International Society on Technology in Education (ISTE)
- Michelle Bourgeois, Chief Technology Officer, St. Vrain Valley School District, CO
- Dr. Tim Clark, Vice President of K-12 Programs, 1EdTech (formerly IMS Global)
- Tony Campbell, Director of Learning and Media Technologies, Washington County Schools, UT
- Dr. Ellen Frede, Co-Founder & Director, National Institute for Early Education Research
- Marlo Gaddis, Chief Technology Officer, Wake County Public Schools, NC
- Dr. Todd Keruskin, Superintendent, Elizabeth Forward Public Schools, PA
- Keith Krueger, CEO, Consortium for School Networking (CoSN)
- Judith Martinez, Colorado Director of the Center for High School Success, Stand for Children
- Andy Tucker, Former Director of Postsecondary and Workforce Readiness, Colorado Department of Education





Strategic Priority Insights



High-Quality Tiered Instruction

Reviewing district strategic plans, the terms “high-quality instruction” and “tiered student supports” were commonplace and of the highest priority. So, what are districts doing to achieve high-quality tiered instruction? And how does personalized learning—a concept top of mind for many district leaders in conversations—figure into this work?

Teachers Face Competing Priorities Amid Wide Adoption of Tiered Support Models

Education leaders shared that clearly defined grade-level learning standards and well-crafted aligned curricula are the starting point for districts to create the conditions for high-quality instruction.

To the extent that evidence-based curricula are the right contextual fit, leaders are adopting these.

For many districts, universal Tier 1 instruction—the teacher-facilitated instruction and learning activities that all students participate in—is complemented with Tier 2 instructional differentiation and Tier 3 formal interventions. Strong models of tiered instruction provide intensified support for struggling students and enrichment for high-flying students. Many districts leverage technology, such as adaptive learning tools, to enable Tier 2 supports.

Reflecting on tiered instruction, district and school leaders shared renewed focus on strengthening Tier 1 universal instruction after two challenging years of learning disruptions and heightened student needs. “When half of students in each classroom are receiving Tier 2 or Tier 3 supports, that’s when you know you have a Tier 1 instructional quality problem,” an Ohio district Chief Academic Officer said.

To understand the push to refocus on quality Tier 1 universal instruction, context matters.

Tessie Bailey, Director of the Center on MTSS at the American Institutes of Research, states that over the past five to 10 years, district use of Response to Intervention (RTI) as a tiered instruction model began to wane, and the adoption of a Multi-Tiered System of Support (MTSS)

comprising academic, behavior, and social and emotional learning (SEL) expanded.

By 2022, every state except Arkansas and Tennessee embraced a tiered support model different than RTI. The advantage for many states and districts was that MTSS and similar tiered support systems addressed not only what students were struggling to learn, but also their mental and social and emotional needs. Positive Behavioral Intervention & Support (PBIS) strategies often feature under the MTSS umbrella.

The pandemic applied a range of pressures to tiered supports delivery, straining teachers’ capacity to handle increasing disruptive student behaviors and heightened mental and physical wellbeing needs. At the same time, teacher and substitute shortages forced school leaders to provide instruction and supports by any means—often assigning specialists to take on whole group instruction, recruiting district staff to fill in, and relying on community support to address learning gaps.

While some districts evolved their tiered supports during this time to clarify processes and improve quality, others were in triage mode, effectively pausing MTSS meetings and teacher professional learning. Several shared the intention to refocus on teacher training and coaching in 2022-23 to improve universal tier instruction.



One thing that has become apparent is that we've made education overly complex. We've lost the ability to provide the intensity of education to get the desired effects. Teachers are doing more things like intervention, assessment, etcetera instead of teaching and learning. We've got to step back to ensure teachers have the time for universal Tier 1 instruction.

TESSIE BAILEY

Director, Center for MTSS, American Institutes of Research

Have tiered supports reached a tipping point in U.S. schools? With unwieldy data analysis and intervention coordination competing for teachers' time and attention, they could be negatively impacting lesson planning and quality instruction. Finding the right balance in teachers' focus between whole-class instruction, accommodations, and formalized interventions is key.

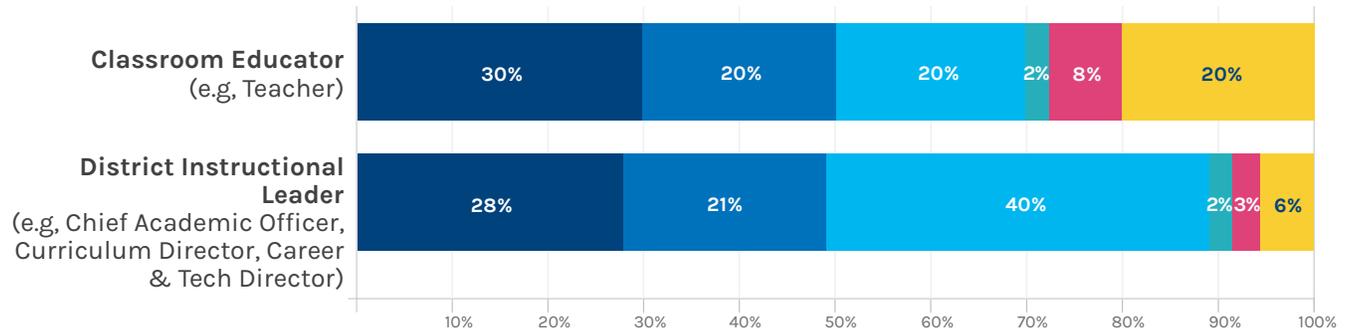
In our national survey of educators and district instructional leaders, four out of five district instructional leaders signaled that some system of tiered supports is in place—demonstrating the broad expansion of the concept and practice in PK-12 schools.



FIGURE 4: Comparing Teachers and District Instructional Leaders' Perceptions of Tiered Supports Use in Their Work

Survey Prompt: Select the phrase that best describes your use of a multi-tiered student support (MTSS) approach.

(N=1,060)



- We implement some tiered service components like Response to Intervention (RTI), but don't use MTSS as a framework
- We consistently use the MTSS framework with fidelity
- We want to use MTSS consistently, but have had challenges implementing lately
- We have used MTSS in the past, but also a different framework now
- We have never used MTSS
- I'm not sure

Striking similarities and differences appear when comparing teachers' and district instructional leaders' perceptions of MTSS implementation. About three in 10 teachers and district leaders report they implement some tiered service components, but they don't use MTSS. One in five teachers and leaders report using MTSS with fidelity. And twice as many district instructional leaders reported challenges in implementing MTSS (40%) than teachers did (20%), with many teachers feeling "unsure" of implementation quality (20%).

2x as many district leaders report challenges in MTSS implementation (40%) compared to teachers

20% suggesting highly variable approaches and success across schools and classrooms when viewed from the system level.

These results suggest that a significant portion of school districts face challenges in prioritizing, supporting, and ensuring MTSS implementation quality, contributing to confusion or ambiguity at the classroom level.

District leaders, principals, and educators continue to seek a balance in focus between quality universal instruction and refining a system of tiered supports. Personalized learning approaches that leverage technology and emphasize flexible learning paths may provide a way forward.

Personalized Learning as a Path Forward

What does personalized learning mean? Many things to educators, it turns out.

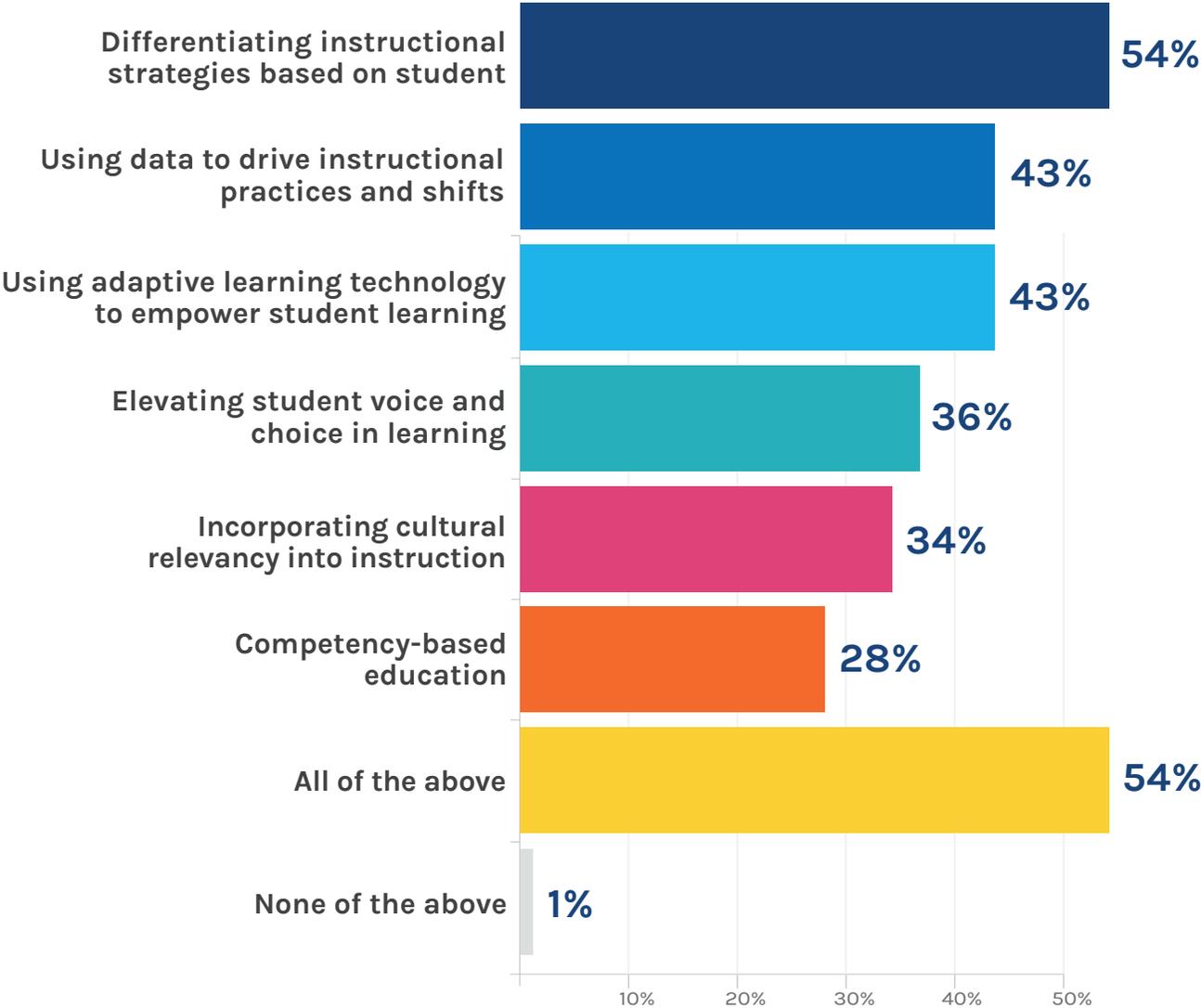
We asked educators to identify terms that best resonated with their perception of personalized learning (e.g., differentiated instructional strategies, using data to inform student supports, adaptive learning technology). Most respondents (54%) selected “All of the above,” demonstrating how overarching a term personalized learning has become.



FIGURE 5: Educator Perspectives on What Personalized Learning Means

Survey Prompt: From the list below, select all terms that best resonate with your perception of personalized learning.

(N=1,944)



Personalized learning encompasses a variety of modern education practices that value student competency and choice in their learning journey, as well as the use of data and technology to enhance instruction and learning.

In some districts, personalized learning has taken root as the driving philosophy and practice for each school and classroom. Elizabeth Forward School District, located outside of Pittsburgh, PA, is one of these districts.

Superintendent Dr. Todd Keruskin of Elizabeth Forward School District in PA insists, “You need to have a framework to scale personalized learning in every school and classroom. You can have awesome

things happening in certain classrooms and schools, but you need a framework. We think of personalized learning in three buckets: student voice and choice, learning technology and data, and project-based learning that is personalized to student interests.”

When the pandemic happened, Elizabeth Forward figured out how to promote student learning progression using digital systems. They shifted instruction to provide grade-level learning that students needed—whether below, at, or above their current grade—to meet them where they were and get them engaged in projects. Their teachers use adaptive learning data to constantly group and regroup students in their classrooms.



Personalized learning is not synonymous with individualized learning...when we say personalizing learning, we talk about student-led and student-owned learning.

Students, no matter their age, are critical partners in designing the education experience. At our district, we chose the word LOVE as a goal for learning: Learning Opportunities Valuing Everyone. That’s a key overarching belief that we have. We regularly survey students on what they love. And we ask: is there strong evidence that what students value and love are happening in our classrooms and schools?

GLEN WARREN

Director of Literacies, Outreach, and Libraries, Encinitas Union School District, CA

When asked what tiered supports model is used in the district, Dr. Keruskin clarified, “We talk more about personalized, or modern education. There was a huge paradigm shift in our district six years ago. It really involved providing the grade-level content that each and every student needed through high-quality personalized instruction. So, if a 7th-grade student needs 5th-grade content, then we are providing that content and guiding growth through groupings, projects, and adaptive technology to get them where they need to be. Our teachers group and regroup students—some of our best teachers regroup nearly every week.”

Most Educators, Including Teachers, Report Struggling to Use Data to Improve Instruction

To monitor student progress and individualize their learning experience, teachers need data and systems that streamline instructional insights.

We found that despite strong belief in the usefulness of data to identify needs and take action (four out of five teachers and leaders agree), most educators still feel there is too much data and not enough time to understand it to improve instruction (two out of three teachers, one out of two instructional leaders). Data systems that deliver visualized, easy-to-understand information, and educator teaming structures that protect time to make sense and shift instruction continue to be a key area of need for PK-12 schools.

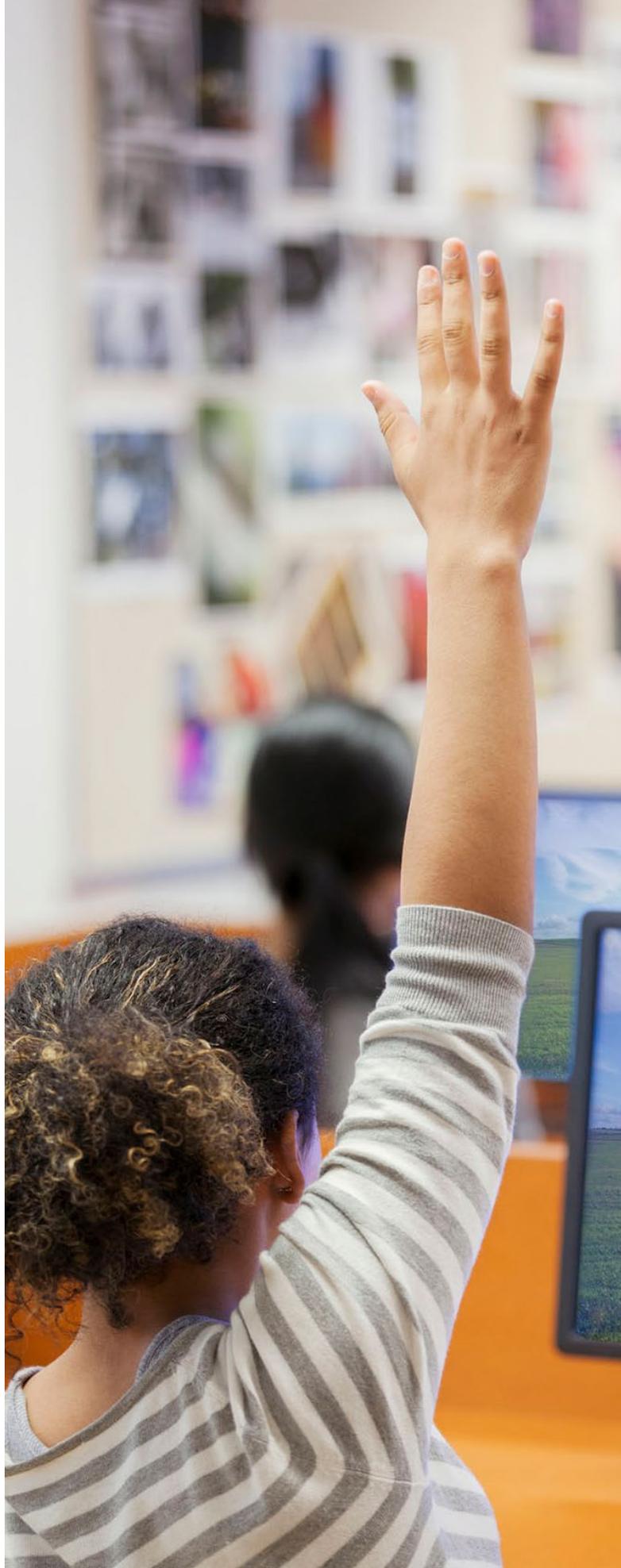
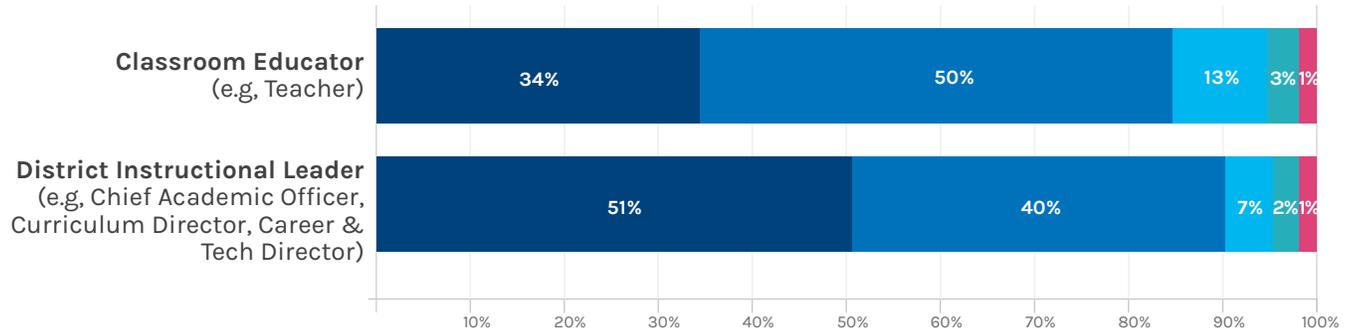


FIGURE 6: Comparing Educator Sentiments on Using Data vs. Actionability

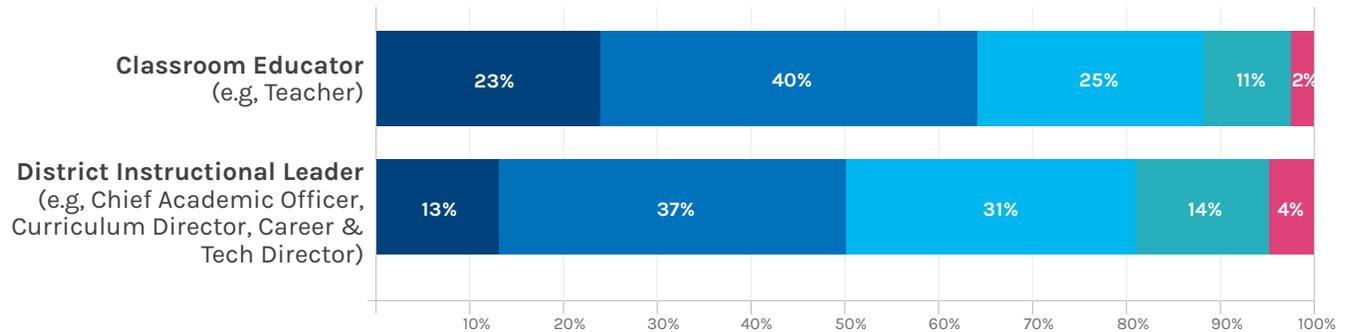
Survey Prompt: Using data helps instructional staff identify needs and take appropriate action.

(N=1,060)



Survey Prompt: There's too much student learning data and not enough time to understand it to improve the quality of instruction.

(N=1,060)



These findings demonstrate the importance of capable technology and appropriate teaming structures, such as professional learning communities and tiered support teams, that enable data sense-making and changes to instructional strategy in order to achieve more personalized education.

Scaling Personalized Learning through a Framework and Proof Points

While some districts have achieved system-wide personalized learning, others nurture it at the classroom and school levels. This allows them to deliver a proof point to bring practices to scale. Bill Bass, Instructional Technology Coordinator for Parkway School District, located in a suburb of St. Louis, says, “Proof of concept is real. Educators need to see personalized learning to feel like they can imagine it. However, somebody has to dream it and create it for themselves.”

For Parkway, personalized learning starts with key aspirations for students, e.g., “students will become increasingly self-directed, skilled, persistent learners” and “creative, thoughtful, and effective problem solvers.” Parkway’s personalized learning

model adapts to the multitude of ways that students can learn, and schools can honor those when tracking progress.

Full implementation of Parkway’s personalized learning model began at a relatively small scale. “We have a proof of concept—it is an elementary school. And it is working. We’re focusing heavily on expanding that model. We invite school leaders to visit the school to see, hear, feel, and touch what it looks like. We are creating a culture of innovation rather than incrementalism. You have to go all-in on it. There is no halfway to determine whether this works.”

One important throughline of the conversation about high-quality tiered instruction and personalization is the emergence of technology in many aspects of students learning. What challenges and priorities will educators grapple with in 2022-23?



Any district that is going to go down a personalized learning path, teachers need autonomy and the right mindset. For a teacher to be able to help students design and grapple with authentic problems, they need a specific mindset that recognizes that it is not them or their content that’s teaching kids. Kids are learning, and they are facilitating that learning. So, mindset is really important. If that’s not there, then teachers won’t be successful in personalized learning.

BILL BASS

Instructional Technology Coordinator, Parkway School District,
MO, and Former President of the Board of Directors, ISTE

FIGURE 7: Parkway School District’s Personalized Learning Framework

PARKWAY PERSONALIZED

A personalized approach to student learning will create opportunities for students to meet mission by focusing on these *vision statements* and *learning principles*:

VISION

- Seek to become increasingly self-directed, skilled and persistent learners
- Be creative, thoughtful and effective problem solvers
- Pursue a personal direction based on individual talents and interests

LEARNING PRINCIPLES

- Transfer learning to new situations beyond the classroom and school
- Test ideas, take intellectual risks and learn from mistakes in pursuit of understanding
- Experience learning challenges that match individual abilities, needs and interests

PARKWAY’S PERSONALIZED LEARNING MODEL

Arranges learning around mastery of competencies

Honors & offers authentic learning beyond school day, schedule, and building

Promotes student identification and exploration of interests

Provides students multiple authentic ways to demonstrate understanding

Makes student voice and choice central to the learning process

WITHIN PERSONALIZED LEARNING, PARKWAY STUDENTS WILL:

- ▶ Solve authentic problems by using a variety of strategies, taking calculated risks, and engaging in deliberate design processes.
- ▶ Explore local and global issues by connecting beyond the classroom and working skillfully with others to achieve common goals and engage with the broader community.
- ▶ Demonstrate a growth mindset by intentionally seeking feedback, capitalizing on their strengths and transferring their understandings to new demands.
- ▶ Create original and remixed works to make their learning visible.
- ▶ Display perseverance by seeking out challenges and new experiences to see problems as opportunities.
- ▶ Reflect on their learning experiences and advocate for their individual learning needs.

