CoSN
LEADING EDUCATION INNOVATION

DRIVING K-12 INNOVATION

2023 HURDLES + ACCELERATORS

LEADING EDUCATION INNOVATION

Challenge

Technology is an essential element of learning, yet the use and application of it is inequitable.

Vision

CoSN is a community of visionary technology leaders empowering every learner to achieve their unique potential in a changing world.

Mission

CoSN provides current and aspiring education technology leaders for PreK–12 with the community, knowledge, and professional development they need to create and grow engaging learning environments.

CoSN is vendor-neutral and does not endorse specific products, services, or solutions.

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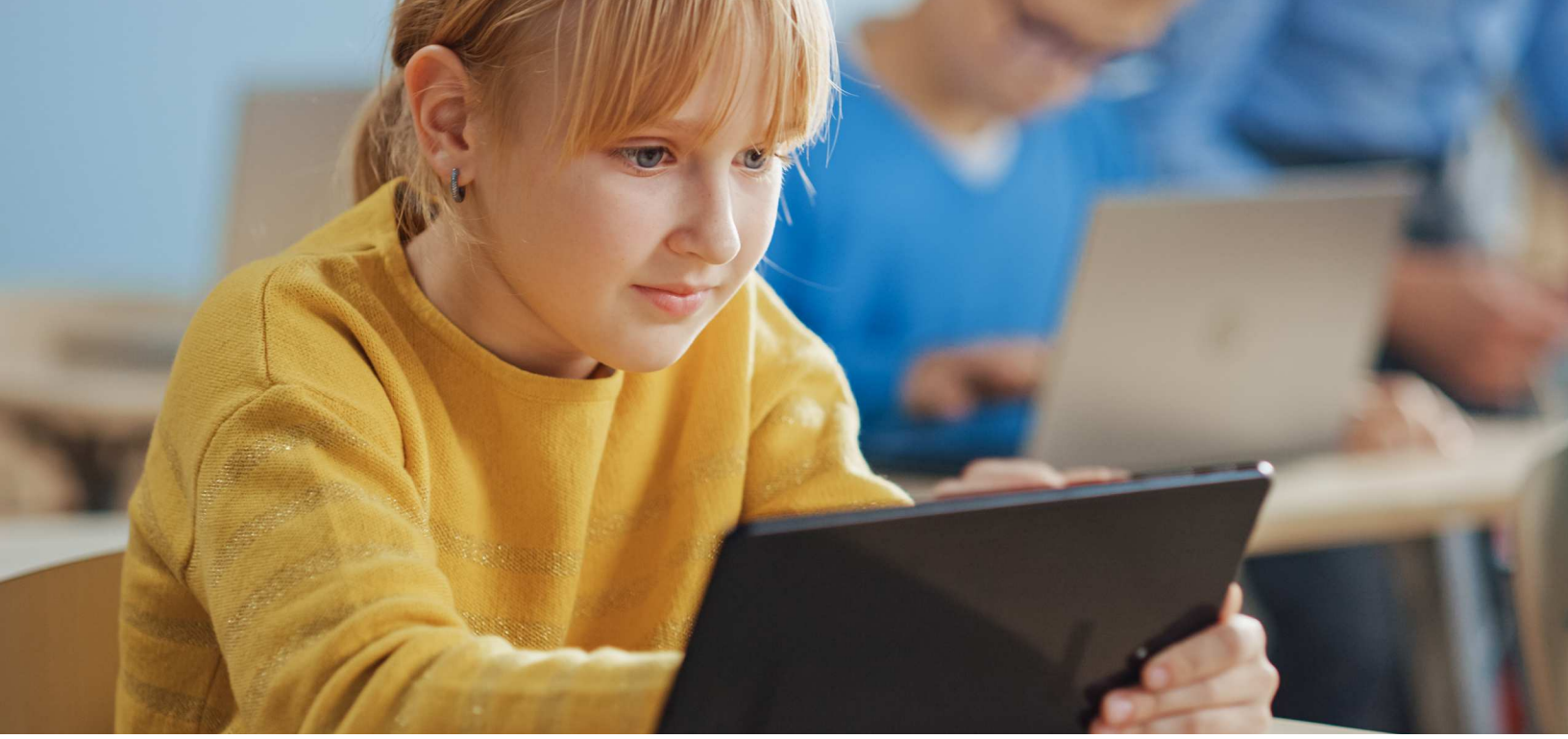