(Source: Parkway Schools)

Educators' Technology Challenges and Priorities

We surveyed educators and district leaders on their top education technology challenges, and a handful of areas topped the list:

- Juggling multiple digital tools for teaching/learning (46%)
- Lack of parent/guardian involvement or understanding (41%)
- Lack of time to use technology effectively during the school day (37%)
- Integrating new edtech tools into the classroom (32%)
- Implementing new instructional approaches (31%)

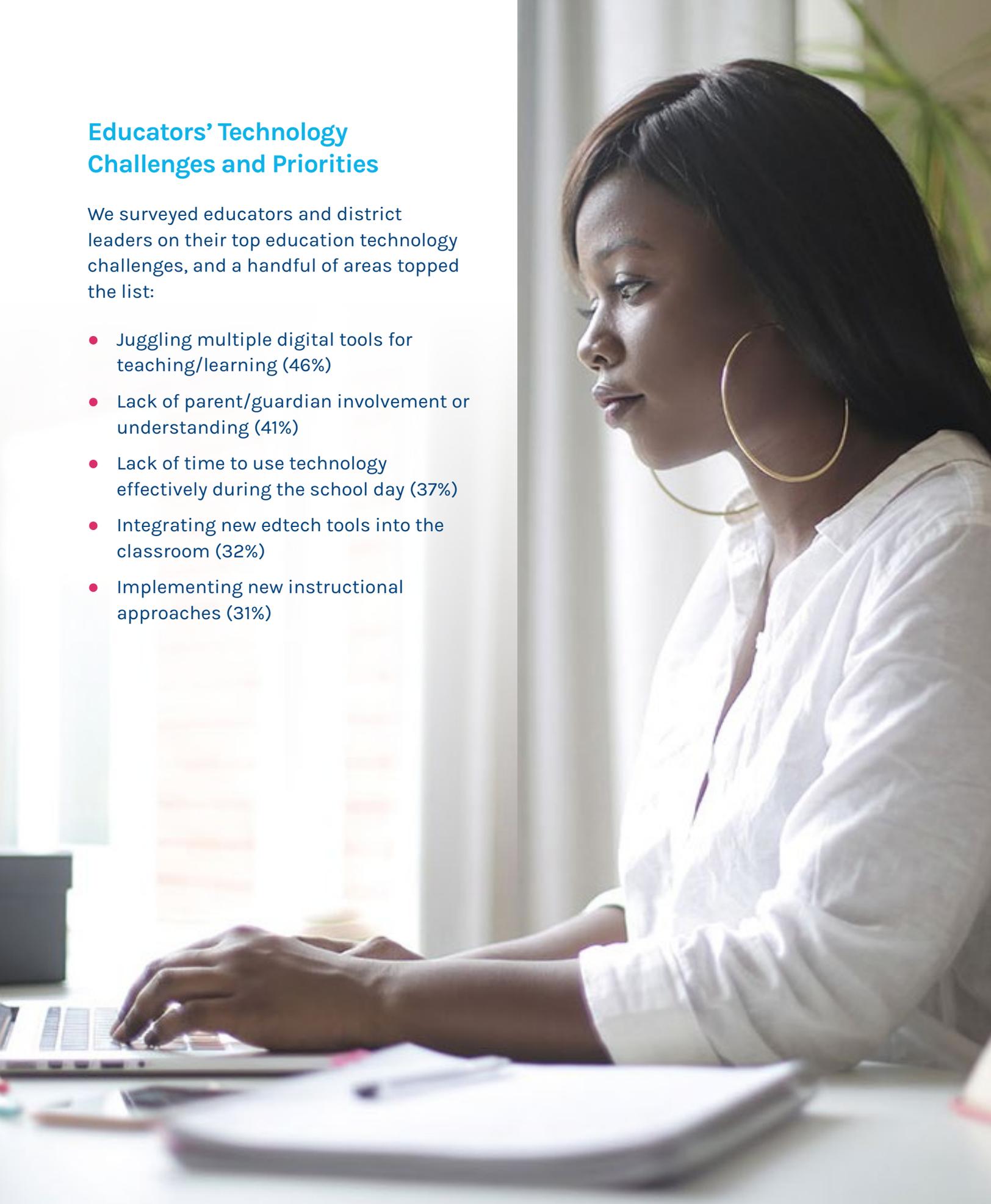
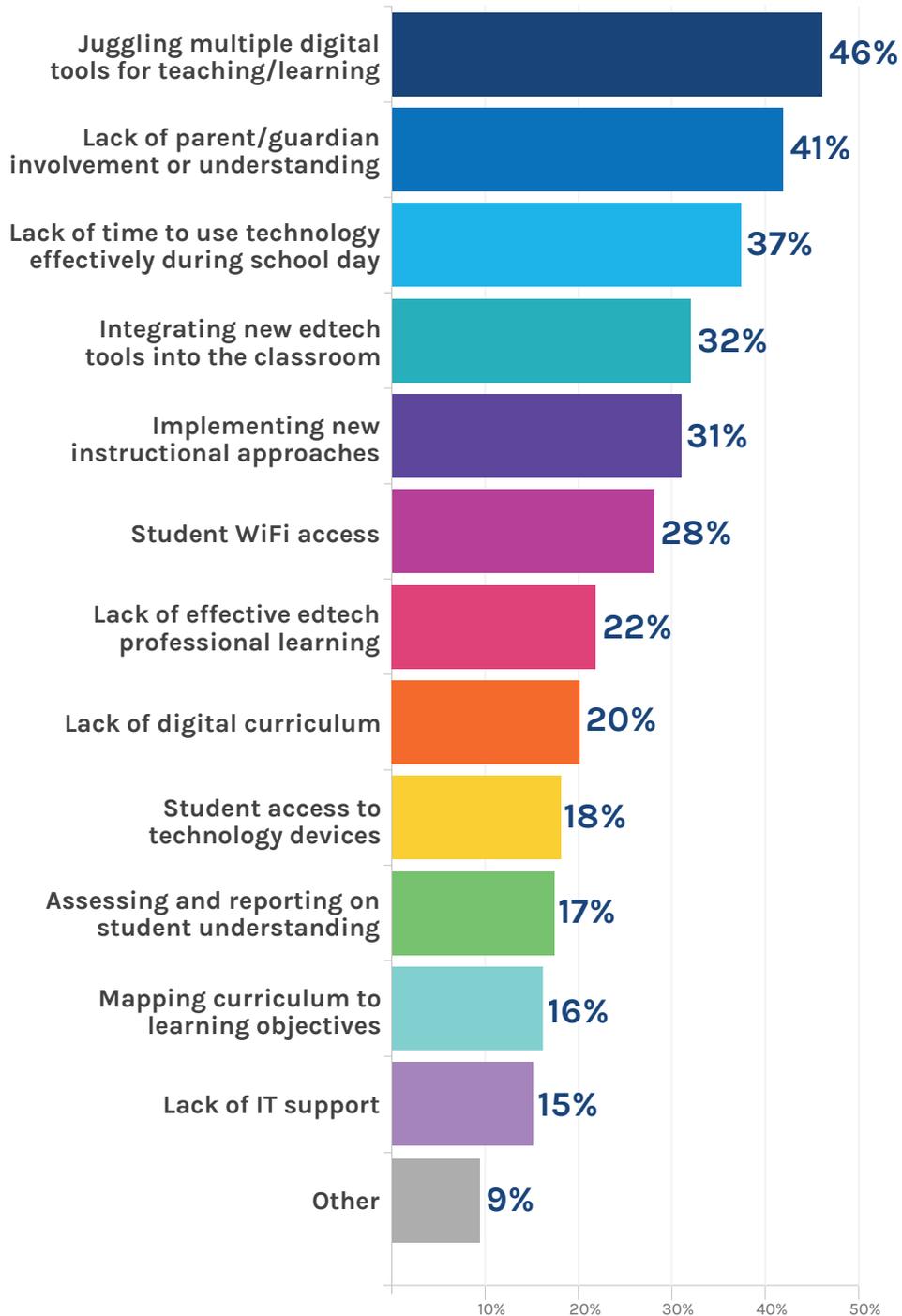


FIGURE 8: Educator Technology Challenges in 2021-22

Survey Prompt: What were your education technology challenges in school year 2021-22? (Select all that apply)

(N=1,944)



These perspectives reflect the ways technology continues to disrupt existing approaches and mindsets in education, as well as the work it takes to use technology to support a positive impact on student success. Far fewer educators reported challenges with students lacking device access, digital curriculum, or getting adequate IT support.

When surveyed on education technology priorities, both teachers and district instructional and technology leaders placed these three issues as top technology priorities for school year 2022-23:

- 1. Improving assessments, reporting, and data-informed instruction**
- 2. Educator collaboration and training**
- 3. Integrating new education technology tools**

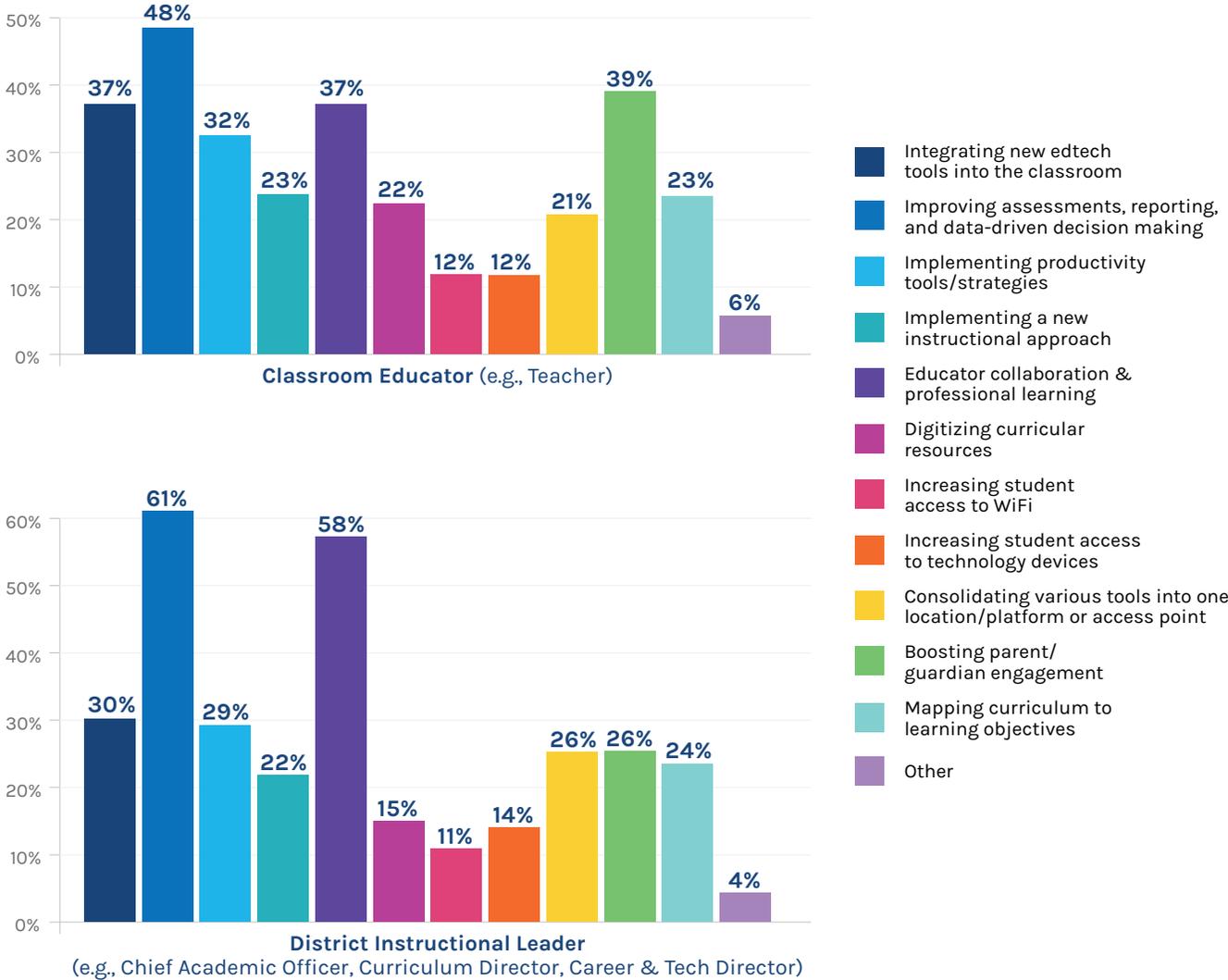
Teachers placed more emphasis on boosting parent and caregiver engagement compared to district leadership.



FIGURE 9: Education Technology Priorities for SY2022-23: Comparing Teacher and Instructional Leader Perspectives

Survey Prompt: What are your education technology priorities next school year?
(Select all that apply)

(N=1,060)



The pandemic brought the use of devices like laptops and tablets to nearly every school in America (90% of middle and high school educators now report providing devices to each student, and 84% of those in elementary schools).⁸ These results show that leaders and teachers are adapting to this paradigm shift. Their work is evolving as they figure out how much technology to use and in what ways it can be most useful for teaching and learning.

As discussed above, the work of analyzing and taking action while using data is an ongoing process that educators continue to prioritize. How to balance these efforts with the work of preparing for and facilitating high-quality Tier I instruction is a persistent question. Finally, educator collaboration and training priorities are not only for instructional and school building leaders but teachers too—verifying leaders’ sentiment to refocus on this work.





Whole-Child Supports

As a concept, it seems to defy singular definition, yet “whole-child supports” appeared in a variety of expressions in school district plans across the nation. We surveyed educators, and the vast majority reported that “social and emotional learning” is the most resonant term associated with whole-child supports.

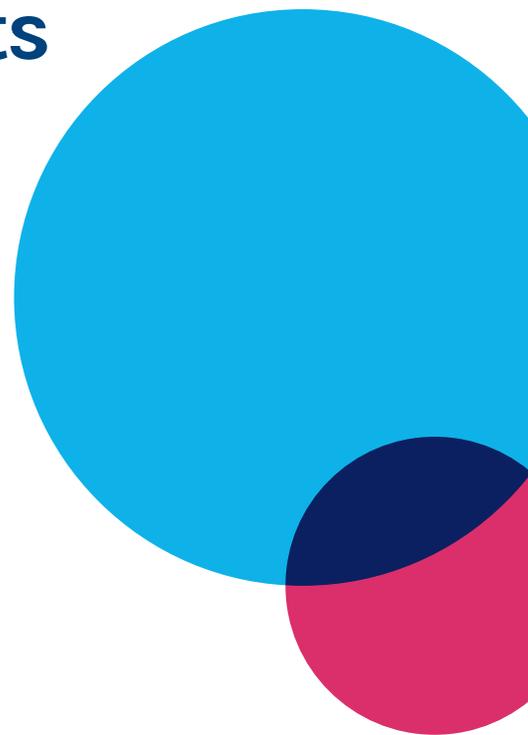
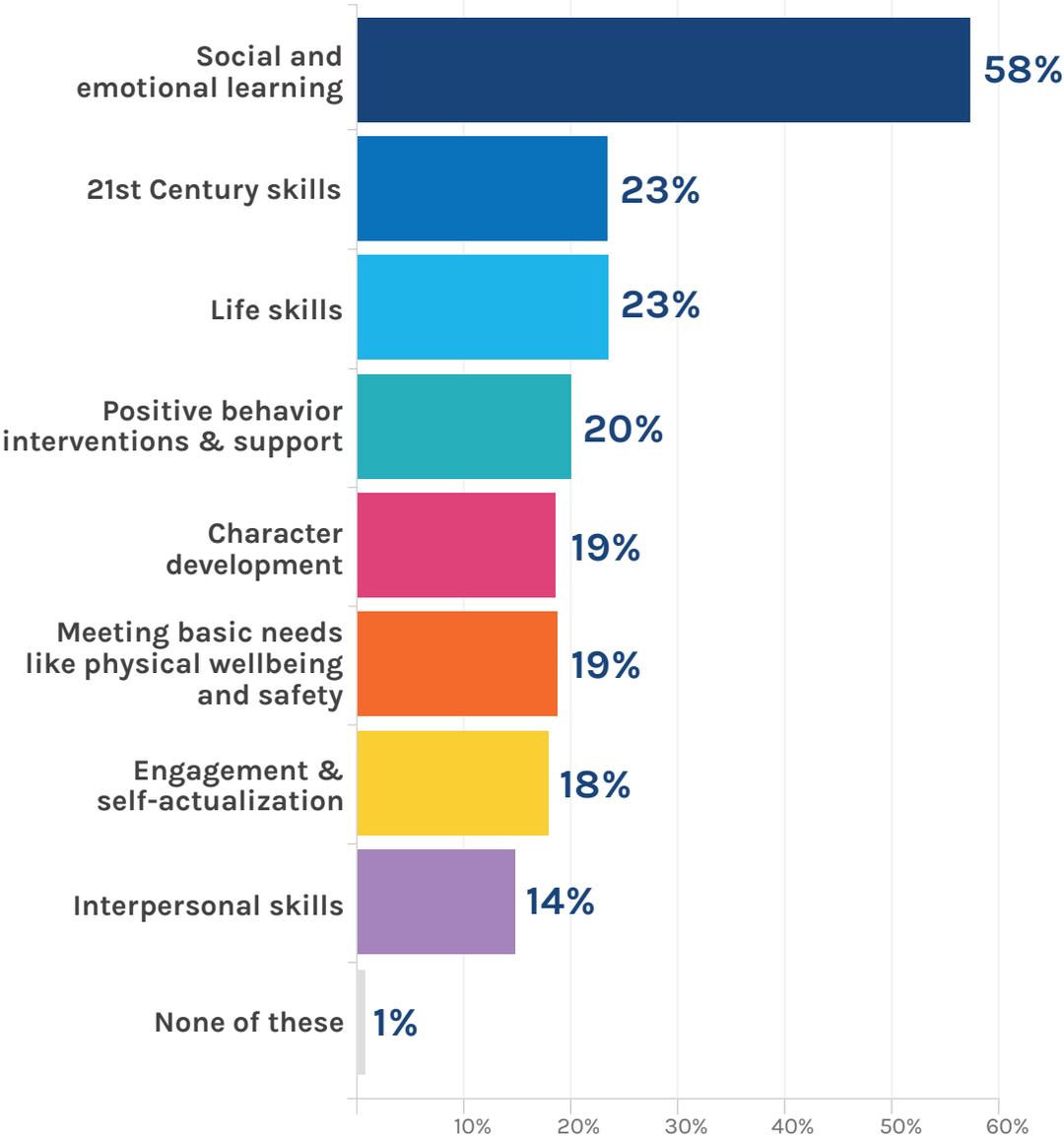


FIGURE 10: Educator Perspectives on Terms that Help Define Whole-Child Supports

Survey Prompt: Select two terms from the list below that resonate most with your concept of whole-child supports.

(N=1,782)



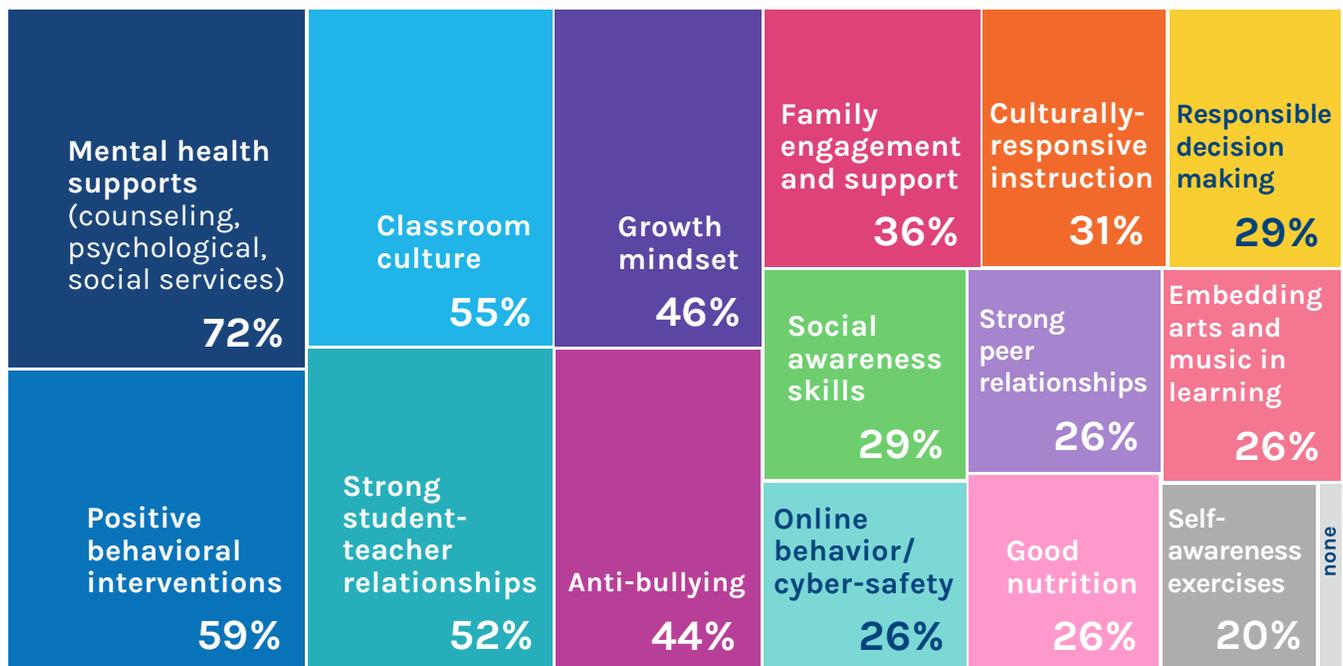
According to the Collaborative for Academic and Social and Emotional Learning (CASEL), SEL is defined as “the process through which all young people and adults acquire and apply the knowledge, skills, and attitudes to develop healthy identities, manage emotions and achieve personal and collective goals, feel and show empathy for others, establish and maintain supportive relationships, and make responsible and caring decisions.”⁹

We asked educators what whole-child support strategies their school or district emphasized, and among the top responses were mental health supports (72%), positive behavioral interventions (59%), classroom culture (55%), and strong student-teacher relationships (52%). Only 3% of educators selected “none of these” options, indicating widespread implementation of some type of whole-child support strategies in schools.

FIGURE 11: Top Whole-Child Strategies Implemented in Schools and Districts

Survey Prompt: From the list below, select all whole child support strategies your school/district emphasizes.

(N=1,782)



Whole-Child Supports Widely Perceived as Fundamental to Student Learning

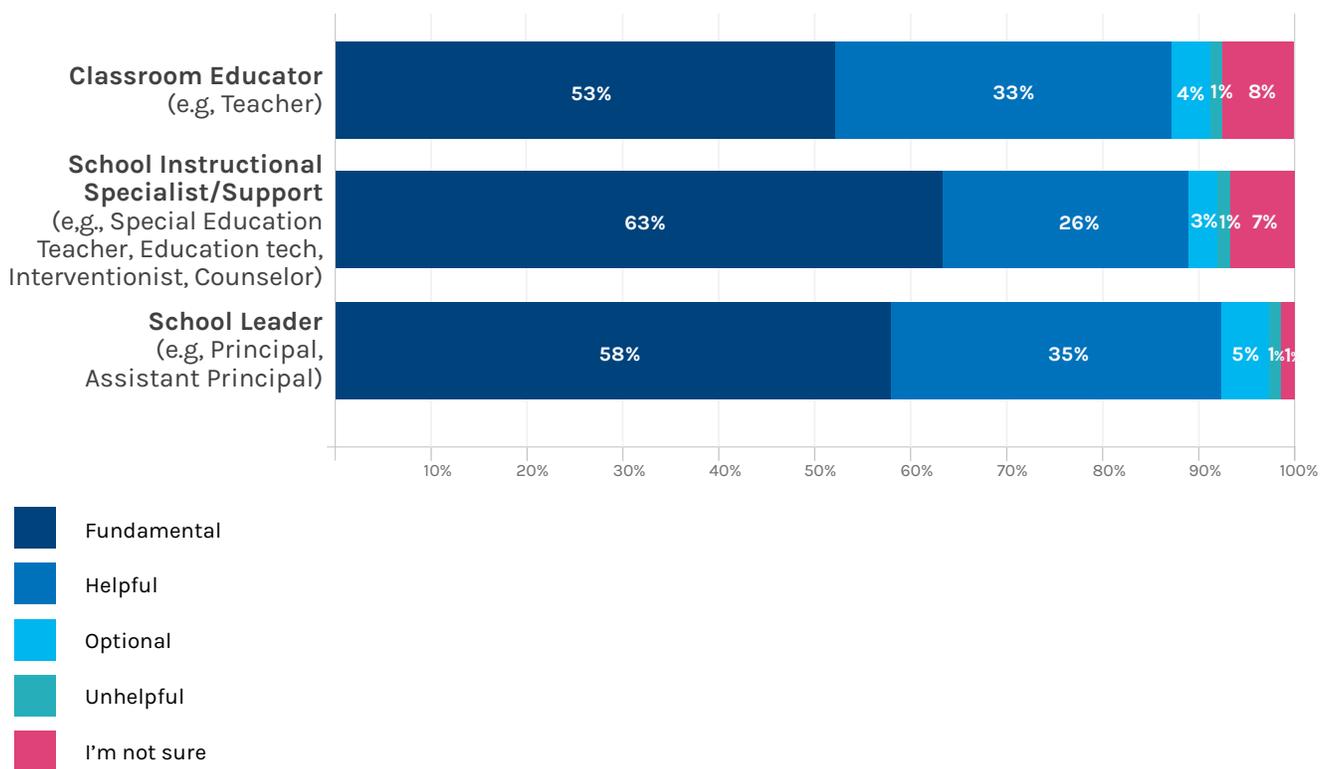
We were interested in learning educators’ perspectives on whole-child supports and their relationship to student learning and development. Most educators identified whole-child education as “fundamental” to student learning and development, with only a small fraction choosing “unhelpful” to describe it.



FIGURE 12: Educator Sentiments on Whole-Child Education and Learning

Survey Prompt: Select the option that best describes your view of whole-child education in advancing student learning and development.

(N=1,625)



In light of this consensus among educators, what does the research say about the effectiveness of social and emotional learning? According to a meta-analysis of research of 213 school-

based universal SEL programs, including outcomes data for more than 270,000 students from kindergarten through high school,¹⁰ two key findings stirred the attention of educators and researchers.¹¹

The first finding was that, compared to control students, students participating in SEL programs showed significantly more positive outcomes with respect to enhanced SEL skills, attitudes, positive social behavior, and academic performance, and significantly lower levels of conduct problems and emotional distress. Also, higher academic performance of SEL program participants translated into an 11 percentile-point gain in achievement, suggesting that SEL programs tend to bolster, rather than detract from, students' academic success.

An Update on Social and Emotional Learning Outcome Research
JOSEPH L. MAHONEY, ET AL.

Pandemic Emphasizes Mutual Interdependence of Whole-Child and Academic Supports

The studies included in the meta-analysis focused on student SEL skills, attitudes, and behaviors. In conversations with educators, we learned that the pandemic response began to merge what many felt was a false distinction between SEL and academic instruction and pedagogy.





We have to account for our students' mental, social, and emotional health needs before we can think about learning. It's not a separate thing. Not long ago, when working with teachers, I felt I was driving down the road in my academic lane, and then there was an SEL lane, and those were two separate lanes headed down the highway. We really thought these were two separate things, and classroom activities were academic or SEL, and you had to change lanes between them. But they're actually not—SEL and academic learning are on the same path and intertwined.

CHRIS CROMWELL

Instructional Technology Coordinator, West Chester Area School District, PA

Given the importance of whole-child supports to student learning and development, where are districts in implementing this priority?

We surveyed educators about their whole-child program implementation. Most teachers, specialists, and principals report that this work is “somewhat structured, supported, and implemented.” This suggests that districts are still refining student social and emotional support, and many practitioners are on this journey together.

When considering how schools implement initiatives, they often begin and are sustained through professional learning. Training the practitioners of a new initiative is key to success.

When we asked educators, specialists, and school leaders where their district is in providing professional learning on whole-child supports, only one in 10 reported no efforts have been taken, whereas nearly seven in 10 reported they are just beginning or in process. Fewer than one in 10 reported advanced professional learning.

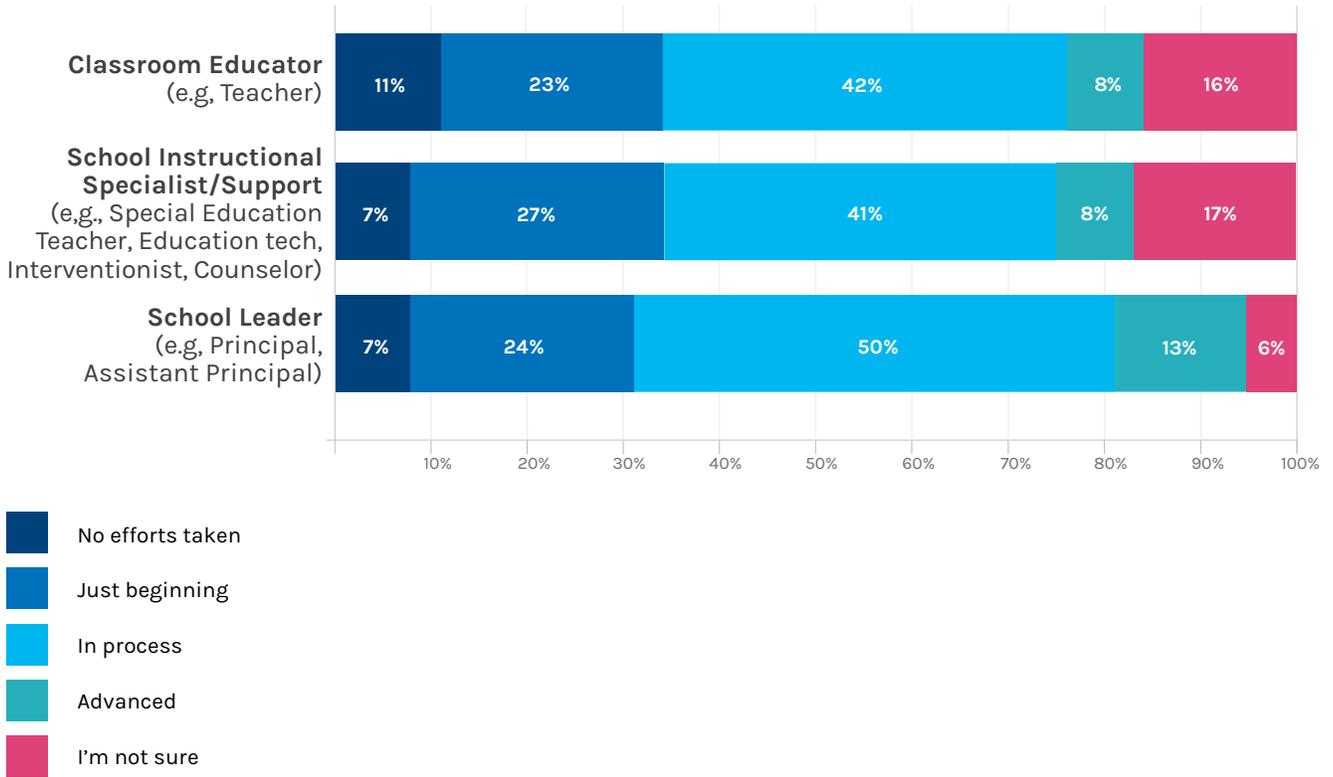
7 in 10 educators say their district is **just beginning** or in the process of providing professional learning to support the whole child.

 **Fewer than 1 in 10** report advanced professional learning in this area.

FIGURE 13: Status of Professional Learning Offered

Survey Prompt: Select one option that best describes where your school or district is in providing structured professional learning to educators on whole-child supports.

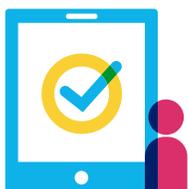
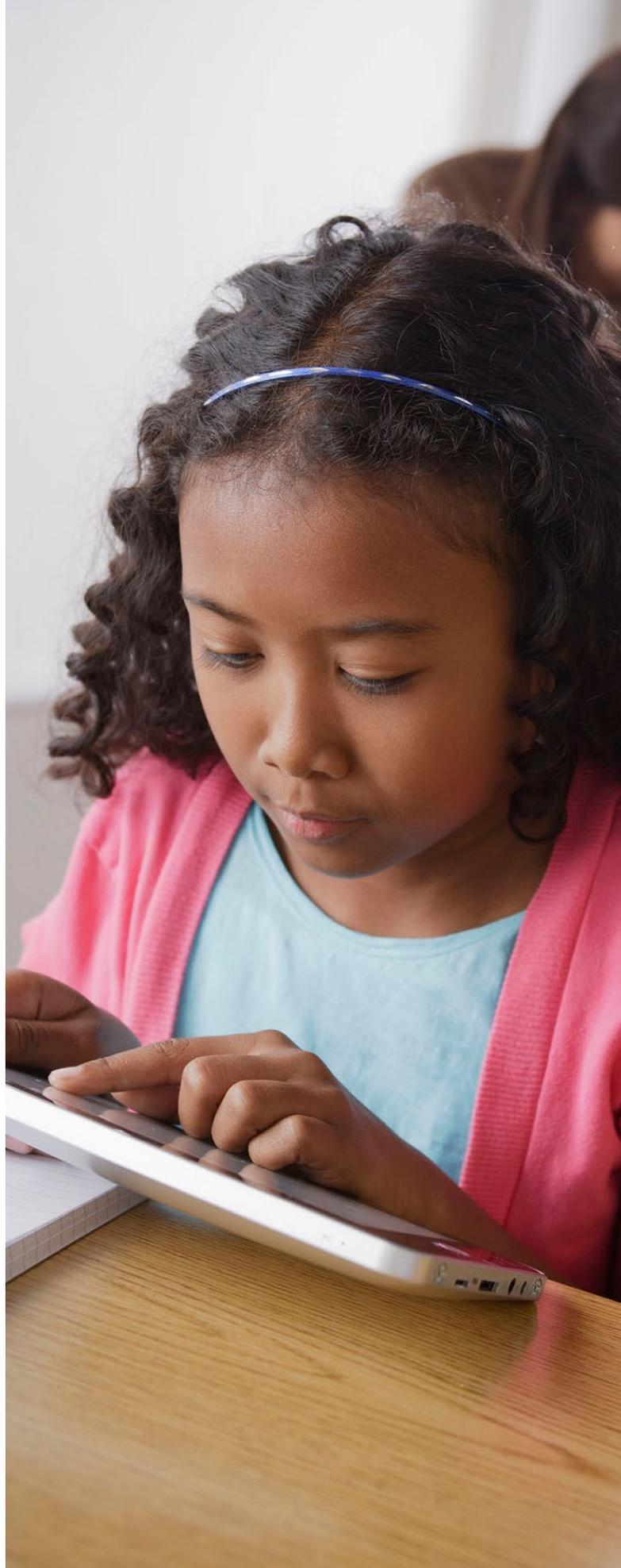
(N=1,625)



Organizational shifts to provide SEL training and coaching may require a critical mass of individuals to see the value and pursue change. Chris Cromwell of West Chester Area School District shares, “In my district, we’re providing teachers more personalized professional learning, and many are opting into SEL training. So, we have opportunities for them, and some are digging into it deeper than others.”

Splintered Focus of Which Behavior Data Matters Challenges a Whole-Child View

When we asked whether technology is a bridge or a barrier to supporting the whole child, many education technology leaders valued the availability of attendance, behavior, and social and emotional survey data—all of which collectively offer a more holistic view of students. However, the proliferation of technology tools and interoperability challenges, combined with a historical emphasis on academic data, challenges a unified approach. This splintered focus on which behavior data matters and what to use it for is evident in the graph in Figure 14. Note that fewer than two in 10 educators use technology for a range of whole-child supports.

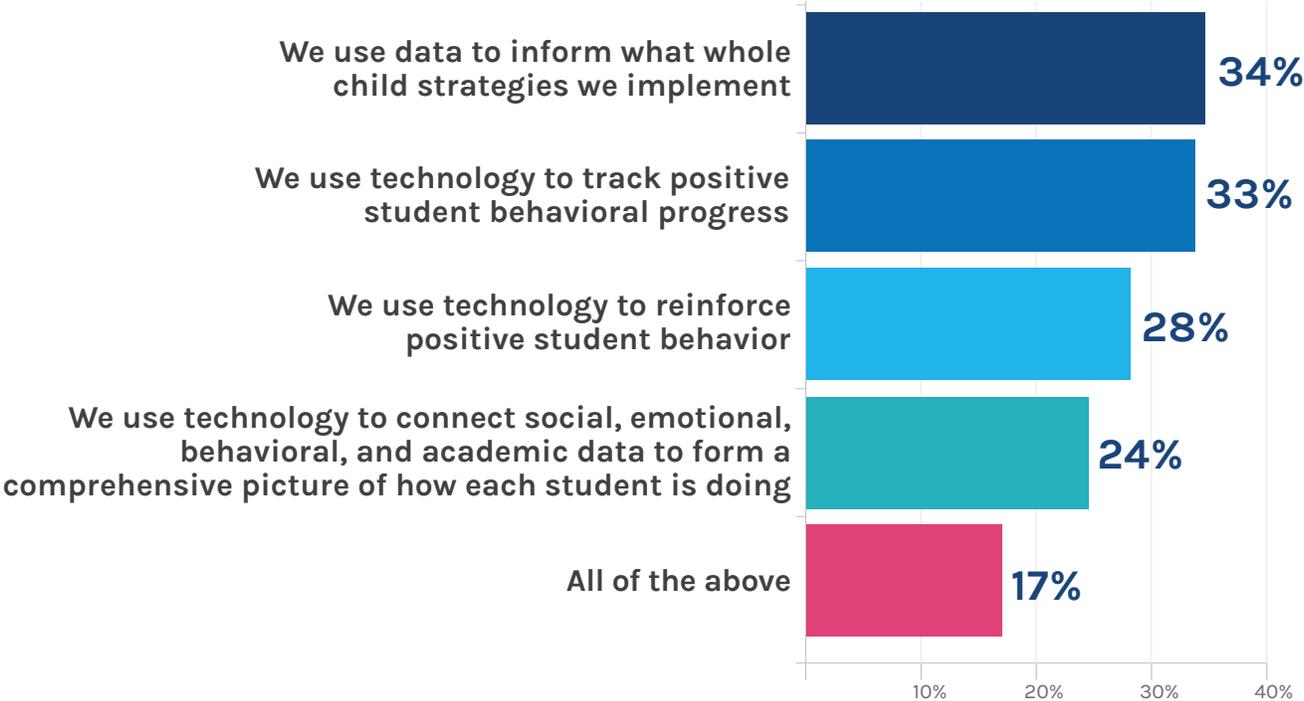


Fewer than 2 in 10 educators use technology to track and inform a wide range of whole child supports, including PBIS and SEL.

FIGURE 14: Educator Use of Technology and Data for Whole-Child Supports

Survey Prompt: Select all statements that apply to your school/district’s use of technology and data to implement whole-child supports.

(N=1,782)



The rise of whole-child support as a district priority area is evident across many functions of schools—including parent and family engagement. In a national survey of teachers, school, and district leaders, six in 10 say their “school/district shares social and emotional strategies with families and caregivers to strengthen student learning and wellness” either frequently or somewhat frequently.

However, the success of whole-child supports and equipping parents with useful strategies hinges on great teachers, behavioral specialists, and other key school staff.



Exceptional Workforce

Motivated, collaborative, and effective staff are primary drivers of student support and success in schools. On average, investments in people comprise greater than 80% of district budgets.¹² This includes teachers, specialists, leaders, coordinators, coaches, bus drivers, cooks, etc. So, it is no surprise that an exceptional workforce stood out as a top priority in our national scan of district strategic plans.

With that said, the past two and a half years presented unique challenges to education talent systems, with districts

experiencing increased rates of staff turnover and absences.¹³

Second only to impacts on student learning and wellbeing, the pandemic severely taxed already flagging educator retention rates and squeezed pipelines, stirring a national dialogue on the issue¹⁴ and possible policy responses.¹⁵ Heightened concerns of school and district leaders prompted calls to parse troubling survey data¹⁶ and actual numbers of teachers leaving the profession.¹⁷

Strong Links and Gaps Between Teacher Intentions and Reality around Leaving the Profession

Recent research conducted by the Annenberg Foundation found that for every 100 teachers who indicated they would leave the profession as soon as possible, about 33 left. The remaining two-thirds continued teaching the next year.¹⁸ And among every 100 teachers who indicated they would not leave the profession, seven did.

What can we take away from this? While there are strong links between teacher intentions and outcomes, there are also disparities. This context is critical when considering recent survey results like those from the National Education Association (NEA) showing that “55% of educators indicate they are ready to leave the profession they love earlier than planned.”¹⁹ While this finding deeply concerns education leaders and policymakers, recent evidence informs more balanced speculation about future teacher attrition rates.

If exceptional talent is a top district priority, and the pandemic elevated urgent challenges to address, let’s look at focus areas for attracting and retaining effective teachers.

Stress, Compensation, and Workloads Identified as Top Factors Driving Teachers from Profession

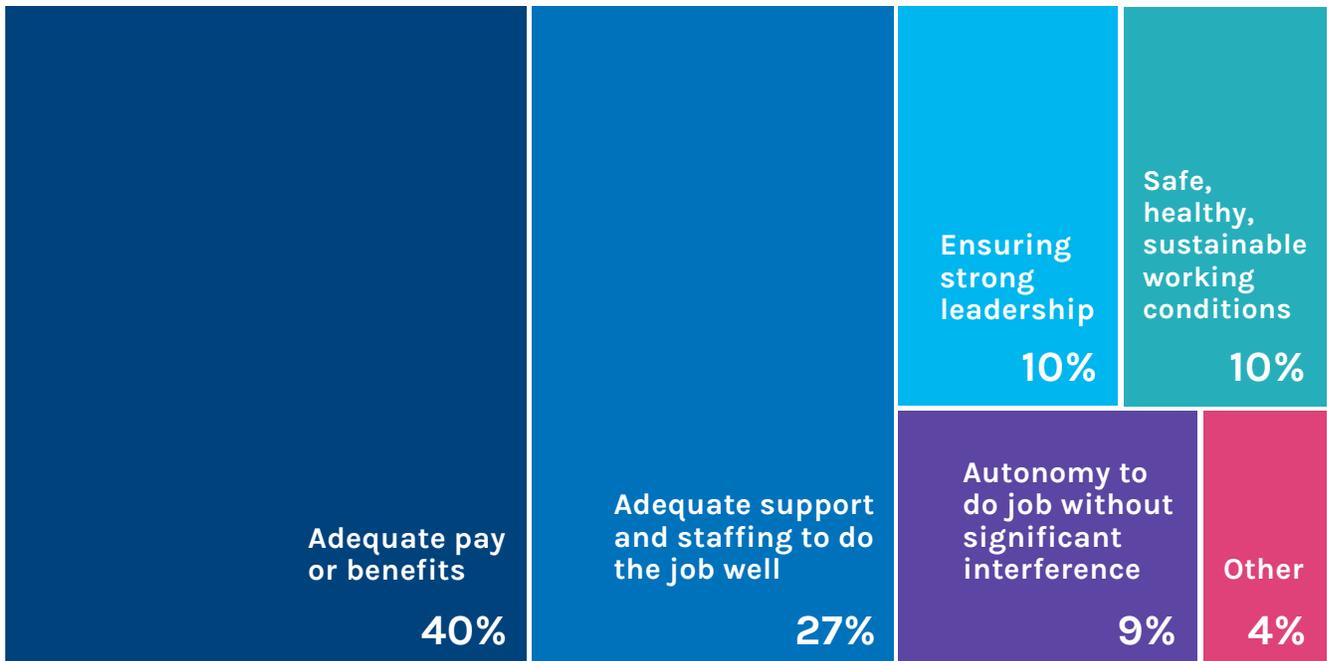
We asked school and district leaders their perceptions of top factors luring teachers from the profession, and a majority identified “a less stressful work environment” as the leading factor, followed by higher compensation and a more manageable workload. We also asked leaders what strategies would get the most traction to keep great teachers and support staff in their schools.



FIGURE 15: School and District Leader Perceptions of Factors Driving Teacher Attrition

Survey Prompt: From your perspective, what is the most important factor to improve staff retention in your school/district?

(N=882)



These findings align with those in the 2022 NEA Survey of Educators, where 74% of teachers report having to fill in for colleagues or take on other duties due to staff shortages. Additionally, 80% report that unfilled job openings leading to more work obligations for the educators who remain is a serious problem.²⁰



Focus on Compensation, Adequate Support, and Staffing to Address Root Causes of Staff Turnover

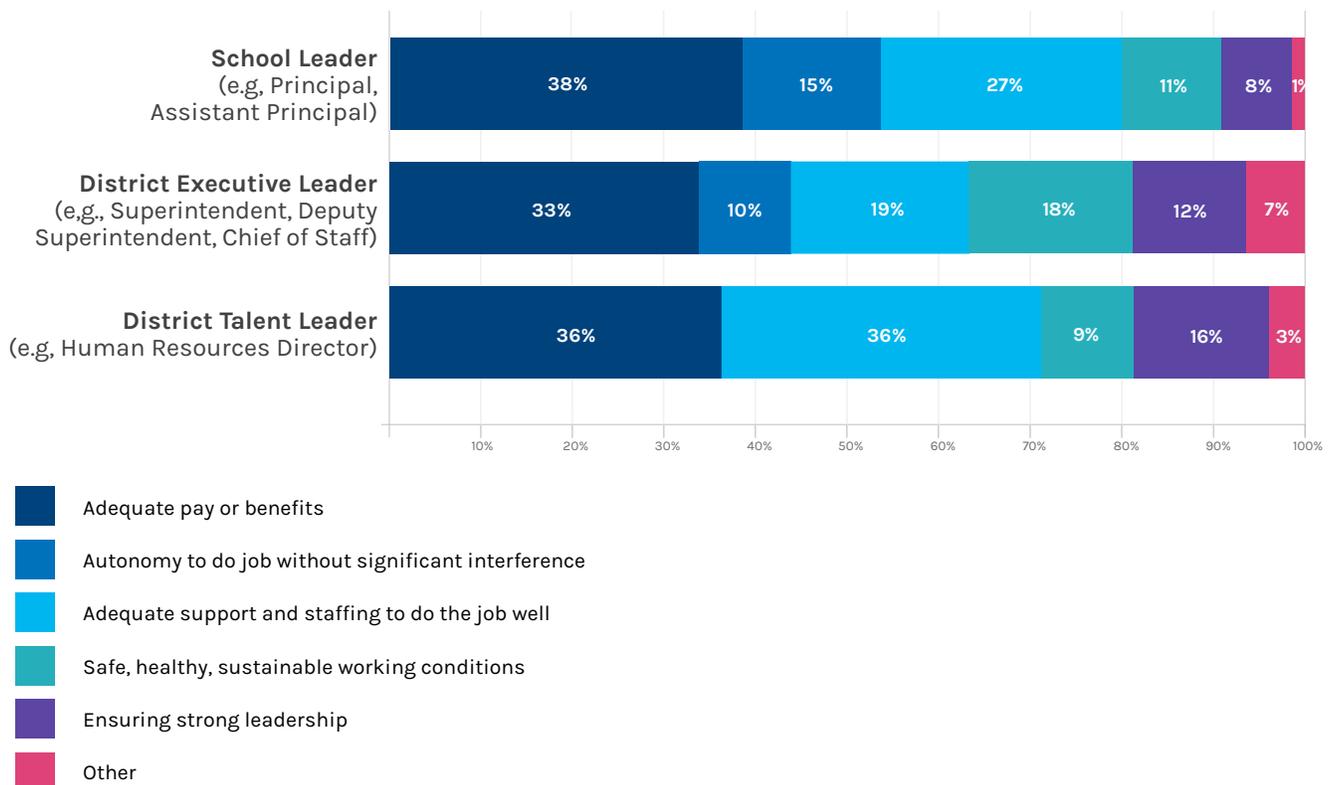
We also asked principals, district instructional leaders, and superintendents what the most important factors are to improve staff retention, and we found key similarities and differences in perspectives.

Among all leaders, a third identified adequate pay and benefits as the top factor to improve retention, with adequate support and staffing as the second most selected factor. And while as many as 20% of principals and district executive leaders identified “autonomy to do the job without significant interference,” no district talent leaders selected this as a key lever to improve retention. Strong leadership and safe, healthy, and sustainable working conditions were identified as important, but not top factors among all respondents.

FIGURE 16: School and District Leader Perspectives on Key Factors to Improve Retention

Survey Prompt: From your perspective, what is the most important factor to improve staff retention in your school/district?

(N=310)



On the topic of compensation, we specifically asked education leaders for their perspective on “How important is the improvement of teacher compensation to improving teacher recruitment and retention?” An overwhelming 93% affirmed its importance. Recognizing the high value of educators, many states and districts took action on compensation. They were enabled both by federal pandemic relief funding and strong state revenues.²¹

Compensation is the top priority, but key shifts in educator policy and practice merit exploration.

Nearly
9 in 10
school and
district leaders
say evaluation
systems should
change to be
more supportive.



Changes Sought in Educator Evaluation after a Decade of Reforms and Pandemic Pauses

In conversation with school and district leaders, we also discussed where teacher evaluations are headed. After a decade of reforms to increase rigor and accountability in how educators are evaluated, recent research found little impact on student performance in relation to these policies.²² This, combined with pauses in educator accountability systems for one to two school years, invited consideration of future directions in educator evaluation.