INTRODUCTION

CoSN's Driving K-12 Innovation initiative proudly convenes an international Advisory Board of approximately 100 education and technology experts to select the most important Hurdles (challenges), Accelerators (mega-trends), and Tech Enablers (tools) Driving K-12 Innovation for the year ahead.

The Advisory Board engages in online discussions and surveys to select the top themes in each category that are transforming teaching and learning. This year, the Advisory Board's work took place over approximately 10 weeks and involved both synchronous and asynchronous discussion opportunities.

METHODOLOGY

STEP 1: INITIAL SURVEY

The Advisory Board completed an initial survey to select the topics for subsequent discussion. This survey narrowed down the original list of Hurdles from 36 to eight, Accelerators from 25 to nine, and Tech Enablers from 27 to eight — including two new Hurdles and one new Accelerator.

STEP 2: DISCUSSION

Six weeks of thoughtful conversation followed the initial survey. Each week, the Advisory Board responded to prompts and engaged in conversation focused on one of the lenses of the initiative (Hurdles, Accelerators, and Tech Enablers). Discussion opportunities were offered via the online forum and a synchronous Zoom call for each lens.

STEP 3: FINAL SURVEY

Finally, the Advisory Board voted on the top Hurdles, Accelerators, and Tech Enablers. Of the many important and impactful topics considered, nine rose to the top as key considerations for driving innovation in 2023. The survey also helped describe the nature of each topic — the surmountability of Hurdles, the intensity of Accelerators, and the timeliness of Tech Enablers.

STATE OF THE WORLD (Context)

HURDLES
(Barriers)

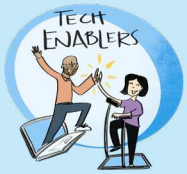
1. Attracting & Retaining Educators and IT Professionals
2. Designing Effective Digital Ecosystems
3. Digital Equity

ACCELERATORS
(Mega-trends)

1. Building the Human Capacity of Leaders
2. Learner Agency
3. Social & Emotional Learning

TECH ENABLERS
(Tools)

1. Artificial Intelligence (AI)
2. Untethered Broadband & Connectivity
3. Rich Digital Ecosystem



BRIDGES (Themes)

MOVING FORWARD IN AN INTERCONNECTED WORLD

While the COVID-19 pandemic isn't over, education — and our systems — must evolve to coexist with the changing "State of the World," and be better prepared for the next disruption.

One outcome of the pandemic is how it has propelled education forward…and we must not go back. "We all know that the pandemic uprooted education. The pandemic also helped most educators recognize that technology is here to stay in education" (Stacy Hawthorne, Hawthorne Education, United States). "Schools and districts invested billions in technology over the past two years. **It's now the responsibility of every educator and school leader to leverage the technology and data that we have to foster meaningful relationships and create personalized learning paths that move each student forward**. We have the power and tools in our classrooms to make a difference for each child. It's not a matter of when anymore, the time is now."

If you look across the 2023 Hurdles, Accelerators, and Tech Enablers, you'll see a clear synergy around systems thinking (an ongoing "Bridge" or theme), and a shift from siloed applications and functions to the evolution of the education ecosystem. As educators and technologists, we must collaborate to create ecosystems that are strong, both in technology and human interactions. A new world requires new innovations and purposeful action in order to best serve learners of today and tomorrow.