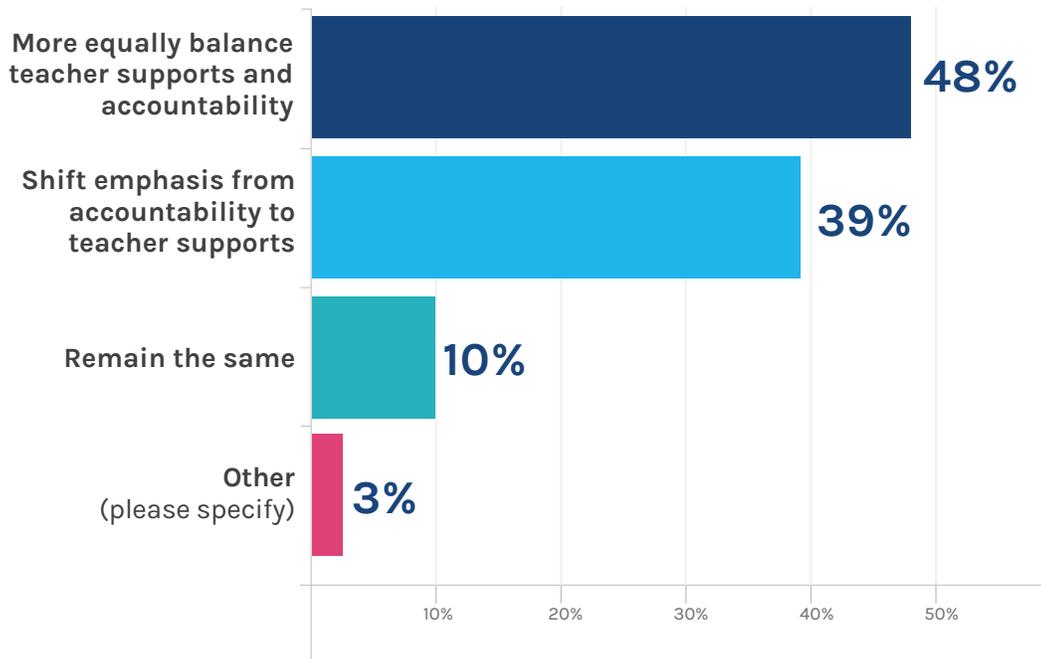
We asked educators where evaluation should go from here. Nearly nine in 10 called for change (87%). Nearly half (48%) selected “more equally balance teacher supports and accountability,” and 39% chose “shift emphasis from accountability to support.” Fewer than one in 10 respondents reported that teacher evaluation should remain the same.



FIGURE 17: Where Should Teacher Evaluation Go from Here?

Survey Question: Many states temporarily paused formal teacher evaluations due to COVID interruptions to student learning and school openings. In your perspective, where should teacher evaluation go from here?

(N=882)



From these findings, we know that teacher support is top of mind for education leaders. So, what are perceptions on effective teacher support strategies that positively impact students learning?



Survey Findings Parallel Key Components of Effective Professional Learning

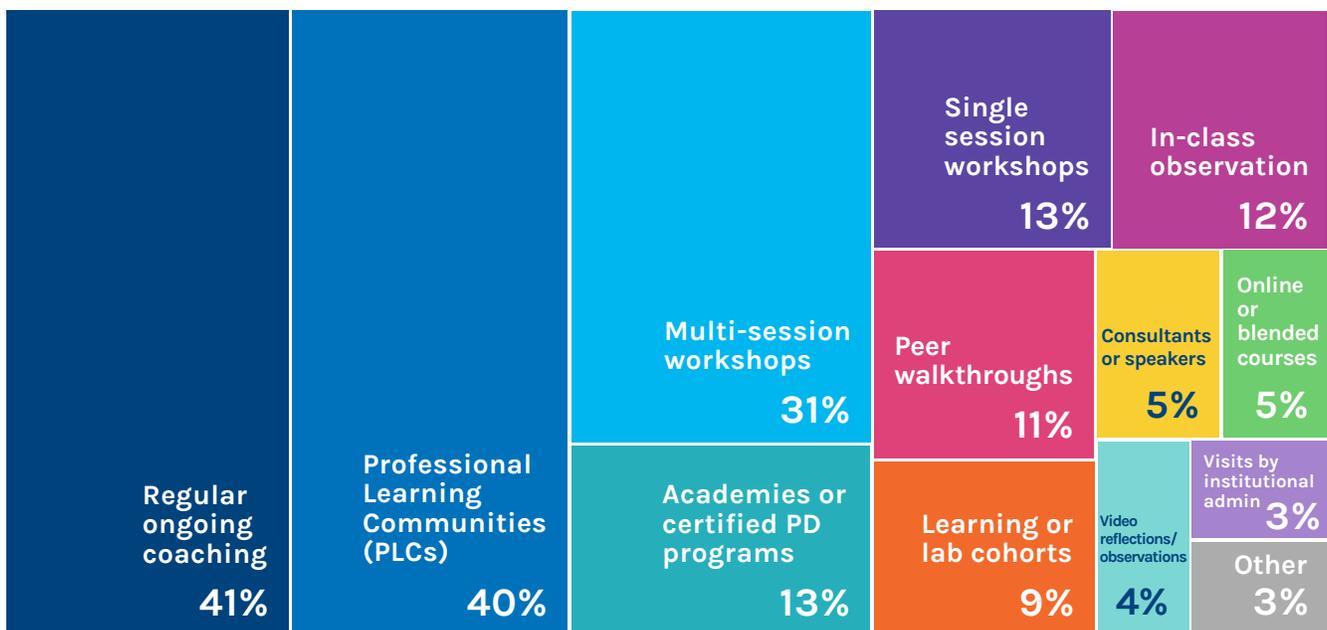
We asked education leaders, “Which two types of professional learning provide the greatest value to improving instruction and student supports?” Responses mirrored research regarding effective professional learning frameworks,²³ which feature three key components: extended training/ workshops (31%), professional learning communities (40%), and regular ongoing coaching (41%).



FIGURE 18: Most Valuable Professional Learning Activities

Survey Prompt: From the list below, select two types of professional learning that provide the greatest value to improving instruction and student supports, from your perspective.

(N=882)



In contrast, video reflections, consultants and speakers, online or blended courses, and visits by administrators were viewed generally as less compelling forms of professional learning. This may be because modern professional learning is perceived as a collaborative and performative process best done with peers rather than a more traditional “sit-and-get” knowledge-building process.

Fewer than Half of Survey Respondents Say Technology Is Used Effectively to Support Talent Needs

Finally, we asked education leaders where technology was being used effectively to support talent needs, and while results are encouraging, there is much progress to be made. The use of technology in service of professional learning, observation, hiring, and recruitment—while generally seen as effective—was only selected by less than half of respondents. And about one in five respondents feel that technology supports “none of the above” talent needs.

Reflecting research findings, educators report the



top 3

most effective

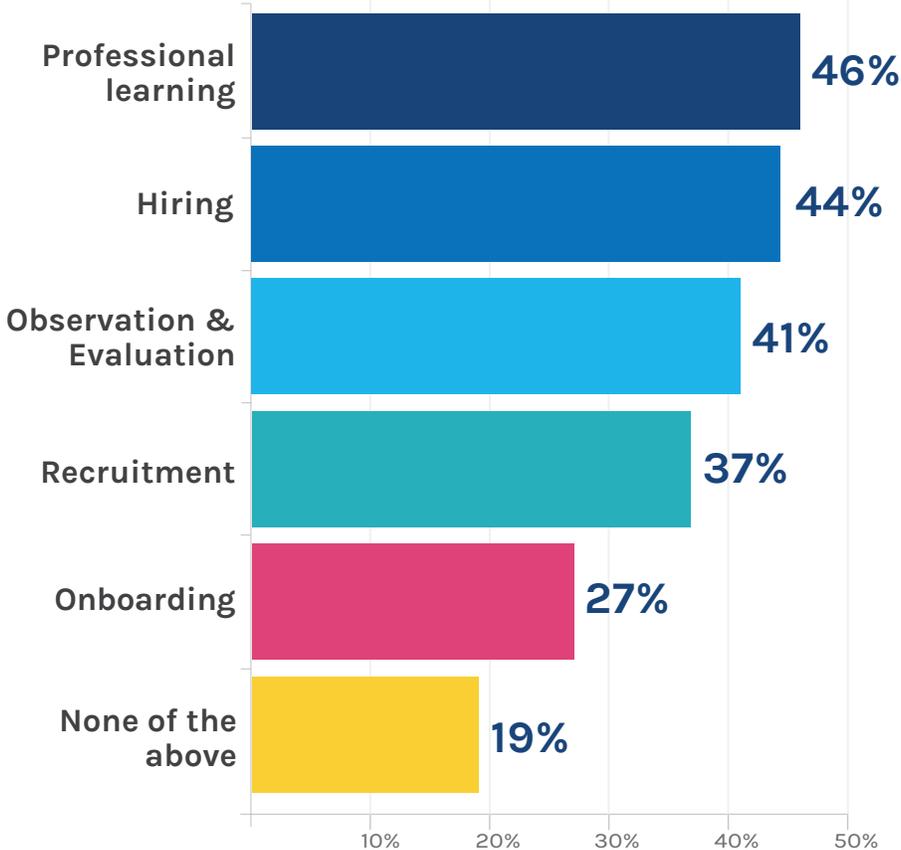
types of professional learning are centered around **collaboration** and **sustained learning**.



FIGURE 19: Perceptions on Use of Technology to Support Talent Needs

Survey Prompt: My district uses technology effectively to support the following talent needs. (Select all that apply)

(N=882)



This finding is consistent with results from the 2022 PowerSchool K-12 Talent Index research report. It revealed teacher retention as a top priority among schools and districts.²⁴ By focusing on improving teacher and staff support, schools and districts may be able to positively impact retention. Modern technology solutions can help enhance professional learning and professional development offerings, simplify administrative processes, and even speed up hiring and onboarding with automated workflows. Investing in these areas could help close the gap this study reveals in effectively supporting teachers and staff with technology.

Alongside disruptions and innovations in talent systems, many districts have maintained or strengthened their communication with families and caregivers. This is in an effort to address student enrollment and absenteeism trends. They're also providing robust wraparound tutoring and enrichment to get students back on track, as well as a host of new health and safety considerations.





Robust Family Engagement

Among the silver linings of the global pandemic, increased communication between schools and parents is perhaps the most significant. Upticks in COVID-19 cases in many districts were met with changes in schooling approaches—in-person to remote or hybrid learning—and required a new, heightened level of information exchange between health officials, district and school leaders, educators, families, and caregivers.²⁵

Pandemic Impacts on Parent and Family Engagement in Education: Opportunities and Challenges

Remote learning and consistent information-sharing with parents and caregivers had two ancillary effects: expanded parental awareness of their child's educational experience and a rise in engagement.²⁶ Technology took on a greater role in parent and family engagement, and districts leveraged their Learning Management System (LMS) and

two-way communication platforms to streamline educational, health, and safety information flows.

Increased parent, family, and community engagement in schooling brought opportunities and challenges to schools. Parents partnered with teachers to support positive student learning habits at home, such as persistence and time management. The complexities, knowledge, and skills inherent in teaching—showcased through online and hybrid learning approaches—inspired new parent and caregiver appreciation of educators across the nation.²⁷

One of the greatest challenges, however, was navigating divisive issues like masking policies and schooling approaches. Many communities were split in their views, catalyzing charged conversations and piling new stressors on students, educators, and leaders. Increased attention was paid to staff physical and mental wellness. District leaders gained experience and became skilled in facilitating conversations among different and opposing views.

Families and Community Members Share More Common Ground than News Coverage Suggests

Refuting perceptions of widespread controversy²⁸ stoked by news cycles, many school communities report a more collaborative parent, family, and community reality. We asked teachers, superintendents, and district communication leaders their views on whether they agreed that stakeholders seek common ground to identify solutions for student learning and wellness. A majority said yes. Only one in 10 communication leaders and two in 10 teachers disagreed.

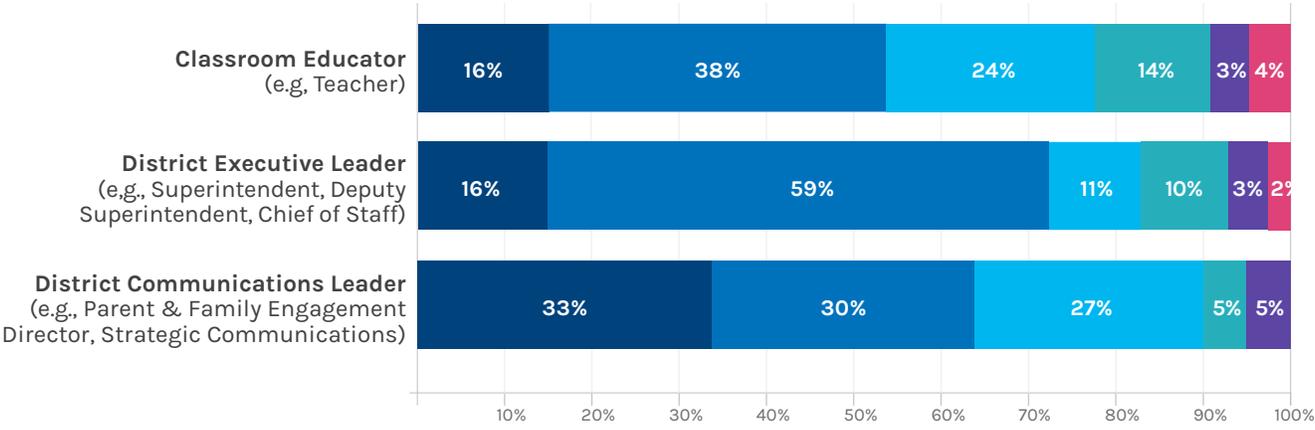
3 out of 4 district leaders say that parents, family, and community stakeholders seek common ground to identify solutions for student learning and wellness.



FIGURE 20: Educator Perceptions of Parent, Family, and Community Collaboration

Survey Prompt: Our parents, families, and community members seek common ground to identify solutions that contribute to student learning and wellness.

(N=924)



- Strongly agree
- Agree
- Neither agree or disagree
- Disagree
- Strongly disagree
- I'm not sure



Educators Report Sustained or Increased Focus on Family Engagement Following Pandemic

So, where do we stand now with parent and family engagement, nearly two and a half years after the beginning of the pandemic? We asked educators, and many reported that parent and family engagement is the same or higher priority now compared to at the height of the pandemic:

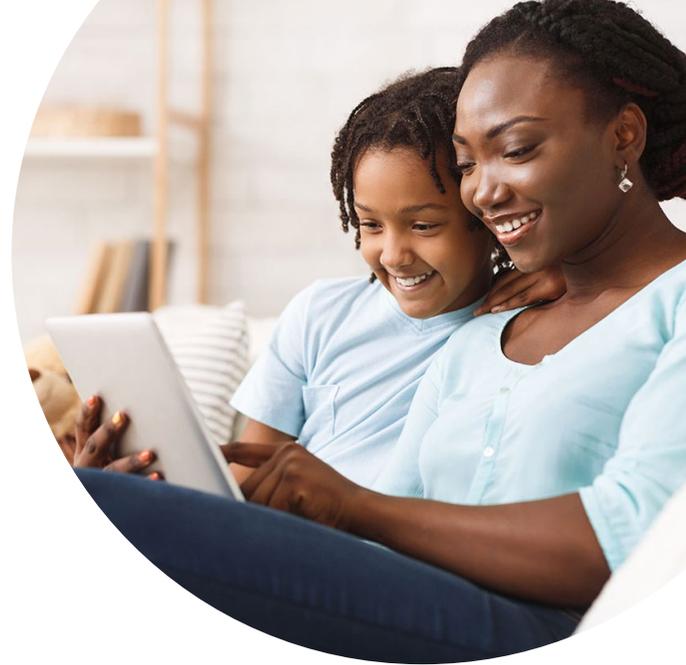
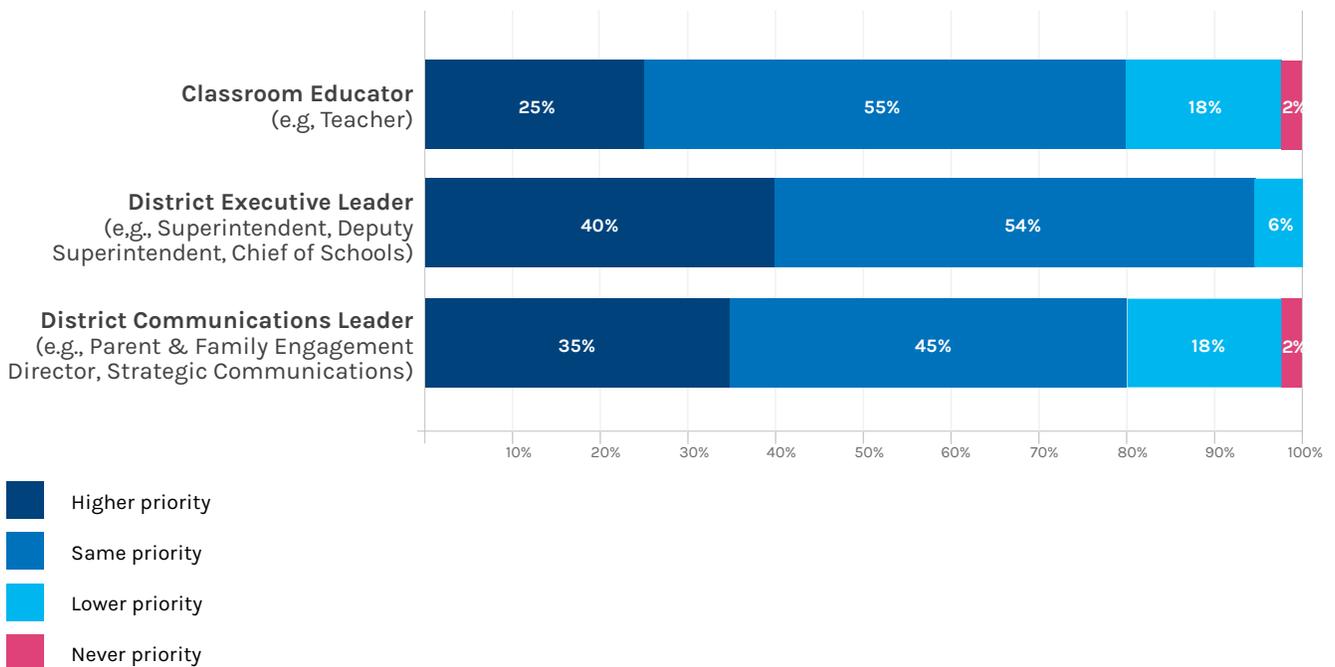


FIGURE 21: Teachers, Superintendents, and District Communication Leaders' Perceptions on Parent and Family Engagement

Survey Prompt: Compared to during the height of the COVID-19 pandemic, how would you describe your school/district's efforts to engage parents and families now?

(N=924)



When asked to reflect on the statement "My school/district effectively uses technology to communicate with students' parents and families," an overwhelming majority of teachers, superintendents, and communication leaders report agreement that this is the case in their school system. Given the recent boom in district adoption of technological communication tools, this is an encouraging sign that the learning curve is quickly closing, and systems are seeing success.

Districts Exploring Communication Tools to Find What Works Best to Engage Families, Reduce Student Absenteeism

Tracking parent and family engagement trends calls for focus on communication methods. We asked educators and technology leaders what tools they used and what they found works well. We heard that using a select few systems is important to avoid over-communication.

As districts navigate enrollment declines and concerning upticks in absenteeism, robust parent and family engagement is especially important. Most educators indicated that email and phone calls remain the most prevalent tools. Text messaging was selected by half of respondents as a chosen method, but written notice is still perceived as a reliable and effective means of intervention for six in 10 respondents. Educators also pointed to other tools, such as social media, Learning Management Systems, and district two-way messaging platforms.

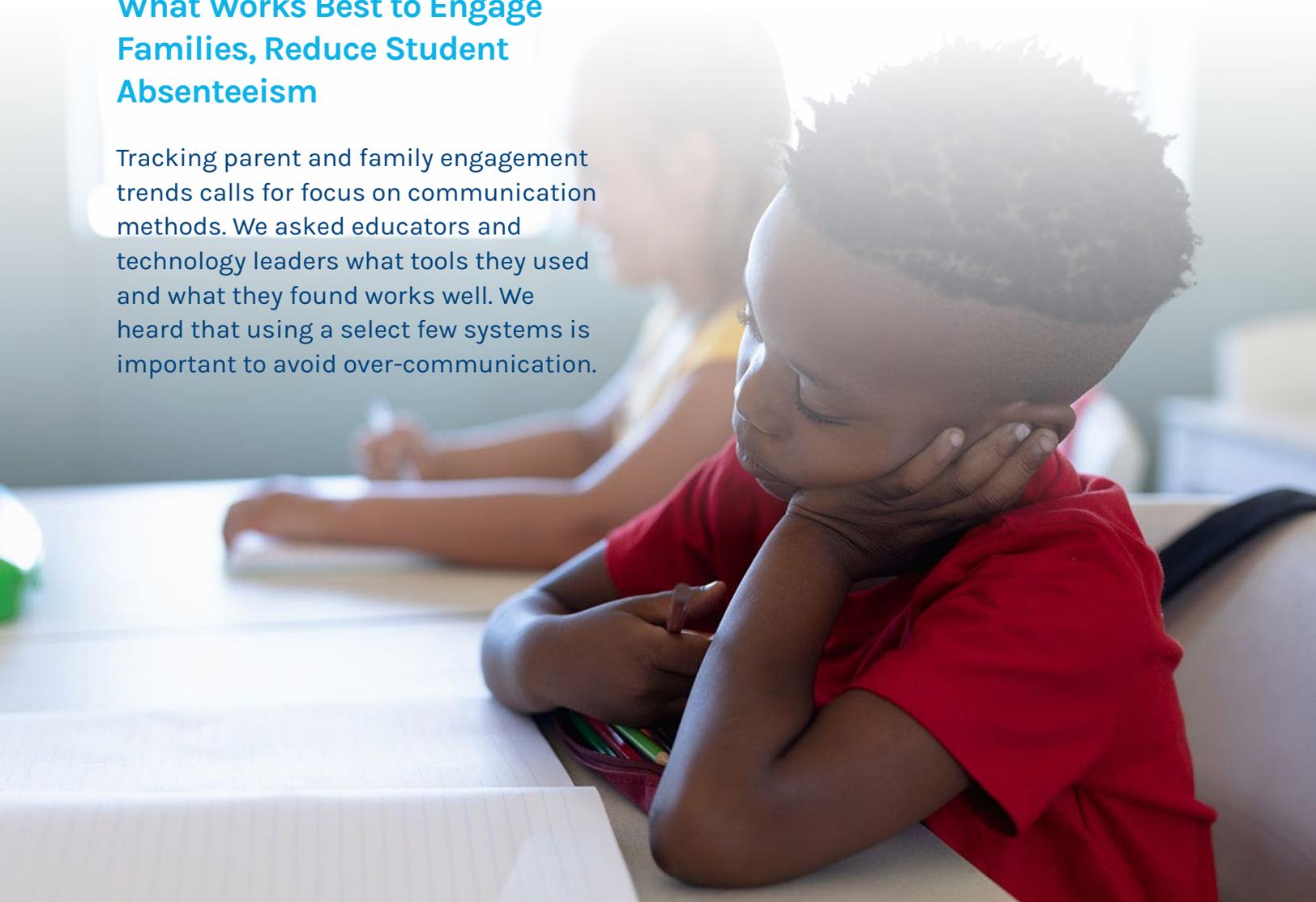
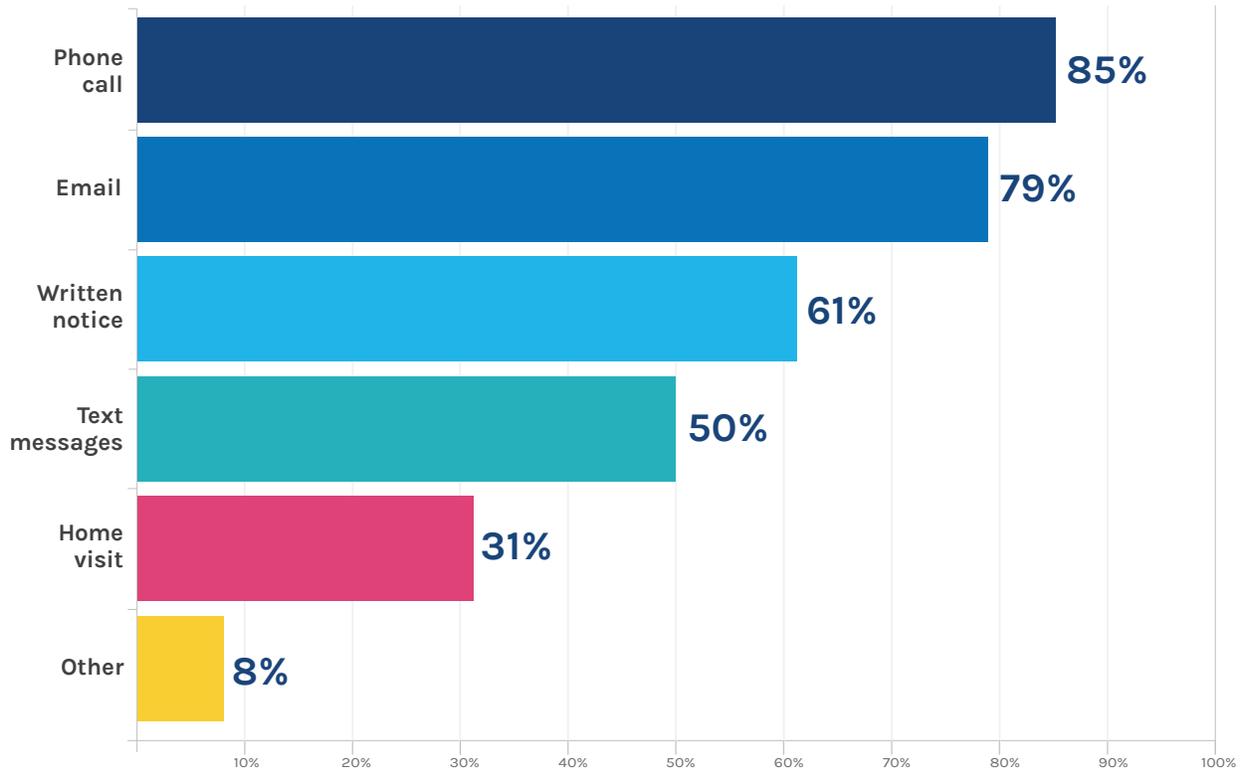


FIGURE 22: District Communication Strategies and Tools

Survey Prompt: Please identify all the ways your school/district notifies parents and families if their students' attendance is a concern. (Select all that apply)

(N=1,069)



Now our focus is on how do we share the good work that students and teachers are doing? Communication was so reactive during the pandemic, and now we're thinking about planning and being proactive. It's a fresh perspective!