Ruben Puentedura (Hippasus, Massachusetts, United States) summed it up best: "The world that students are and will be living in is changing in ways that educators and school system leaders have never known. **Giving learners the tools they need to engage with this world will require fundamental redesign of both content and practice — neither alone will suffice.**"

You can read more about our top trends in the 2023 Tech Enablers publication. Additionally, discover more bridges across the project's categories, and be inspired by how our Advisory Board answered this question: ***What do you think is the most important thing for educators and school system leaders to keep in mind in order to drive impactful K-12 innovation in 2023?***

2023 TOP 3 HURDLES

1 ATTRACTING & RETAINING EDUCATORS AND IT PROFESSIONALS

Hiring and keeping school staff is a significant problem for school systems; many educators are experiencing low pay, stress, and emotional burnout, causing them to set aside their passion for teaching and leave the field. Educators also face a lack of trust and respect by society and systems – trust that teachers know what they are doing and have the best interest of their students at heart.

For IT Professionals, there are the added competitive factors of low pay compared with private companies who are able to offer higher salaries, flexible work schedules and locations, and more time off.

2 DESIGNING EFFECTIVE DIGITAL ECOSYSTEMS

A digital ecosystem is a group of connected information technology resources that allow students and teachers to interact and collaborate in an effective, valuable way. But what are the keys to developing a successful digital ecosystem? Interoperability – the ability of computer systems to exchange, interact, and make use of information – as well as constant improvement of efficiencies, providing data analytics, and data visibility are all important.

3 DIGITAL EQUITY

Digital Equity includes three interrelated components: digital foundations, conditions for learning, and meaningful learning opportunities. This nuanced Hurdle encompasses more than just equitable access to quality digital technologies such as high-speed internet and powerful computing devices both inside and outside of school. It also includes ensuring that:

- students have the knowledge and skills to use technology in the service of learning;
- they interact with robust and accessible content and programs;
- students and their identities are represented with and by the technologies themselves; and
- they experience meaningful opportunities as learners.

2023 TOP 3 ACCELERATORS

1 BUILDING THE HUMAN CAPACITY OF LEADERS

Strengthening the professional community of schools and providing opportunities for educators and all K-12 professionals to learn and master new skills can open the door to innovative practices that can enhance student experiences. When schools invest in their staff by providing opportunities to learn and master new skills, agency in their work, and the freedom to make mistakes without fear, they create an environment that is attractive to innovative people.

2 LEARNER AGENCY

Learner Agency is a combination of the will and the skill to learn. It is about students as active choice-makers in their education and about reconceptualizing their role from that of “student” to that of “learner.” Combined with a strong learning environment, students are able to transform from order-takers to innovators, experience the state of "flow," and learn far more authentically. In order for schools to facilitate learner agency, they must also encourage educator agency. Learner agency is essential for lifelong learning and requires a different approach to school structure and practices. Truly embracing learner agency will require transforming education systems. This Accelerator is deeply intertwined with Personalization.