JODI JOHNSON

Instructional Technology Coordinator, Princeton Public Schools, MN

Nine in 10 Educators Say Parent and Family Engagement Can Help Reverse Recent Enrollment Declines

The pandemic impacted student engagement, increasing absenteeism and tapering enrollment. This stoked concern about root causes and funding implications, and invited questions about the role of parent engagement. We asked educators about their thoughts on reversing recent enrollment declines.

When asked, “How important is effective parent, family, and community engagement to reverse recent enrollment declines across student populations—particularly early grades and high school students?” over half of respondents said it was “critical,” and nearly 40% said it was “important.” These findings demonstrate how much educators value parental involvement and partnership in reversing recent declines in student engagement.

In the next two sections, we explore early education and high school enrollment and absenteeism trends further, considering both social and education trends driving these phenomena.





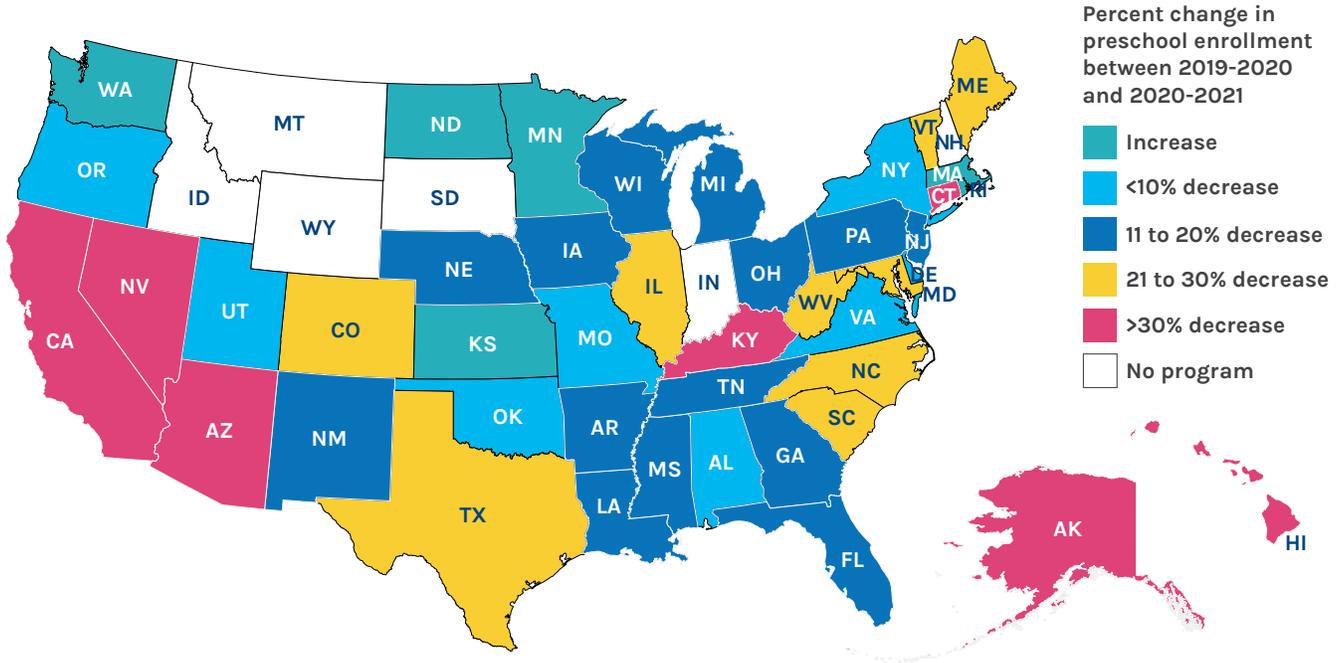
Expanded Early Childhood Learning

In our national scan of district strategic priorities, we found that early childhood education received growing interest at the state²⁹ and district³⁰ levels. This was in response to heightened calls for more and earlier equitable education opportunities and a reduction in family financial burden for early education. A buzz of advocacy and dialogue at the federal level in late 2021,³¹ followed by inaction, spurred local leaders to act.

Unfortunately, the pandemic dramatically impacted enrollment in preschool for 3- and 4-year-old children (i.e., PK3 and PK4), a result of health and safety concerns as well as classroom closures and remote schooling.³² According to the National Institute for Early Education Research (NIEER), preschool enrollment declined in nearly every state across the country.³³

FIGURE 23: NIEER Findings on Preschool Education Enrollment

PRESCHOOL ENROLLMENT DECLINED IN NEARLY EVERY STATE



(Source: National Institute for Early Education Research. The State of Preschool 2021: State Preschool Yearbook.)

This finding parallels the National Center for Education Statistics (NCES) finding that the number of reported students attending public schools in the United States in 2020-2021 fell by 3% compared to the 2019-20 school year. Preschool enrollment dropped a staggering 22%, and kindergarten enrollment fell by 9%.³⁴

While education leaders grapple with enrollment fallouts from the pandemic and re-engage families of 3-, 4-, and 5-year-old children, there is strong reason to believe that early childhood education enrollment will experience a resurgence.

Between SY19-20 and SY20-21,
preschool enrollment dropped by **22%**
and kindergarten enrollment fell by **9%**
 nationally compared to
3% drop overall in higher grades.

Educators See Early Education as Critical and Long Overdue

Decades of research and growing public perceptions backing the investment in early childhood education are causes for optimism. We asked educators their perceptions of early childhood education, and 54% said these programs are “a critical educational service that should have been offered long ago,” while 38% felt early childhood is “a promising investment that should be evaluated further for efficacy.”

Zero respondents felt that early childhood education was “a misguided use of funds.” That in itself is a telling piece of data. Educators stand united on this issue.

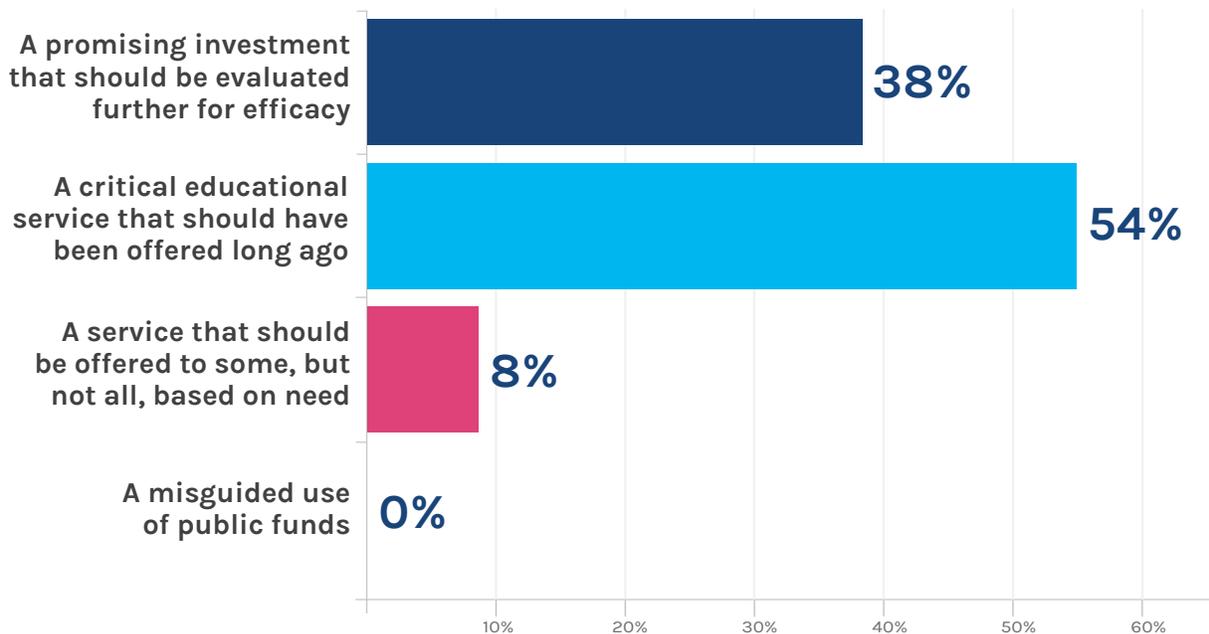
54% of educators say early childhood programs are a **critical educational service** that should have been offered long ago.



FIGURE 24: Educators’ Perceptions of Early Childhood Efficacy

Survey Prompt: Select the phrase that best describes your perspective on publicly provided early childhood education for all 3- and 4-year-olds.

(N=13)



Three Key Considerations for District Leaders Aiming to Expand Early Childhood Education

According to Dr. Ellen Frede, Senior Co-Director of the National Institute for Early Education Research (NIEER), district leaders should consider three key ideas before launching or expanding early childhood programming:

- 1. Get educated to really understand what works and what doesn't with Pre-K programs. Bring in a consultant or organization to support the work.** Decades of research on key components of effective Pre-K programs³⁵ and a proliferation of guidance that is practice-oriented are available.³⁶ District leaders can also bring on an expert to help guide their efforts.
- 2. Stand up an early childhood advisory council that should include higher education experts, head start and childcare community, and K-12 leaders.** With greater collaboration, there is more buy-in and improved continuity in student and family educational experiences. Some states, such as New Jersey, require school districts to convene an early childhood advisory council while many others encourage this.

- 3. Reflect on K-3 offerings and be prepared to adjust.** Increasingly, states and districts emphasize the importance of intentional transition strategies to provide more seamless, coherent education to students as they move from Pre-K to Kindergarten. These should include curricular and instructional changes.³⁷ If this is not done it can dampen the effect of an early education program's impact. Dr. Frede urges districts to make the transitions from Pre-K to K as seamless as possible—even when children attend Pre-K in a different building or setting.





Graduates Prepared for College, Career, and Life

Pandemic Erodes Teacher-Student Relationships, High School Attendance Slips

In our scan of strategic plans, we found that districts prioritize graduation and student readiness for life beyond high school. However, the pandemic pulled educators' focus away from college, career, and life readiness (CCLR) efforts and toward immediate student health and safety needs and learning interruptions.

Recent research from RAND found that in 2021, high school educators engaged in fewer discussions about education and career options with students than prior to the pandemic. Additionally, postsecondary testing goals and soft skills received less focus.³⁸ District leaders shared worries that lockdowns, virtual work, and postponed college visits hurt many students' social development and limited their exposure to work-based learning and college campuses. According to the National College Attainment Network, Free Application for Federal Student Aid (FAFSA) completion rates were down 9% in March 2022.³⁹

The downstream impacts of fewer teacher-student conversations about learning and career pathways show up in attendance figures. Losing those interactions during disruptions and virtual schooling also strained opportunities for meaningful relationship-building. Nationally, high school attendance slipped 3% from prior to the pandemic,⁴⁰ and in many districts, chronic absenteeism soars.

Schools and districts want to identify which students slipped from the rolls. From there, they plan to bring them back into the classroom through home family visits, strengthened classroom culture, and more frequent conversations about how they are doing, their aspirations, and efforts to prepare for their future.

Employment Shifts Raise Future-Ready Questions

These public education impacts paralleled seismic shifts in the employment and jobs sector for students' families. The pandemic caused historic losses of employment and inspired a broad swath of workers to rethink their current job, motivated by health concerns, shifts to remote work, or discontent with low wages.⁴¹ Low-income communities experienced a disproportionate loss of jobs and challenges to re-entering the labor market than their higher-income counterparts.⁴² While COVID-19 caused a mosaic of interruptions to business operations and stubborn supply chain issues, remote work and reliance on technology grew by leaps and bounds, reshaping entire sectors of the economy.⁴³



Attendance has been a very strong indicator of school success—so much so that the U.S. Department of Education has increased focus on reporting in this area, both for truancy and chronic absenteeism. Attendance below 85% is the greatest area of concern. We've seen double-digit declines in attendance rates among schools that had 90% attendance or higher prior to the pandemic. We need to go back to the student-teacher relationship; the literature is clear that this is fundamental to improving student engagement and increasing attendance.

JUDITH MARTINEZ

Colorado Director of the Center for High School Success, Stand for Children

Employment trends are a critical factor in designing CCLR programs that prepare students to enter sectors with long-term labor demand and living wages. For example, the U.S. Bureau of Labor Statistics reports that employment in computer and information technology occupations is projected to grow 13% from 2020 to 2030, faster than the average for all occupations.⁴⁴ Cloud computing, the collection and storage of big data, and cybersecurity are all driving growth and disrupting old ways of work. And while computer science courses and micro-credentials in software coding have become a more common offering across districts, many students still have limited options.⁴⁵

These societal shifts and employment trends increasingly influence school districts' ideas of what a future-ready graduate looks like.

Districts and States Anchor Future-Ready Conversations to Portraits of a Graduate, Striking Resonance with Personalized Learning Frameworks

What does it mean to be future-ready? In the wake of changes brought about by COVID-19, many districts are revisiting what student characteristics are crucial for future success. Those discussions, in turn, contribute to new ideas for designing instruction and supports.

Many districts have painted a portrait or profile of a graduate, which the Aurora Institute deemed “a modernized vision for student learning and achievement.”⁴⁶ These portraits emerged in our national scan of district priorities as a common device to communicate, in simple terms, what students should demonstrate upon completion of their PK-12 schooling journey. In addition to districts, states such as Washington⁴⁷ and Utah⁴⁸ lead the charge to set a clear benchmark of student aptitudes—many of them skills-based.



FIGURE 25: Omaha Public Schools Portrait of a Graduate⁴⁹



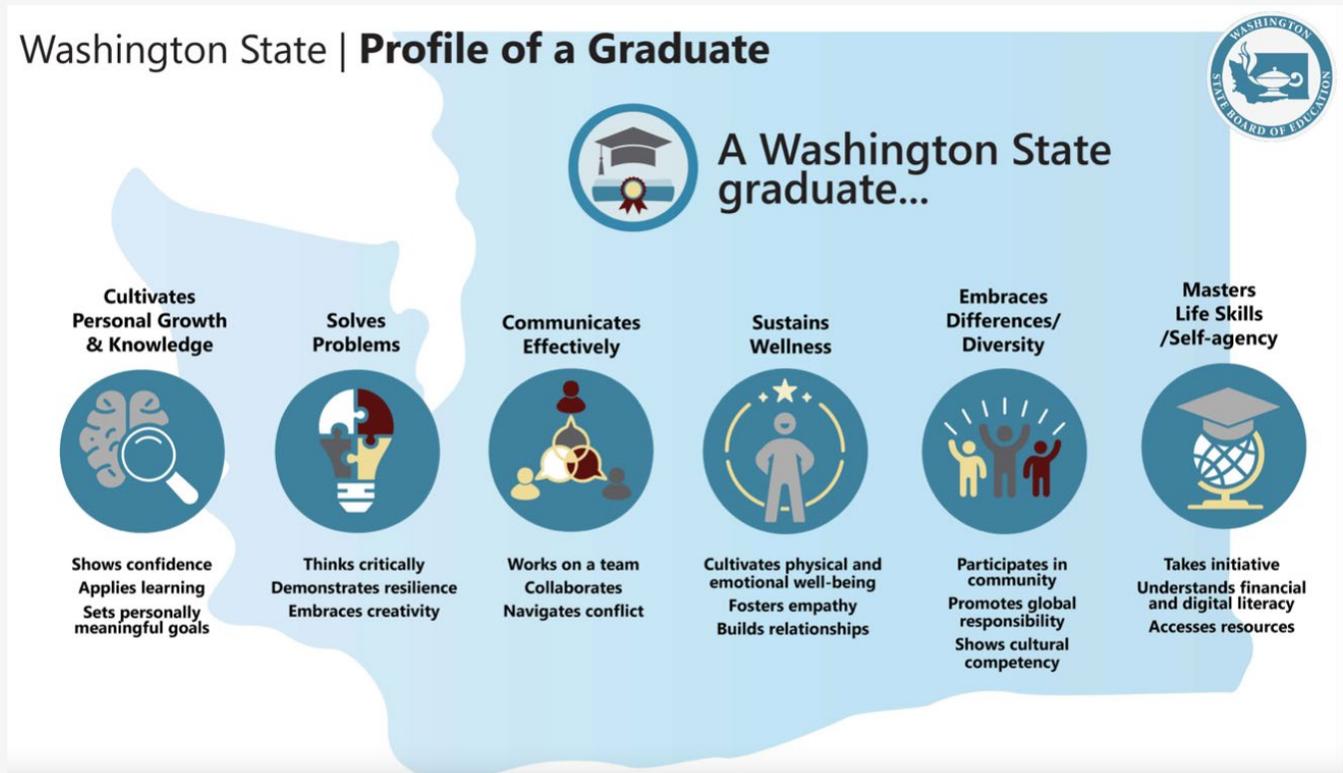
(Source: <https://www.ops.org/domain/1010>)

People skills and self-management skills are deeply embedded in these profiles of a graduate, a response to what Andy Tucker at the Colorado Department of Education says has been resounding feedback from colleges and employers that students “are not ready.”

In conversation with district leaders, we found a strong link between student characteristics captured in their portraits

of a graduate and frameworks to guide personalized learning. Life-ready skills such as problem solving, perseverance, and skillful communication—baked into many personalized learning frameworks—also appear in portraits of a graduate. This is a promising area of synergy in how school districts conceptualize the PK-12 continuum’s goals and efforts to expand the personalization of learning in schools.

FIGURE 26: Washington State Profile of a Graduate⁵⁰



(Source: Washington State Dept. of Education)



These portraits are answering critical questions like, ‘How do we prepare our students to be able to innovate and maneuver in the changing world in which we live?’ They are also driving strategic planning for CCLR efforts that are more about being life and future-ready than four-year degrees. We are hearing increasingly more about how important essential employability skills and social and emotional skills are.

ANDY TUCKER

Former Director of Postsecondary and Workforce Readiness,
Colorado Department of Education

How are school districts acting on these portraits and actualizing opportunities for students that foster these skills? Leaders told us that ideally, career pathways exposure happens in elementary school, with project-based learning in middle school and hands-on experiential learning in high school.

To what extent are these CCLR offerings provided? We asked educators.

CCLR Options Increasingly Diverse, Yet Fewer than Half Report Offerings Outside Dual Enrollment, AP, or IB Courses

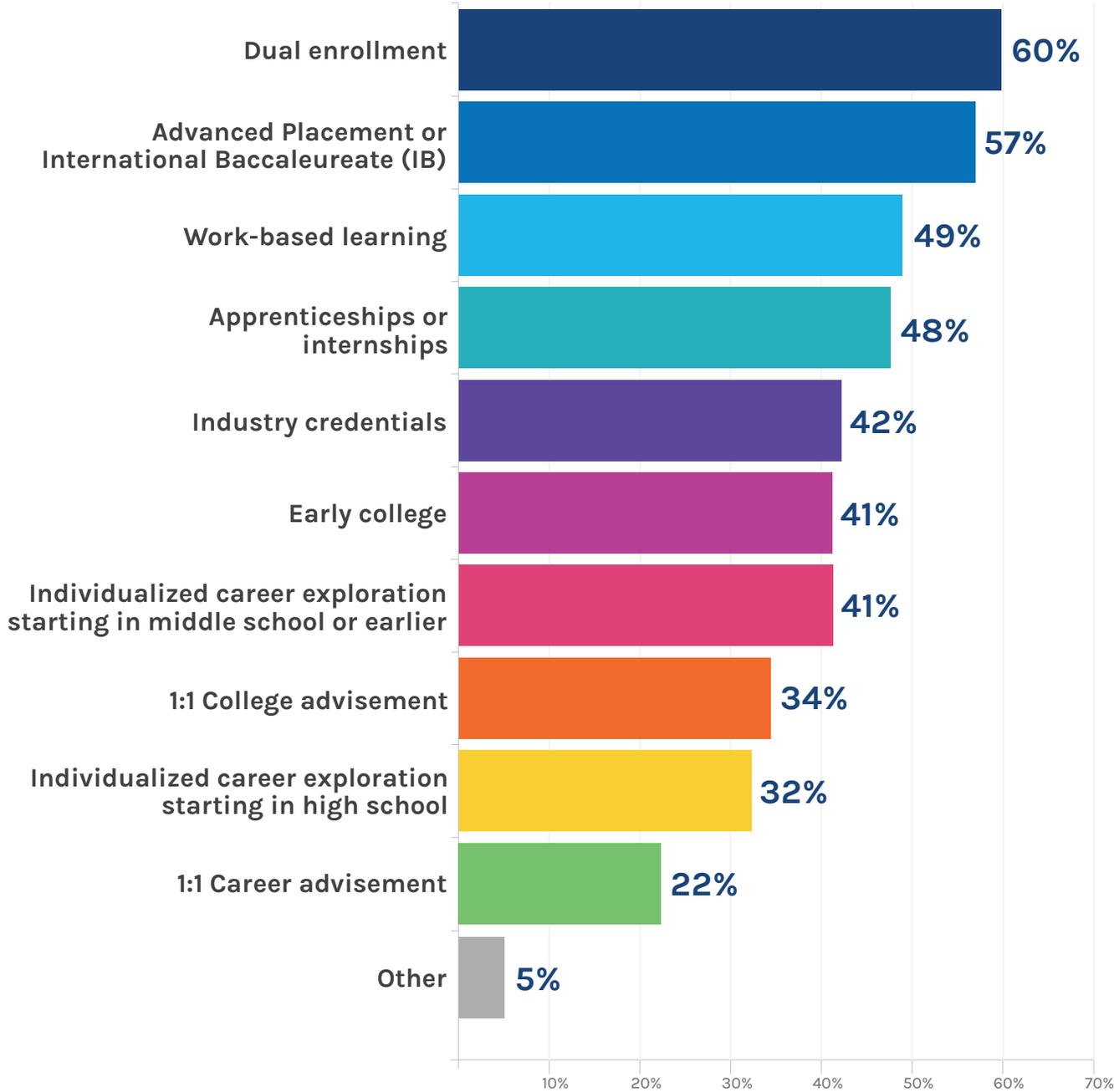
In terms of programming and options offered, district superintendents and CCLR leaders told us that dual enrollment and Advanced Placement (AP) courses or International Baccalaureate (IB)—perhaps the longest existing types of programs—are most prominent. Close to six in 10 respondents report that their district offers these opportunities.



FIGURE 27: Survey of District College and Career Readiness Program Offerings

Survey Prompt: Our district offers these college and career readiness pathway programs to students. (Select all that apply)

(N=166)



These results show increasingly diverse program offerings are being offered to students—at least four in 10 respondents report work-based learning, apprenticeships, early college, industry credentials, or individualized career exploration starting in middle school or earlier are provided in their school district.

And yet, these CCLR offerings appear limited in scale. While some districts may offer several options to students to support career exploration and tailor their secondary studies to interests and skills, more than half of districts do not offer options beyond dual enrollment, AP, or IB. Challenges providing diverse CCLR programming, Judith Martinez of Stand for Children points out, are often technical in nature, with changing student interests, lack of access to options, and competing staffing demands—especially in rural districts—hampering a wider array of offerings.

We asked district leaders to what extent students were engaged when developing high school course offerings. Over 50% of respondents agreed that student voice figured into leaders' consideration and design of high school course offerings—an encouraging number. Still, one in five respondents indicated their district did not solicit student perspectives when designing course offerings. These findings suggest that a combination of technical challenges and lack of student engagement may be contributing to a narrow set of high school course offerings in a segment of districts.

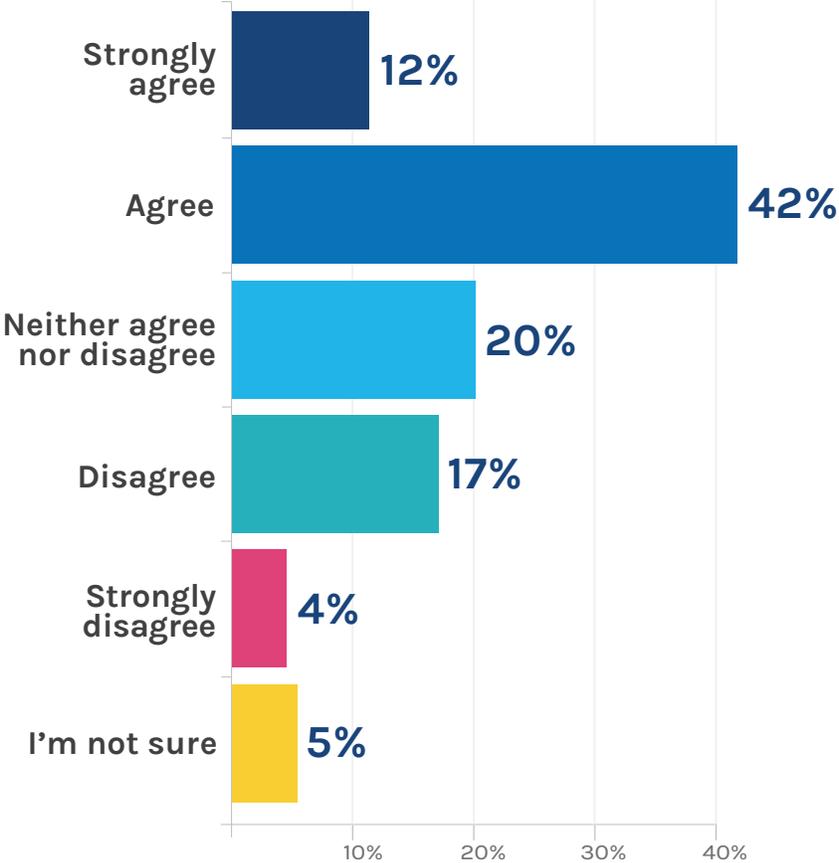
A majority of district leaders report that student voice figures into consideration and design of high school course offerings. Still, 1 in 5 respondents indicated their district **does not solicit student perspectives when designing course offerings.**



FIGURE 28: Perceptions on District Solicitation of Student Voice in High School Course Offerings

Survey Prompt: Our school/district regularly solicits and considers student voice to provide relevant and engaging high school course offerings.

(N=166)



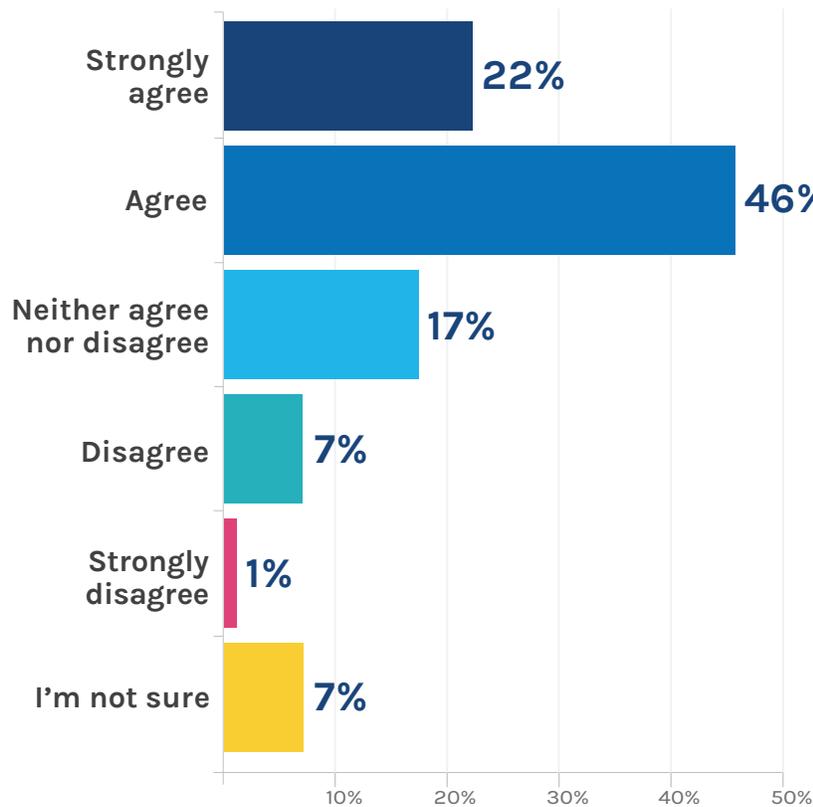
Finally, we asked educators to consider whether technology was being used to advance student readiness. An encouraging two-thirds of respondents indicated that districts do a good job of leveraging technology to empower students in their exploration and consideration of future pathways.

Nearly **7 in 10** educators say their district **leverages technology** to support **students' exploration** of postsecondary institutions and career pathways.

FIGURE 29: Educator Perceptions of Technology Use in Student CCLR Exploration

Survey Prompt: Our district fully embraces technology to empower students' exploration of postsecondary institutions and career pathways.

(N=166)





Organizational Excellence and Efficiency

Excellence and efficiency were both cited as strategic priorities in our national scan. School and district culture, leadership, communication, clear goals, and well-supported staff are key building blocks. But so too are capable systems and sustainable finances. We found that school districts now place greater emphasis on these core efforts than prior to the pandemic.

Operational functions of school systems, such as budgeting and technology, have long been perceived as secondary to the most proximate levers to improving student academic achievement and growth, such as instruction, student supports, and talent initiatives. But after the pandemic upended school operations and spurred billions in pandemic relief funding, district priorities shifted, and organizational excellence and efficiency garnered intensified focus.

Budgets Draw Stakeholder Scrutiny as Districts Leverage Sizeable Pandemic Relief Funds

The term "unprecedented", undoubtedly overused since the pandemic began, is nonetheless appropriate when sizing up the pandemic relief packages that the U.S. Congress passed in a matter of one year. These funds, purposed to help school systems safeguard student health and address the many impacts on their learning and wellbeing, came in three acts: The Coronavirus Aid, Relief, and Economic Security (CARES) Act, the Coronavirus Response and Recovery Supplemental Appropriations (CRRSA) Act, and the American Recovery Plan (ARP) Act each contained an Elementary and Secondary Schools Education Relief portion (ESSER I: \$13.5B; ESSER II: \$54B; ESSER III: \$122B). In total, these acts delivered \$181 billion in federal funds to schools. By comparison, ESSER funding exceeded three times the nearly \$50 billion provided through the American Recovery & Reinvestment Act (ARRA) in 2009 to counter the economic impacts of the Great Recession.

Pandemic relief funding totalling over \$181B for K-12 schools exceeded

3X the nearly \$50 billion provided to schools through the American Recovery & Reinvestment Act (ARRA) in 2009 to counter the economic impacts of the Great Recession.

Given the staffing challenges, technology imperatives, and stronger student supports needed to undertake learning recovery, school districts welcomed these funds.

Stakeholder engagement—a built-in requirement for school districts' acceptance of ESSER funds—promoted conversations between district leaders and teachers, support staff, principals, families, and community stakeholders about pandemic impacts, needs, and key investments to put schools on a firmer footing. These efforts produced a flurry of ESSER plans outlining priorities and catalyzed heightened community interest and participation in deciding how funds would be spent.

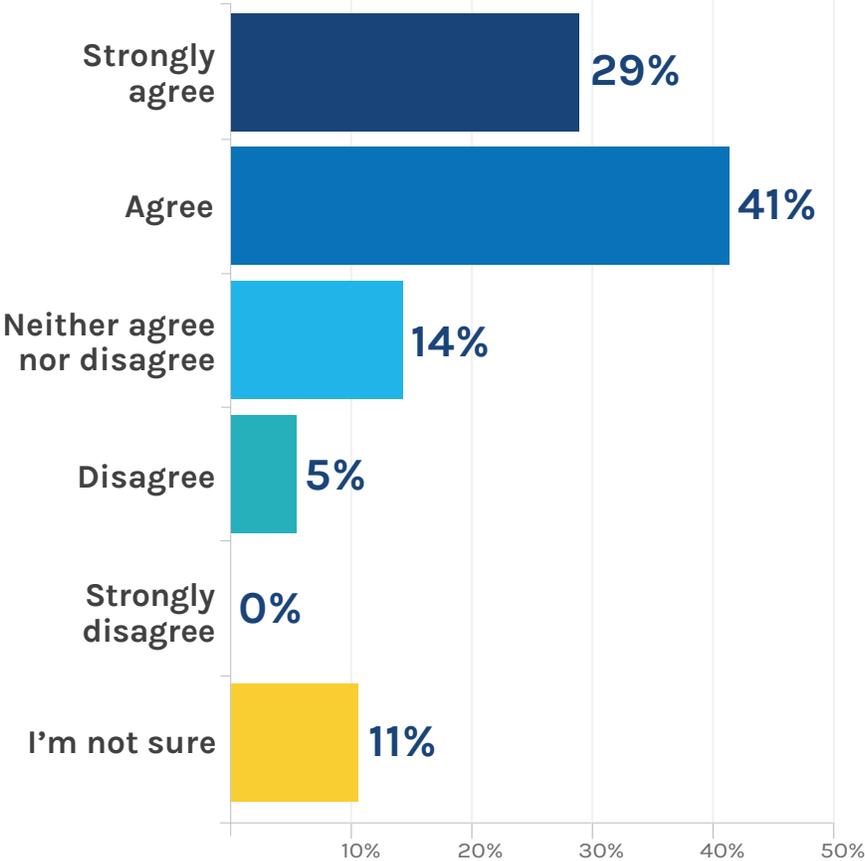
We asked educators their perception of district uses of these funds, and seven in ten educators agreed that ESSER funds addressed the right priorities in their districts. This suggests that efforts to engage stakeholders and find common ground achieved traction.



FIGURE 30: Educators' Perception of Local ESSER Investments

Survey Prompt: Our district federal emergency relief (ESSER) funds are addressing the right priorities for our school/district.

(N=477)



Top District Technology Modernization Investments

According to an Education Week Survey, by March 2021, 90% of district leaders provided a device for every middle and high school student, and 84% did so for elementary school students.⁵¹ Student-centered technology use ushered in a new era of schooling digitization, and with it, new thinking about what is possible in systems interoperability, automation, and insights.



We are so reliant on technology today as a tool for K-12. We have systems for instruction, evaluation, finance, and managing a district's human resource functions. All of these systems must operate seamlessly and must be driven by standards for reporting if a district is going to be effective.

DR. TIM CLARK

Vice President of K-12 Programs, 1EdTech (formerly IMS Global)

In response to our survey, districts shared that they have modernized the following top systems over the past two years: learning management, family communication, student information, data and analytics, enrollment, and parent and family engagement tools. Most of these investments were driven by shifts in types of instruction, as well as the urgency to understand student learning needs and identify recovery priorities. A noteworthy 8% reported that their district modernized a comprehensive spectrum of tools in recent years. And of course, it is possible that school districts modernized some or many of these systems prior to two years ago.

4 in 10 educators report that their district

modernized learning management systems and parent and family

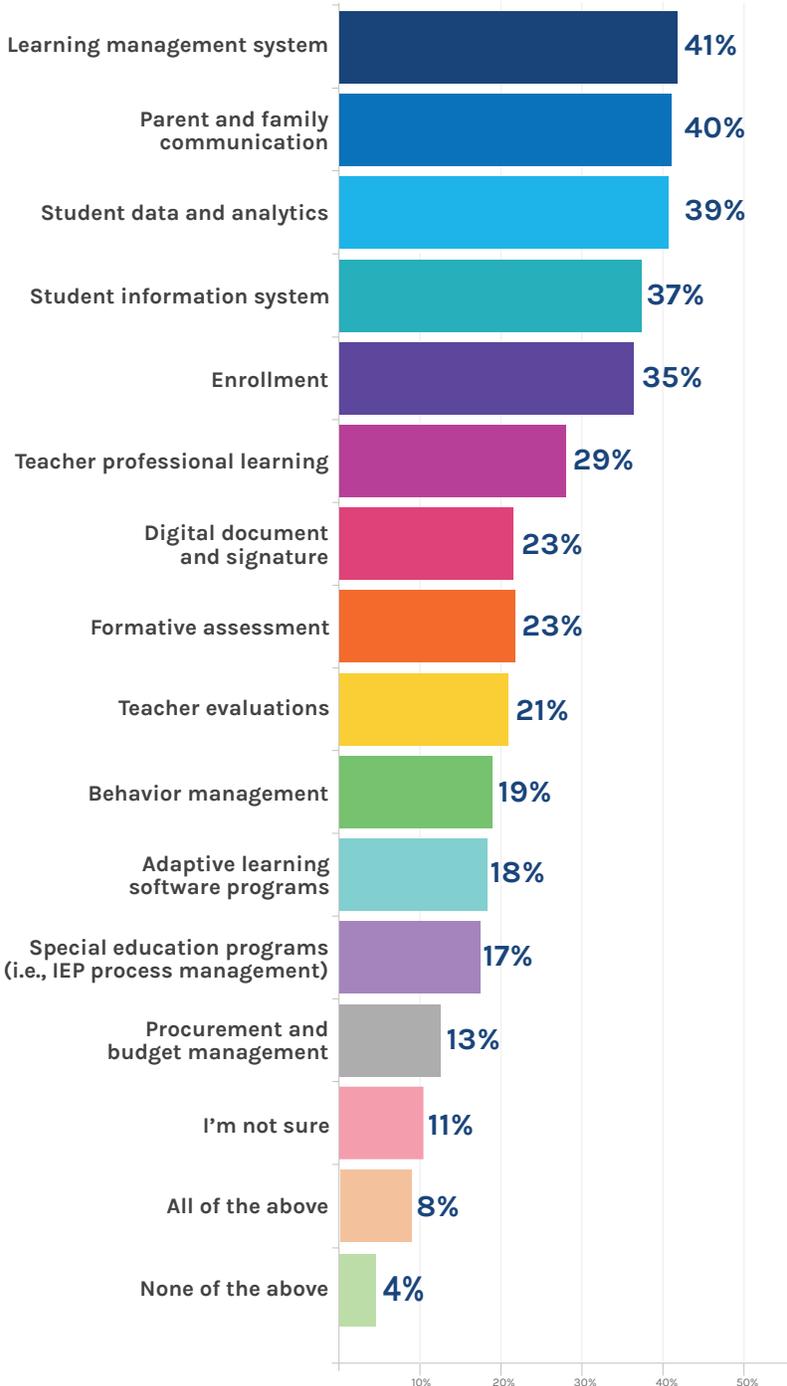
communication tools during the pandemic, more than any other type of technology investments.



FIGURE 31: Survey Responses of Districts Who Have Modernized Systems

Survey Prompt: My district has modernized the following technology in the past two years. (select all that apply)

(N=477)



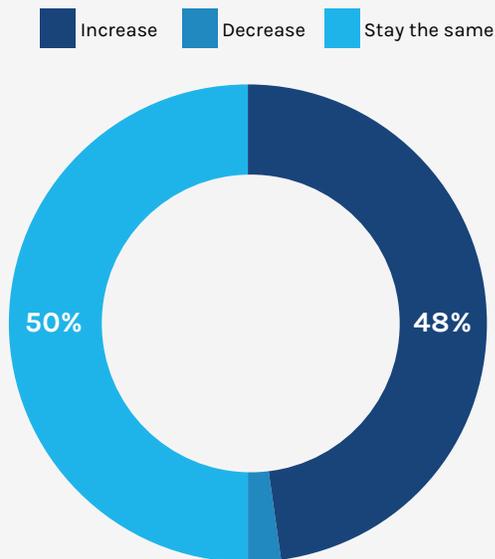
This data suggests that some districts are delaying or struggling to modernize their total systems infrastructure, with 13% modernizing their budget and finance systems and less than 20% investing in their special programs systems. Competing priorities and other barriers to modernizing these systems may be at play here. For example, more than three times as many respondents indicated modernization of

their LMS. Modernization is happening, just not across all systems equally.

We also surveyed districts to understand their plans for modernizing finance and talent systems in particular, as these are often intertwined in the process of planning, and close to half of districts expected increased investment in these systems.

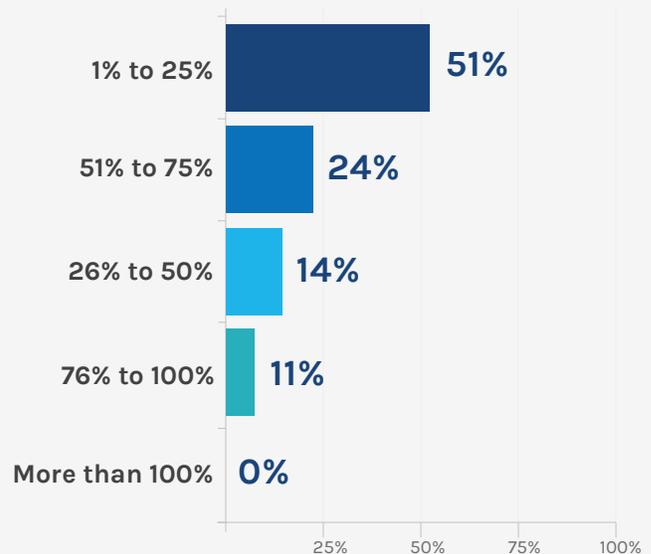
FIGURE 32: District Leader Perceptions on Expected K-12 Investment in ERP/HR Systems

Expected Investment Change in the Next Two to Three Years



(Source: Hanover Research)

Expected Investment Increase



Without the right interoperable technology, districts are often left to manual processes, cobbling disparate systems and processes to plan and support their employees.

The coronavirus pandemic shed light on these often-overlooked gaps in system functionality. As many employees began to work virtually within disparate and antiquated systems, it was clear that

clunky systems ate up too much time, frustrated users, and at times made it difficult to find accurate data. And for large school districts in particular, the challenge of managing time and attendance data for thousands of employees—already a costly and time-consuming process—was only exacerbated without a digital platform to automate and reconcile it all.

As districts consider the next leg of their digital readiness journey after their pandemic sprint, we asked what leaders should keep in mind to guide this work.

Key Considerations for Smart, Long-Term Technology Investments and Successful Diffusion

ESSER funds and the opportunity to modernize key student information and learning management systems, among others, inspire more intentional thinking and coordination among district and school leaders.

Michelle Bourgeois, Chief Technology Officer at St. Vrain Valley School District in Colorado, shared, “It’s a constant hard look at what we believe our future should hold and where our priorities lie. It’s easy to throw money into technology purchases and not think about the long-term impact. So for each of our [technology] initiatives, there are three buckets of considerations: obtain, train, and sustain. When we obtain a tool, we ask: Does it align with our instructional goals? Is it something we can support and scale? In terms of training, we set aside 10 to 20 percent of overall product investment to ensure the staff is supported. And we ask: What will we do to ensure this product is sustained into the future?”

St. Vrain Valley School District has been applying these considerations for a decade. That’s why they’re recognized by many in Colorado and nationwide as a district to model when designing a digital ecosystem and smart supports for educators and staff.⁵²



Teacher adoption and effective technology use only come with the guarantee of sustainability. Every adoption should include a long-term strategy aligned with district priorities. If a teacher thinks that a resource won’t be available in three or five years, I can’t blame them for not putting the time, effort, and energy into learning how to use that technology and use it to improve instruction.

MICHELLE BOURGEOIS

Chief Technology Officer, St. Vrain Valley School District, CO

In terms of scaling and implementing technology systems, St. Vrain Valley School District uses a model that recognizes the stages of technology diffusion and needed staffing supports. Just as with personalized learning, technology innovation in a district can be strengthened through a framework of considerations, such as who should be involved in selecting technology and what is the right scoping of supports.



FIGURE 33: St. Vrain Valley School District Innovation Tech Framework⁵³

<p><i>A framework to thoughtfully diffuse innovative technology into the district.</i></p> 	<p>Innovation <i>Being explored by a few people with as yet unknown benefit or impact.</i> Sparking new ideas</p>	<p>Early Adoption <i>Use and examination by a subset of people for potential expansion.</i> Preparing for launch</p>	<p>Early Mainstream <i>Supported and accepted as an optional part of learning in SVVSD.</i> Getting the word out</p>	<p>Mainstream <i>Embedded into everyday learning in SVVSD</i> Available district-wide</p>	<p>Innovative Tech Framework tech.svvsd.org/support/itf • codex.svvsd.org</p>
BEFORE YOU BEGIN.....	Check out Codex				
What are key considerations?	Does it meet privacy requirements? Does it meet security and safety requirements? Is it compatible with our infrastructure?	Does it meet an unaddressed need? Does it align with curriculum and learning goals?	Is it best suited to meet the identified need? Are there other solutions already in place?		
Who should be part of the conversation?	Awareness: Site Administrator Inquiry: Innovation Center Network: Senior Manager of IT Operations and Infrastructure Privacy: Manager of IT Service Delivery Safety: Risk Management	AND... Curriculum: Executive Director of Curriculum Support: Senior Manager of Technical Support	AND... PD: Coordinator of Professional Development Awareness: Area Assistant Superintendents	AND... Implementation: DTS Learning Systems Team	
What does support look like?	Self support	Site based support Consultation from Innovators	Some support from curriculum and DTS Some PD is offered	Full support by curriculum and DTS PD embedded	
Where is it being used?	Innovation Center DTS Imaginarium One or a few Individual spaces in the district (A single library, makerspace, extracurricular clubs)	Many individual spaces in the district. A few classrooms.	Most individual spaces in the district. Some classrooms.	Most or all classrooms.	
Who funds and refreshes?	Site level	Site level Some seed money possible	Some district budgeting, but no guarantee of continued funding. TeChoice eligible.	District funding	
What is an example in each stage now?	 Misty Robot	 AR/VR	 3D printer	 iPad	

(Source: St. Vrain Valley School District)

School Districts Face Steep Learning Curve to Guard Systems from Cybersecurity Attacks

With ransomware, phishing attacks, and data breaches, cybersecurity incidents recently shifted from a potential worst-case scenario to reality for too many districts nationwide.⁵⁴ During the 2020-21 school year alone, the nonprofit organization K-12 Six, which operates as a cybersecurity “enhanced information sharing and analysis center,” documented 166 school incidents affecting 162 districts across 38 states.⁵⁵

Speaking with chief technology and information officers and issue experts in this area, we learned that many districts get caught unaware or unprepared. External, and even internally originating cybersecurity threats, continue to keep IT

workers awake at night. So much depends on proactive training of staff and students to identify phishing attacks. When one arises, end users must recognize the threat and know how to exercise the utmost caution when clicking on links.

Technology and information leaders—on the front lines of the expanding use of technology—are quickly learning that security standards are key when selecting and maintaining student information systems (e.g., SIS, LMS, and enterprise resource planning (ERP) systems, among others). Core security elements like security by design, third-party penetration testing, and responsible disclosure programs are quickly becoming technology vendor non-negotiables for many districts. If and when incidents occur, districts expect a robust security incident response and rapid communication to triage the situation swiftly and restore a line of defense against future incidents.



Cybersecurity is the number one challenge to districts. Cyber criminals have realized that districts are soft targets. But when you ask technology leaders about their local threat, they underestimate it. And only one in five districts have staff that own the work of cybersecurity.

KEITH KRUEGER

Chief Executive Officer, Consortium for School Networking (CoSN)

Organizations like the Consortium for School Networking (CoSN) lead the drive to support schools and districts in implementing key security best practices. This helps minimize risk while allowing educators to focus on the work of supporting student learning and wellbeing. Keith Krueger, CEO of CoSN, notes the broad implications of technology and security and shares that, “In the last 20-30 years, most superintendents thought of technology as a separate department, but really, it’s a horizontal, strategic resource.” He points out that modern infrastructure with up-to-date security controls is critical to cybersecurity protection.

“Solutions cannot just be siloed. The wild west of spring 2020—where teachers went out and selected whatever free tools were out there to conduct remote learning—was not sustainable from a security standpoint,” Krueger shared.

Cloud-based system hosting and strong interoperability offer major advantages to districts’ system protection and user authentication management efforts. Many district leaders shared that single sign-on (SSO), multi-factor authentication, and secure staff and student accounts are fundamental to protecting school communities and safeguarding learning experiences going forward.



There are big funding implications to protecting against future cybersecurity attacks, as well. The flagship Federal Communications Commission (FCC) technology device and connectivity program, E-Rate—a critical funding source for schools and libraries—“does not cover cybersecurity beyond firewalls. It’s crazy that we would provide robust access to internet without cybersecurity protections from a policy and funding lens,” Krueger said.

Navigating Funding and Operational Challenges Ahead

Despite the influx of federal funding, a number of factors recently conspired to cloud an otherwise sunny financial forecast for school districts. Enrollment declines,⁵⁶ rising inflation,⁵⁷ and the tiered sunseting of ESSER I, II, and III funds are

pressing discussions about how districts can prepare for the future ahead with operational excellence.⁵⁸

Recent upticks in homeschooling and shifts to private schools, among other causes, drove K-12 public school declines in excess of 1.1 million students since 2020.⁵⁹ Increasing rates of chronic absenteeism, impacting how schools are funded across states, signal budget challenges ahead for the public education sector, too. For example, chronic absenteeism reached as high as 46% in the Los Angeles Unified School District,⁶⁰ 40% in New York Public Schools,⁶¹ and 44% in Ohio’s Akron Public Schools.⁶² In some places, those percentages run even higher for the earlier grades—the student group disproportionately impacted by learning loss, according to assessment results.⁶³ Chronic absenteeism for kindergartners in Akron, for example, is at 47%.



We don’t have the luxury of lead time anymore. We continue to try to build relationships quickly and through clear, concise communication so that parents value us and don’t leave. Because our enrollment numbers are going down, it’s very difficult to plan ahead. There are possible lean times ahead.

JOY GO-NG

Curriculum Specialist, Instructional Technology, Paramount Unified School District.

While districts received ESSER funding to help offset funding impacts in the short term, the last of ESSER funds expire in September 2024. Districts find themselves in a balancing act. They're making every effort to remain agile and meet the pressing needs of students, educators, and families. But they're also budgeting for sustainability and unknowns. It's a consequential combination of short-term and long-term prioritization.

As districts walk this tightrope, leaders express the need for making hard choices and sticking to a feasible set of priorities. Attempting to take on too many initiatives to address immediate needs may be shortsighted and hampered by staffing

challenges plaguing schools since the start of the pandemic. Selecting a mix of short-, mid-, and long-term initiatives, and investing in the right priorities, is key to achieving success.

“There's a need to pick a few key things now and focus on those. In some ways, the deluge of ESSER funds—putting this pressure on a system to do a lot of things—created fragments. Districts are now trying to do all the things they long wished they could do prior to these dollars, but the structures aren't there to implement it all because of staffing issues and competing priorities,” shared Judith Martinez, Colorado Director of the Center for High School Success, Stand for Children.





Zooming Out: Reflections on Priorities and Grounding Concepts

Schools and districts face many and varied challenges. Not coincidentally, at PowerSchool, we believe PK-12 education is in its most transformative period in modern history.

In many ways technology, data, and effective systems hold the key to solving some of the most vexing challenges currently faced. In other ways, good policy and practice, informed by educator, family, and student voice and backed by innovation and evidence, lights the path forward. Improved educational opportunities for both the current and future generations of students depends on all the above.

In this report, we explored the seven key priorities guiding districts as they embark on the 2022-23 school year and beyond. We heard a range of leader viewpoints on these priorities. Some feel they were unjustifiably separated and granular, such as the distinction between high-quality instruction and whole-child supports. Others feel these distinctions clearly reflect the work that lies ahead for

leaders navigating new terrain after a tumultuous couple of years. We welcomed a spectrum of viewpoints as education leaders chart a future course alongside students and families, and we celebrated the differences in perspectives.

We would be remiss if we did not circle back to the two vital concepts that ground the seven priority areas: **providing equitable student supports and making data-informed decisions**. These twin efforts mutually reinforce and mark the path forward as educators find new ways of using technology to serve students. Increased state and district investments in data dashboards to inform systems design and priorities signal that equitable student opportunity will be strengthened through new ways to understand what's happening in classrooms and schools.⁶⁴



How PowerSchool Can Help

The Role of Technology in a Promising New Era for Education

At PowerSchool, we believe that every student deserves the best, most personalized education possible. Technology—like education itself—is a powerful tool to advance opportunity.

Making the most of technology starts with universal access to broadband and connected devices. Schools have journeyed a long way from the days of the blackboard, with its inherent limitations. And while the pandemic disrupted many existing ways of schooling, it would be difficult to return to old ways of doing things after seeing so many new possibilities and efficiencies surfaced by technology.

Integrated technology holds the key to providing educators tools for making informed decisions about student learning needs, to break through entrenched gaps in learning outcomes, and to open new panoramas to conceptualize educational programming. Equipped with usable data, actionable insights can empower educators and district leaders to advance the ultimate objective: student success. Accurate, accessible, and secure data form the foundation for unlocking a brighter future in PK-12 education.

Digital Ecosystem Maturity: The Journey toward New Possibilities

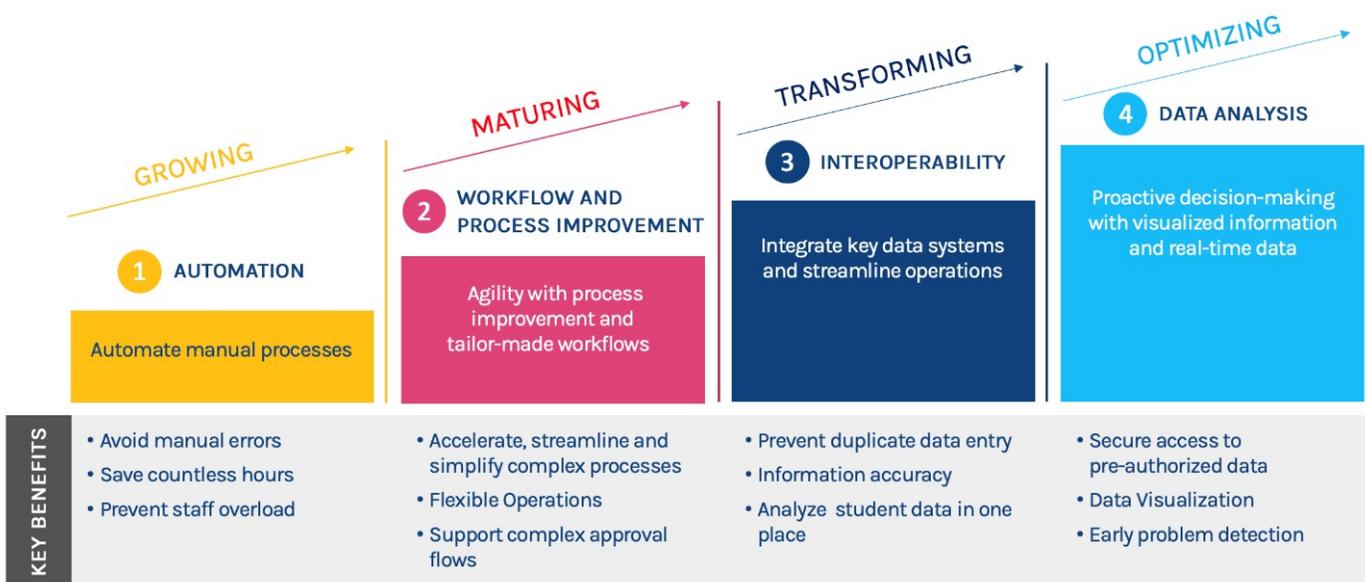
In addition to accessibility and security, schools continue to actualize the benefits of modernized systems. In conversation with chief technology and information officers, these leaders shared several key aspirations for their systems to better support educators and students:

- A fully integrated SSO architecture for administration and learning systems
- One system that allows for customizations but has core out-of-the-box toolsets (attendance, budgeting, HR functions, forecasting, position control, and dashboard reports)
- Systems that grow with the district, but are not filled with updates, changes, and add-ons

- True data portability through integrated software and better data accuracy assurance
- Security at the forefront of each innovation and deployment

These characteristics demonstrate how schools and districts are evolving in their technological journey. At PowerSchool, we believe that districts' system modernization happens on a continuum. Four major phases mark the System Modernization and Maturity Model, a process through which districts can partner with PowerSchool to build out a mature solution set that allows for continuous improvement and supports immediate and future core functional needs.

FIGURE 34: Digital Ecosystems Modernization & Maturity Model



Districts look to the System Modernization and Maturity Model to answer big, important questions like:

- Are we meeting educator and support staff needs in the best way possible?
- Where can we achieve efficiency to save educators' time and make their jobs easier and more impactful?
- What are the benefits of investing effort and funding to enhance key processes, workflows, and systems?
- How can our systems, processes, and people be more proactive and aligned to our strategic goals?

PowerSchool's Education Solutions Team helps districts mature their systems to drastically reduce costs and more efficiently support students and teachers. With a proven track record of partnering with districts across the country, our Education Solutions Team helps schools and districts explore and prioritize steps that are needed to answer the key system modernization questions above to make the necessary system, process, and people adjustments to achieve district-wide improvements.



PowerSchool Professional Services Supports Short- and Long-Term Goals

District data and information leaders also shared that, when working with vendors, they need a strong support partnership (e.g., training, technical support, change management) to realize end-user success. To Michelle Bourgeois' point earlier, planning and budgeting for adequate supports can set staff up to optimize systems and embed these in core activities to realize success.

PowerSchool builds a relationship with each customer, establishing and maintaining positive relationships with state departments of education, schools, districts, and their agents. Trust begins by establishing clear expectations, maintaining open communication, and delivering on time and within budget.

The focus is always on achieving customer-defined objectives by delivering quality services that utilize and maximize resources effectively and efficiently during the planning, development, and implementation of a solution.

The Proven Practices Division at PowerSchool is a team of educational experts who create and deliver high-quality, standards-aligned professional learning focused on meeting the diverse needs of districts, educators, and students. This team has been partnering with school districts around the U.S. for more than 20 years, creating and delivering high-quality professional development.

PowerSchool professional learning sessions and coaching services are rooted in adult learning principles, educational research, and characteristics of professional learning proven to shift professional practices. The key is providing collaborative, relevant, action-oriented, personalized, sustained, and learner-centered support. Similar to the System Modernization and Maturity Model, PowerSchool's Services teams support districts as they move along a continuum of improvement in using and maximizing the impact of mature systems.



FIGURE 35: Building a Culture of Continuous Improvement



Award-Winning PowerSchool Services and Support



Our Vision for Future Solutions Starts with Listening

The future of education technology starts by listening to educators today. Reflecting on educator technology priorities explored throughout this report, we have identified the following imperatives in response:

Top Education Technology Priority	PowerSchool Imperative
Improving instructional strategies that support the whole child , leveraging tiered support frameworks, and making data-driven decisions	Scaled, Whole-Child Personalized Learning: Bring together student mastery and competency-based learning to truly personalize the student experience and equip teachers with usable information system-wide
Collaborating effectively with school colleagues, effective professional learning, and supporting the whole educator	Educator-Centric Systems: Offer tools designed in response to top problems of practice and common teaming needs, as well as individual teacher improvement supports
Integrating new technology tools	Unified Experience: Unify the user experience with an intuitive user interface, common tools across applications, and data interoperability
Fostering parent engagement and understanding of student learning	High-Quality Parent Engagement: Enable consistent visibility and collaboration between teachers, parents, and students
Providing rich and diverse career exploration, diverse course offerings, and agility to meet new interests from students	Impactful Student Career & College Planning: Offer expanded career exploration and support for elementary, middle, and high school learners with the ability to develop career and military pathway planning, and access regional and state-specific data when exploring options for future success
Improving data-informed academic and operational investment decisions	Connected and Actionable Insights: Support improving student outcomes and creating pathways to social mobility with comprehensive data visualization tools available alongside the first fully managed data-as-a-service platform for PK-12

Our Reach, Responsibility, and Product Drivers

PowerSchool's mission is to power the education ecosystem with unified technology that helps educators and students realize their full potential, in their way. At PowerSchool, we believe that in order to meet educator and student needs, we must provide a complete, integrated user experience built around personalization, educator needs, and modern systems standards.

PowerSchool provides a unified technology platform that includes the core system of record used by districts and schools, helping leaders to leverage rich data to deliver insights and analytics to improve educational outcomes. We support over 45 million students globally and more than 15,000 customers, including more than 90 of the top 100 districts by student enrollment in the United States, and we sell solutions in over 90 countries.

Given PowerSchool's sizeable reach and impact, we have the responsibility to improve PK-12 education. Considering the above imperatives, these four PowerSchool product drivers help us advance PK-12 education for students, educators, and families:

- **Engaging Students and Families**
- **Empowering Educators**
- **Increasing Operational Efficiency**
- **Building Comprehensive Analytics**

We envision a solution platform where students, educators, and families can fully engage in building pathways to success. An environment in which students and teachers have the tools and insights they need to achieve their best. A place where educators inspire leaders of learning and students' passions to grow, becoming owners of their educational journey from start to finish. Where graduating students have the necessary skills to engage in a life of learning.



ENGAGING STUDENTS AND FAMILIES

Personalized Learning for All Students

PowerSchool equips educators with tools to deliver rich learning content in a variety of formats and individualize instruction based on the needs of the whole child, helping them drive and monitor student engagement and success. Through **PowerSchool Unified Classroom®**, students can access digital learning content and lessons, collaborate online with teachers and classmates, and complete assignments online from anywhere. This gives them more resources to learn when, where, and how works best for them.

Making Education Relevant with Post-Secondary Pathways

All K-12 students get the chance to connect learning to life through continued advances in **Naviance by PowerSchool**. Naviance is a comprehensive college, career, and life readiness (CCLR) platform that addresses equity and access gaps by helping students plan for their future beyond high school. Plus, Naviance helps school counselors and teachers scale student support. Age-appropriate tools, like Up the Ladder, help elementary learners begin to explore interests and develop career plans from an early age. CCLR programs are most successful

when everyone in the district plays a role in owning the long-term success of students. Integrating Naviance with its broader portfolio of solutions, PowerSchool helps educators combine their efforts to collectively support the post-secondary goals of each student.

The future of student pathway planning requires greater focus on transferable skills and knowledge sets that enable students to evolve along with our rapidly changing workforce. PowerSchool is the only company capable of seamlessly integrating common skills and knowledge frameworks throughout the student journey and supporting systems (including PowerSchool SIS, Naviance, and Unified Classroom products).

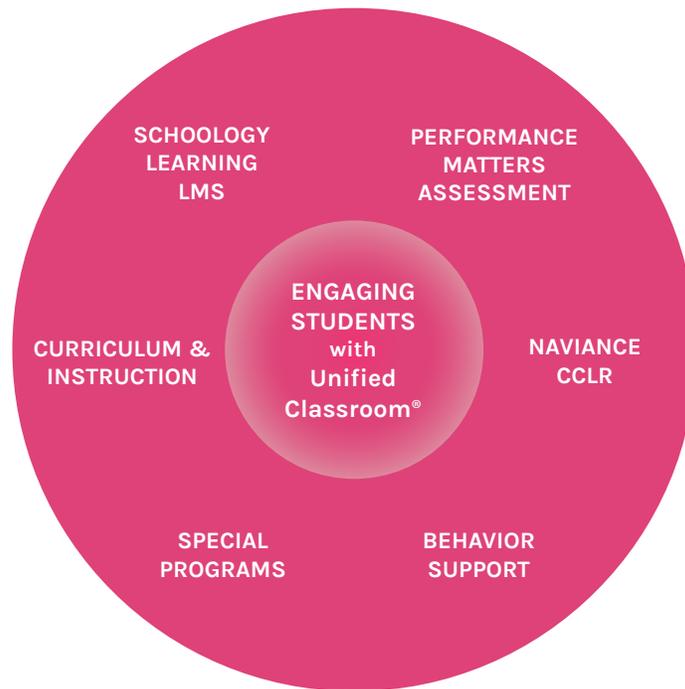


Engaging Families

PowerSchool solutions bridge the gap between classroom and home through integrated mobile app and family portal tools and communications. A key tenet for our home solutions is to enable a continuum of learning to support activities outside the classroom, especially in virtual and hybrid learning models. Additionally, ensuring family tools are multi-lingual creates an inclusive and accessible environment for engagement—putting the focus on communicating instead of building barriers. Guardians, caregivers, and parents get seamless visibility into attendance alerts, academic performance, schedules, school bulletins, and instant teacher communication.



- 
HIGH-QUALITY
TIERED
INSTRUCTION
- 
INTENTIONAL
CURRICULUM
MAPPING
- 
COLLABORATIVE
LESSON PLANNING
- 
FOCUSED SUPPORT
FOR ALL LEARNERS



- 
DATA-
INFORMED
ENGAGEMENT
- 
CONNECTED COLLEGE,
CAREER, AND LIFE
READINESS
- 
IMPROVED CLIMATE AND
WHOLE-CHILD SUPPORTS
- 
RECLAIMED TIME
WITH A UNIFIED
USER EXPERIENCE

EMPOWERING EDUCATORS

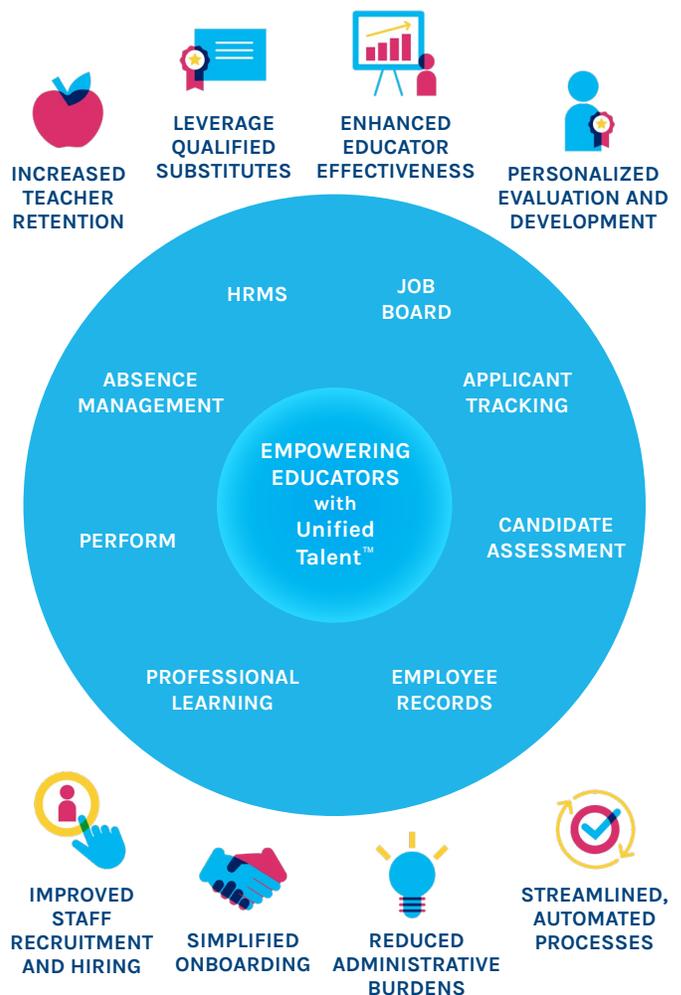
Unified Classroom® gives educators deeper insight into students’ needs to inform instructional decisions. With benchmark assessment, academic, and social and emotional data, as well as special programs plans, educators get the information they need to better tailor instruction to student needs. Formative assessment, lesson planning, and learning management tools make it easier to monitor progress and adjust plans to help students along their personal path to mastery. Curriculum and Instruction teams can scale personalized learning in our platform district-wide by building, distributing, and adjusting curriculum maps informed by student outcomes.

To help educators realize their full potential, Unified Talent helps districts advance teacher, leader, and staff effectiveness. PowerSchool works to help districts solve the challenges that accompany a comprehensive approach to K-12 talent management. Plus, a unified software approach helps reduce the costs of these programs by automating and digitizing paper-intensive PK-12 talent management processes.

With **Unified Talent**, educators and staff can define a focused development plan with growth goals that include specific actions and timelines, including personalized and targeted professional development. Development plans can adapt to standards and rubrics used

by any district. This helps educators understand their current competencies and identify future professional improvement goals. When integrated with classroom data sources like **PowerSchool SIS** and **Unified Classroom**® **Performance Matters**, student performance can inform teacher growth plans.

PowerSchool’s goal is to design innovative solutions that support this cycle of continuous growth for educators and staff. We deliver on this vision with **Unified Talent™ Educator Support Solutions**, a modular set of applications built on more than 20 years of collaboration with leading education agencies across the nation.

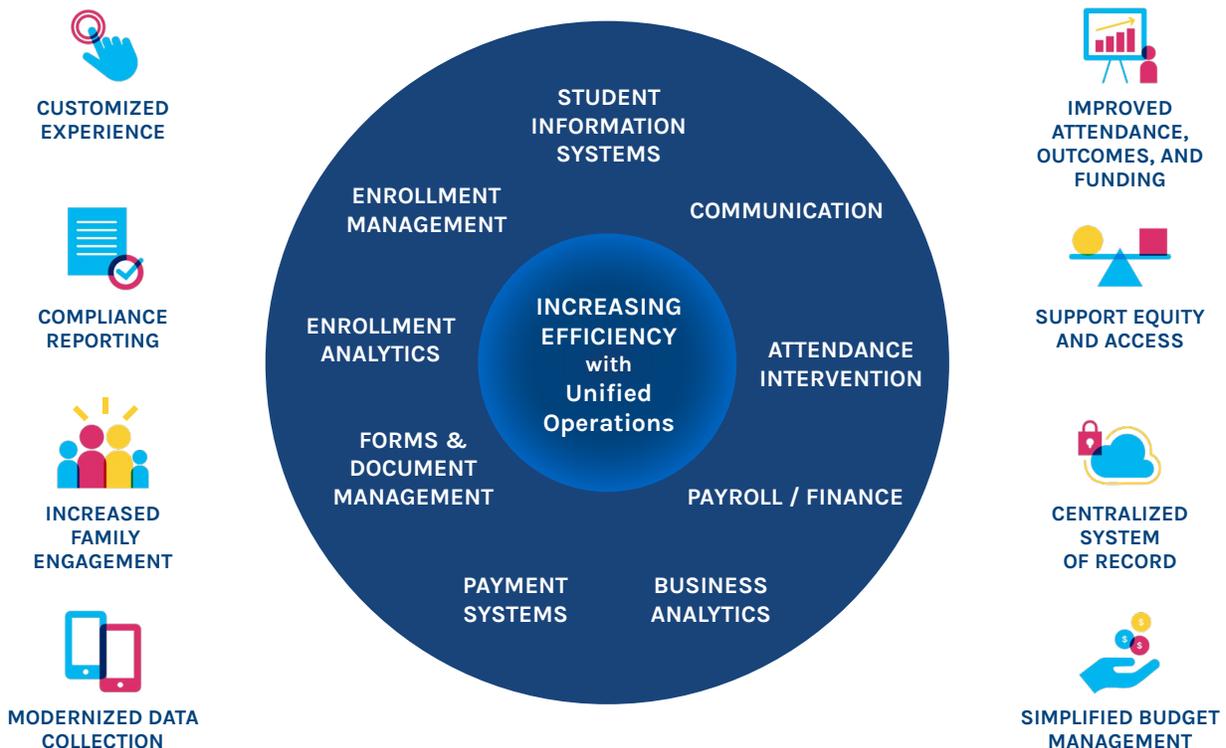


INCREASING EFFICIENCY

PowerSchool SIS, enrollment, finance, and HR/payroll solutions help remove data and workflow silos, bringing teams together to collectively support student success. With **PowerSchool SIS and Enrollment**, a single solution connects all school and district operations to maximize resources and staff productivity. Plus, this unified integration provides safe and secure data management. Districts can enjoy reliable, flexible operations for scheduling, grade management, and reliable state reporting. Interoperability with core systems saves time and effort while unlocking better insights with data accurately passed between systems. PowerSchool SIS empowers educators with easy master data management for all student information.

For mission-critical systems of record, integrated **PowerSchool Unified Talent™** and **Unified Administration™** solutions bring finance, HR, and payroll together. This simplifies processes and workflows for staff while eliminating costly paper and postage purchases.

The combined power of our operations solutions reduces overhead with seamless data transmission, eliminating manual processes and duplicate data entry. Moving into the future, PowerSchool SIS will continue to innovate, eliminating even more data silos with improved integrations, workflows, and user experience.



BUILDING COMPREHENSIVE ANALYTICS

Unified Insights and Connected Intelligence by PowerSchool® create a single platform that aggregates disparate data sets. Districts and states can normalize their data to surface insights across hundreds of education technology tools. With configurable analytics and visualization toolsets, real-time student insights can be viewed and acted upon by all stakeholders involved in the community, state, district, school, and classroom.

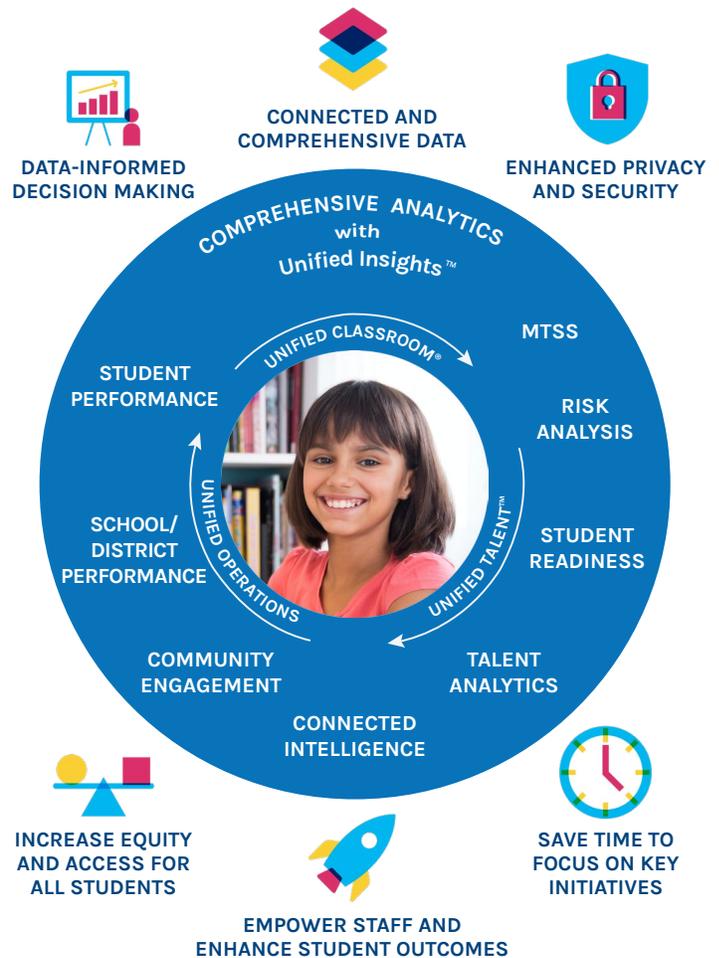
PowerSchool’s robust system of intelligence with market-leading Artificial Intelligence (AI) / Machine Learning (ML) capabilities includes:

- Longitudinal trend analysis and visualization for student attendance, special programs, behavior, academics, and learning metrics
- Monitoring resource allocation, equitable spending, and educator effectiveness
- Insights into culture and climate impacts
- Identification of students who may not be on track for postsecondary success
- Analysis of enrollment forecasts, enrollment locations, boundaries, and school capacity predictions

- Easy-to-understand dashboards for community stakeholders to see graduation rates, enrollment trends, and progress toward state accountability metrics

Connected Intelligence is a data-as-a-service platform with the power to democratize data for internal stakeholders (district and state agency leaders) and authorized external partners.

Providing a secure data cloud that unifies and integrates data, segregated by customer, **Connected Intelligence** provides real-time access to historic and current data. It enables data retrieval capabilities from source systems for powerful analytics in states, districts, and schools.





Our Cybersecurity Commitment

As the leading provider of cloud-based software for K-12 education in North America, security is at the forefront of each PowerSchool innovation and product integration.

Company-wide, prudent, and appropriate measures are taken to respect data confidentiality, integrity, and availability. With a robust program to protect the security and integrity of applications—including security by design, third-party penetration testing, and a responsible disclosure program—protecting customer, student, staff, and family data stored in the cloud always comes first.

State-of-the-art security measures and best practices include intrusion detection and prevention, web application firewalls, advanced endpoint protection, and 24/7/365 eyes-on-glass monitoring by our dedicated security operations team, led by our Chief Information Security Officer.

A New School Year and New Possibilities

As PK-12 education continues to evolve, technological change and innovation must be responsive to community priorities and deliver new possibilities.

Integrated technology promises to provide new ways to meet each student's academic and social and emotional learning needs. As we learned from portraits of a graduate and personalized learning models, digital ecosystems will be critical tools in the project of preparing students with the knowledge, soft skills, aptitudes, and confidence they'll need in the world of tomorrow.

As this report shows, connected, more actionable information can provide educators a deeper understanding of each child's development and inspire quicker, better decisions backed by reliable and comprehensive data. As we write this, interoperable technology is shifting from nice-to-have to an industry standard, shaping a future where people and technology work in greater harmony and impact—and with fewer headaches.

This report has explored the top common strategic priorities that school districts are investing their time and energy into as they begin to undertake the 2022-23 school year. From providing innovative and needed professional learning, finding and retaining great educators, to achieving more robust security and streamlined operations, we at PowerSchool remain focused on helping every school better serve each student. PowerSchool will continue to improve, develop, and deliver educational technology that helps districts achieve their vital goals and support their community into a new year of possibilities.



Research and Report Team

The research and creation of this report is the result of a collaborative effort led by the PowerSchool Education Solutions Team. The 10-member team has over 200 years of combined experience in PK-12 as classroom teachers, principals, chief technology officers, superintendents, state department of education program directors, and advisors to policymakers and top elected officials. The team brings its wealth of experience to deepen PowerSchool's understanding of the needs of students, parents and caretakers, administrators, and educators.

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- Katherine DeRosear, Former Director of Workforce Development, Virginia Manufacturers Association
- Team Members and Leaders from throughout the PowerSchool organization

Sources

¹ Kevin Bushweller, “What the Massive Shift to 1-to-1 Computing Means for Schools, in Charts,” *EducationWeek* (17 May 2022): online, Internet, 15 June 2022. Available: <https://www.edweek.org/technology/what-the-massive-shift-to-1-to-1-computing-means-for-schools-in-charts/2022/05>

² National Center for Education Statistics, “Nation’s Public School Enrollment Dropped 3 Percent in 2020-21,” Press Release (28 June 2021): online, Internet, 15 June 2022. Available: https://nces.ed.gov/whatsnew/press_releases/06_28_2021.asp

³ Attendance Works, “Monitoring Who Is Missing and How Much: A Review of State Policy & Practice in School Year 2021-22,” Policy Brief (June 2022): online, Internet, 23 June 2022. Available: https://www.attendanceworks.org/wp-content/uploads/2019/06/Attendance-Works-State-Policy-Analysis-2022_061422.pdf

⁴ U.S. Department of Education, Office for Civil Rights, *Education in a Pandemic: The Disparate Impacts of COVID-19 on America’s Students* (June 2021): online, Internet, 15 June 2022. Available: <https://www2.ed.gov/about/offices/list/ocr/docs/20210608-impacts-of-covid19.pdf>

⁵ FutureEd, Covid Recovery, “Technology,” (7 June 2022): online, Internet, 15 June 2022. Available: <https://www.future-ed.org/technology/>

⁶ Louis S. Nadelson, et al., “Principals’ Perceptions of Education Equity: A Mindset for Practice,” *Journal of Education and Learning* 9.1 (Nov. 2019): online, Internet, 15 June 2022. Available: <https://files.eric.ed.gov/fulltext/EJ1234502.pdf>

⁷ Data Quality Campaign, *From Hammer to Flashlight: A Decade of Data in Education*, (Jan. 2017): online, Internet, 15 June 2022. Available: <https://dataqualitycampaign.org/wp-content/uploads/2017/01/DQC-Arnold-01232017.pdf>

⁸ Alyson Klein, “During COVID-19, Schools Have Made a Mad Dash to 1-to-1 Computing. What Happens Next?” *EducationWeek* (20 April 2021): online, Internet, 15 June 2022. Available: <https://www.edweek.org/technology/during-covid-19-schools-have-made-a-mad-dash-to-1-to-1-computing-what-happens-next/2021/04>

⁹ CASEL, “What Is Social Emotional Learning? Consortium for Social Emotional Learning,” CASEL.org: online, Internet, 3 June 2022. Available: <https://schoolguide.casel.org/what-is-sel/what-is-sel/>

¹⁰ Joseph A. Durlak, et al., “The Impact of Enhancing Students’ Social and Emotional Learning: A Meta-Analysis of School-Based Universal Interventions,” *Child development* vol. 82,1 (2011): 405-32. <https://srcd.onlinelibrary.wiley.com/doi/10.1111/j.1467-8624.2010.01564.x>

¹¹ Joseph L. Mahoney, et al., “An Update on Social and Emotional Learning Outcome Research,” *Phi Delta Kappan* (26 Nov. 2018): online, Internet, 15 June 2022. Available: <https://kappanonline.org/social-emotional-learning-outcome-research-mahoney-durlak-weissberg/>

¹²U.S. Department of Education, Institute of Education Sciences, *Condition of Education* (2022): online, Internet, 3 June 2022. Available: <https://nces.ed.gov/programs/coe/indicator/cmb>.

¹³Lindsey Bever, “Canceled buses and a superintendent in the classroom: How omicron has thrown schools into crisis,” *Washington Post* (7 Jan. 2022): online, Internet, June 3, 2022. Available: <https://www.washingtonpost.com/education/2022/01/07/student-teacher-absences-omicron/>

¹⁴PBS News Hour. March 24, 2022. “States call in the National Guard to mitigate school staffing shortages,” *PBS News Hour*, 24 March 2022. Available: <https://www.pbs.org/newshour/show/states-call-in-the-national-guard-to-mitigate-school-staffing-shortages>

¹⁵Tiffany McDole and Cassidy Francies, *State Policy Levers to Address Teacher Shortages*, Education Commission of the States (June 2022): online, Internet, 15 June 2022. Available: <https://www.ecs.org/wp-content/uploads/State-Policy-Levers-to-Address-Teacher-Shortages.pdf>

¹⁶Merrimack College and EdWeek Research Center, *1st Annual Teacher Survey: 2022 Results*, EdWeek (2022): online, Internet, 15 June 2022. Available: https://fs24.formsite.com/edweek/images/WP-Merrimack_College-Todays_Teachers_Are_Deeply_Disillusioned_Survey_Data_Confirms.pdf

¹⁷Madeline Will, “Will There Really Be a Mass Exodus of Teachers?” *Education Week* (25 February 2022): online, Internet, 15 June 2022. Available: https://www.edweek.org/teaching-learning/will-there-really-be-a-mass-exodus-of-teachers/2022/02?utm_source=nl&utm_medium=eml&utm_campaign=popweek&utm_content=list&M=64323111&U=&;UUID=4445a27291d71c46387ad9c9f88ec621

¹⁸Tuan D. Nguyen, et al., “Comparing Turnover Intentions and Actual Turnover in the Public Sector Workforce: Evidence from Public School Teachers,” *EdWorkingPapers* 22.537 (February 2022): online, Internet, 15 June 2022. Available: <https://www.edworkingpapers.com/sites/default/files/ai22-537.pdf>

¹⁹Eric Jotkoff, “NEA survey: Massive staff shortages in schools leading to educator burnout; alarming number of educators indicating they plan to leave profession,” Press Release, National Education Association (February 2022): online, Internet, 15 June 2022. Available: <https://www.nea.org/about-nea/media-center/press-releases/nea-survey-massive-staff-shortages-schools-leading-educator>

²⁰GBAO Strategies, “Poll Results: Stress and Burnout Pose Threat of Educator Shortages,” NEA Member Survey (2022): online, Internet, 15 June 2022. Available: <https://www.nea.org/sites/default/files/2022-02/NEA%20Member%20COVID-19%20Survey%20Summary.pdf>

²¹Giulia Heywerd, “In Several States, Teachers Get Their Biggest Raise in Decades,” *New York Times* (14 April 2022): online, Internet, 3 June 2022. Available: <https://www.nytimes.com/2022/04/14/us/teacher-salary-pay-raise.html>

²²Joshua Bleiberg, et al., *The Effect of Teacher Evaluation on Achievement and Attainment: Evidence from Statewide Reforms*. *EdWorkingPapers* 21.496 (December 2021): online, Internet, 15 June 2022. Available: <https://doi.org/10.26300/b1ak-r251>

²³Linda Darling-Hammond, et al., “Effective Teacher Professional Development,” Learning Policy Institute, (5 June 2017): online, Internet, 15 June 2022. Available: <https://doi.org/10.54300/122.311>.

²⁴PowerSchool, “2022 PowerSchool K-12 Talent Index: Education Research Report,” PowerSchool (2022): online, Internet, 15 June 2022. Available: <https://www.powerschool.com/whitepaper/2022-powerschool-k-12-talent-index-education-research-report/>

²⁵David Orta and Vanessa Gutiérrez, “Improving School-Family Communication and Engagement: Lessons from Remote Schooling During the Pandemic,” Research Brief, University of Chicago Consortium on School Research (April 2022): online, Internet, 15 June 2022. Available: <https://consortium.uchicago.edu/sites/default/files/2022-04/Improving%20School-Family%20Communication-Apr%202022-Consortium.pdf>

²⁶Alyson Klein, “Pandemic Parents Are More Engaged. How Can Schools Keep It Going?” *EducationWeek* (14 Sept. 2021): online, Internet, 15 June 2022. Available: <https://www.edweek.org/leadership/pandemic-parents-are-more-engaged-how-can-schools-keep-it-going/2021/09>

²⁷Melany Stroupe, “Harris Poll finds 82% of parents have a greater appreciation for teachers since the start of the COVID-19 pandemic,” Press Release, University of Phoenix (3 May 2021): online, Internet, 15 June 2022. Available: <https://www.businesswire.com/news/home/20210503005350/en/Harris-Poll-finds-82-of-parents-have-a-greater-appreciation-for-teachers-since-the-start-of-the-COVID-19-pandemic>

²⁸Carolyn Thompson, “Hostile school board meetings have members calling it quits,” *Associated Press* (29 August 2021): online, Internet, 15 June 2022. Available: <https://apnews.com/article/health-education-coronavirus-pandemic-school-boards-35db5c9eec87b85ca8eb95a64c2f6dd7>

²⁹Steven Jessen-Howard, “Governors Propose Nearly \$3 Billion of Investments in Early Learning Programs,” *Center for American Progress* (15 May 2019): online, Internet, 15 June 2022. Available: <https://www.americanprogress.org/article/governors-propose-3-billion-investments-early-learning-programs/>

³⁰Hillary Davis, “Superintendent sets goals to boost student achievement in Las Vegas,” *Las Vegas Sun* (11 March 2022): online, Internet, 15 June 2022. Available: <https://lasvegassun.com/news/2022/mar/11/superintendent-sets-goals-to-boost-student-achieve/>

³¹Lauren Camera, “Build Back Better Act a ‘Game Changer’ for Early Childhood Education,” *U.S. News & World Report* (19 Nov. 2021): online, Internet, 15 June 2022. Available: <https://www.usnews.com/news/education-news/articles/2021-11-19/build-back-better-act-a-game-changer-for-early-childhood-education>

³²Lauren Camera, “How the Pandemic Devastated State-Run Early Education,” *U.S. News & World Report* (26 April 2022): online, Internet, 15 June 2022. Available: <https://www.usnews.com/news/education-news/articles/2022-04-26/how-the-pandemic-devastated-state-run-early-education>

³³Allison H. Friedman-Krauss Ph.D., et al., *The State of Preschool 2021: State Preschool Yearbook*, National Institute for Early Education Research (2022): online, Internet, 15 June 2022. Available: https://nieer.org/wp-content/uploads/2022/07/YB2021_Full_Report.pdf

³⁴National Institute for Early Education Research. *The State of Preschool 2021: State Preschool Yearbook*. Available: https://nces.ed.gov/whatsnew/press_releases/06_28_2021.asp

³⁵Cannon, Jill S., M. Rebecca Kilburn, Lynn A. Karoly, Teryn Mattox, Ashley N. Muchow, and Maya Buenaventura, *Decades of Evidence Demonstrate That Early Childhood Programs Can Benefit Children and Provide Economic Returns*. Santa Monica, CA: RAND Corporation, 2017. https://www.rand.org/pubs/research_briefs/RB9993.html

³⁶Beth Meloy and Abby Schachner, *Early Childhood Essentials: A Framework for Aligning Child Skills and Educator Competencies*, Learning Policy Institute (October 2019): online, Internet, 15 June 2022. Available: https://learningpolicyinstitute.org/sites/default/files/product-files/Early_Childhood_Essentials_Framework_REPORT.pdf

³⁷Bruce Atchison and Sarah Pompelia, *Transitions and Alignment from Preschool to Kindergarten*, Education Commission of the States (Sept. 2018): online, Internet, 15 June 2022. Available: <https://www.ecs.org/wp-content/uploads/Transitions-and-Alignment-From-Preschool-to-Kindergarten.pdf>

³⁸Christine Mulhern and Elizabeth D. Steiner, “Changes in College and Career Readiness Supports During the First Year of the Pandemic,” *Research Reports*, RAND Corporation (2022): online, Internet, 9 June 2022. Available: https://www.rand.org/pubs/research_reports/RR827-5.html

³⁹Jeremy Bauer-Wolf, “FAFSA completion falls about 9% from previous year, report says,” *Higher Ed Dive* (28 April 2022): online, Internet, 15 June 2022. Available: <https://www.highereddive.com/news/fafsa-completion-falls-about-9-from-previous-year-report-says/622881/#:~:text=Total%20FAFSA%20completions%20especially%20plummeted,33%25%20from%20the%20previous%20year>

⁴⁰Joanne Carminucci, et al., “Student Attendance and Enrollment Loss in 2020-21,” American Institutes for Research (June 2021): online, Internet, 15 June 2022. Available: https://www.air.org/sites/default/files/2021-07/research-brief-covid-survey-student-attendance-june-2021_0.pdf

⁴¹Emma Goldberg, “All of Those Quitters? They’re at Work,” *New York Times*, (13 May 2022): online, Internet, 9 June 2022. Available: <https://www.nytimes.com/2022/05/13/business/great-resignation-jobs.html>

⁴²Nicole Bateman and Martha Ross, “The Pandemic Hurt Low-Wage Workers the Most—and So Far, the Recovery Has Helped Them the Least,” *Brookings*, (28 July 2021): online, Internet, 9 June 2022. Available: <https://www.brookings.edu/research/the-pandemic-hurt-low-wage-workers-the-most-and-so-far-the-recovery-has-helped-them-the-least/>

⁴³Kim Parker, et al., “COVID-19 Pandemic Continues to Reshape Work in America,” Pew Research Center (16 February 2022): online, Internet, 9 June 2022. Available: <https://www.pewresearch.org/social-trends/2022/02/16/covid-19-pandemic-continues-to-reshape-work-in-america/>

⁴⁴U.S. Bureau of Labor and Statistics, “Computer and Information Technology Occupations,” *Occupational Outlook Handbook* (18 April 2022): online, Internet, 9 June 2022. Available: <https://www.bls.gov/ooh/computer-and-information-technology/home.htm>

- ⁴⁵Emiliana Vegas and Brian Fowler, “What Do We Know About the Expansion of K-12 Computer Science Education?” *Brookings* (4 August 2020): online, Internet, 10 June 2022. Available: <https://www.brookings.edu/research/what-do-we-know-about-the-expansion-of-k-12-computer-science-education/>
- ⁴⁶Alexis Chambers and Natalie Truong, “Profile of a Graduate to Redefine Student Success for the Future,” Aurora Institute (4 May 2020): online, Internet, 15 June 2022. Available: <https://aurora-institute.org/blog/profile-of-a-graduate-to-redefine-student-success-for-the-future/>
- ⁴⁷Washington State Board of Education, *Profile of a Graduate*. online, Internet, 15 June 2022. Available: <https://www.sbe.wa.gov/sites/default/files/public/images/POG%20PDF.pdf>
- ⁴⁸Utah State Board of Education, *Portrait of a Graduate*. online, Internet, 15 June 2022. Available: <https://www.schools.utah.gov/file/bccb96eb-e6a6-47cf-9745-cf311675ad8b>
- ⁴⁹Omaha Public Schools, *Portrait of a Graduate*. online, Internet, 15 June 2022. Available: <https://www.ops.org/domain/748>
- ⁵⁰Washington State Board of Education, *Profile of a Graduate*. online, Internet, 15 June 2022. Available: <https://www.sbe.wa.gov/sites/default/files/public/images/POG%20PDF.pdf>
- ⁵¹Kevin Bushwiler, “What the Massive Shift to 1:1 Devices Means for Schools, in Charts” *EducationWeek* (17 May 2022): online, Internet, 15 June 2022. Available: <https://www.edweek.org/technology/what-the-massive-shift-to-1-to-1-computing-means-for-schools-in-charts/2022/05>
- ⁵²St. Vrain Valley School District, “St. Vrain Valley Schools’ chief technology officer receives industry award as visionary and growth leader,” Press Release, St. Vrain Valley School District (December 6, 2021): online, Internet, 15 June 2022. Available: <https://www.svvsd.org/2021/12/06/st-vrain-valley-schools-chief-technology-officer-receives-industry-award-as-visionary-and-growth-leader/>
- ⁵³St.Vrain Valley School District, “Innovative Tech Framework,” St. Vrain Valley School District. online, Internet, 22 June 2022. Available: <https://tech.svvsd.org/support/itf/>
- ⁵⁴The State of K-12 Cybersecurity: Year in Review. K12 Six. <https://www.k12six.org/the-report>
- ⁵⁵The State of K-12 Cybersecurity: Year in Review. K12 Six. <https://www.k12six.org/the-report>
- ⁵⁶National Center for Education Statistics, “Nation’s Public School Enrollment Dropped 3 Percent in 2020-21,” Press Release (28 June 2021): online, Internet, 15 June 2022. Available: https://nces.ed.gov/whatsnew/press-releases/06_28_2021.asp
- ⁵⁷Chris Isadore, “Inflation Rises At Fastest Pace in 40 Years, Pushed Up by Record Gas Prices,” *CNN Business* (10 June 2022): online, Internet, 15 June 2022. Available: <https://www.cnn.com/2022/06/10/economy/may-inflation-gas-prices/index.html>

⁵⁸Matt Zalaznick, “How 3 ed-tech leaders will help their districts avoid the ESSER fiscal cliff,” *District Administration* (21 June 2022): online, Internet, 22 June 2022. Available: <https://districtadministration.com/how-3-ed-tech-leaders-will-help-their-districts-avoid-the-esser-fiscal-cliff/>

⁵⁹Shawn Hubler, “With Plunging Enrollment, a ‘Seismic Hit’ to Public Schools,” *New York Times* (17 May 2022): online, Internet, 15 June 2022. Available: <https://www.nytimes.com/2022/05/17/us/public-schools-falling-enrollment.html>

⁶⁰Paloma Esquivel, “Nearly half of LAUSD students have been chronically absent this year, data show,” *Los Angeles Times* (31 March 2022): online, Internet, 18 July 2022. Available: <https://www.latimes.com/california/story/2022-03-31/lausd-students-chronic-absent-amid-covid-pandemic>

⁶¹Susan Edelman, “Chronic absenteeism in NYC public schools hits alarming 40%,” *New York Post* (2 April 2022): online, Internet, 18 July 2022. Available: <https://nypost.com/2022/04/02/chronic-absenteeism-in-nyc-public-schools-hits-alarming-40/>

⁶²Jennifer Pignolet, “With half of students chronically absent, Akron schools look to state program for help,” *Akron Beacon Journal* (8 April 2022): online, Internet, 18 July 2022. Available: <https://www.beaconjournal.com/story/news/2022/04/08/half-students-chronically-absent-akron-public-schools-looks-state-help/9475956002/>

⁶³Kara Arundel and Naaz Modan, “Reports: Math, reading progress slowed during first full school year of pandemic,” *K-12 Dive* (28 July 2021): online, Internet, 18 July 2022. Available: <https://www.k12dive.com/news/progress-slowed-in-math-and-reading-during-pandemic/604025/>

⁶⁴Kaitlyn Radde and Kae Petrin, “How Covid-19 is changing school data,” *Chalkbeat* (1 July 2022): online, Internet, 5 July 2022. Available: https://www.chalkbeat.org/2022/7/1/23188699/how-the-covid-19-pandemic-changing-school-data-systems-federal-funding-relief-spending?utm_source=Chalkbeat&utm_campaign=b0b6547425-Colorado+How+the+COVID19+pandemic+is+changing+scho&utm_medium=email&utm_term=0_9091015053-b0b6547425-1296856030



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