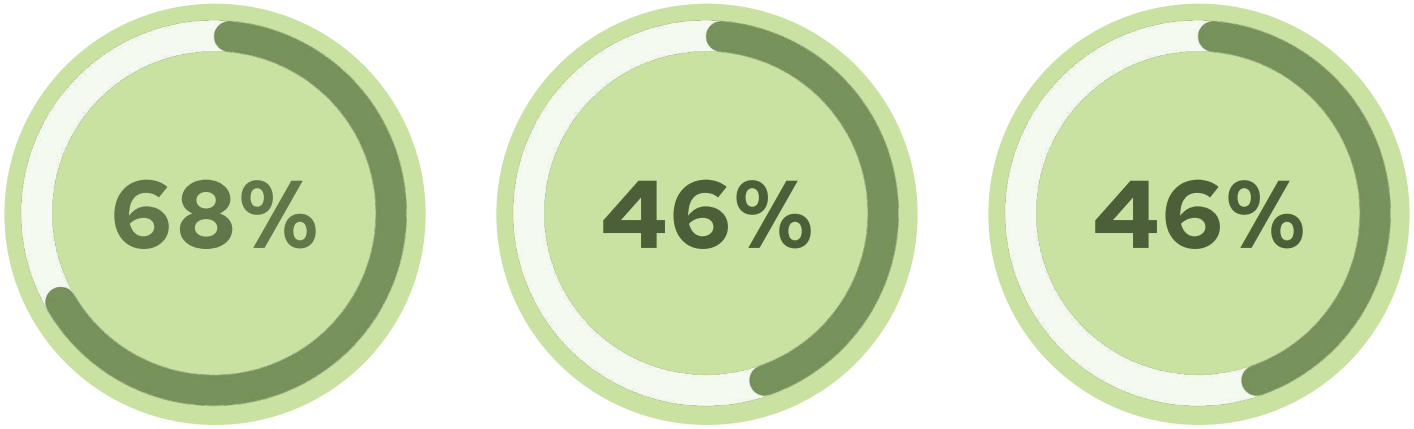
3 SOCIAL & EMOTIONAL LEARNING

A core function of education is building skills and understanding for mental, social, and emotional well-being, including empathy, flexibility, and adaptability. These capabilities shape mindsets and enhance successful learning, collaboration, problem-solving, and civic responsibility. In the face of remote learning and the adaptations necessitated by the COVID-19 pandemic, many learners, families, and educators are experiencing tremendous anxiety, loneliness, mental stress, trauma, and grief. In this moment, educators are challenged to think about how social emotional needs are enhanced or diminished with varying uses of technology, and to reimagine school norms to better enable the well-being of staff, learners, and parents, carers, and guardians.

EXPLORING THE **2023 HURDLES**

... BY IMPORTANCE

Top 3 most important Hurdles for education systems to address in 2023 (63 respondents):



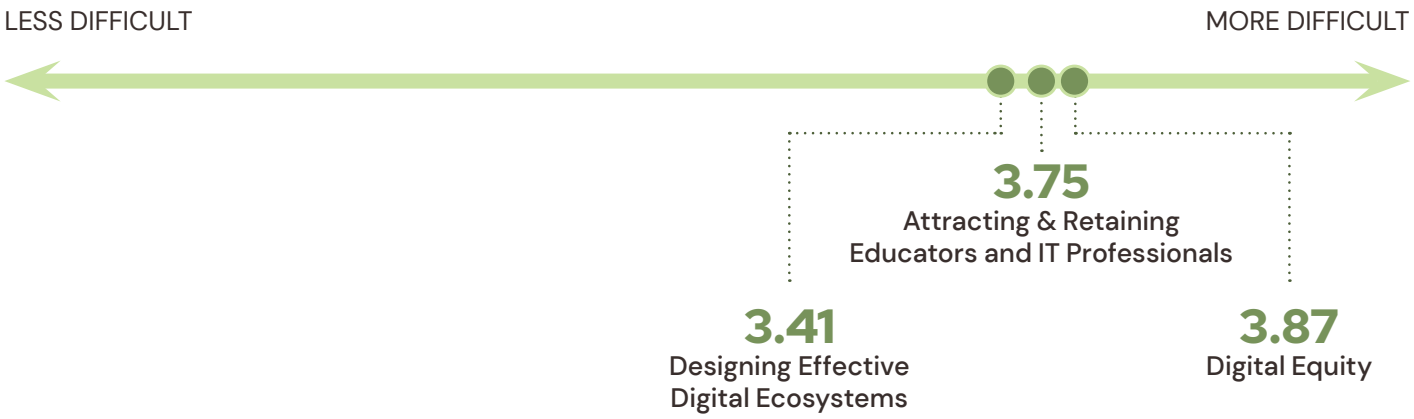
1. Attracting & Retaining Educators and IT Professionals

2. Designing Effective Digital Ecosystems*

3. Digital Equity

... BY DIFFICULTY

Top 3 Hurdles in order of degree of difficulty to surmount, as ranked by the Advisory Board (Scores reflect the average score out of 5, with 1 being the easiest to surmount and 5 being the most difficult; 63 respondents):

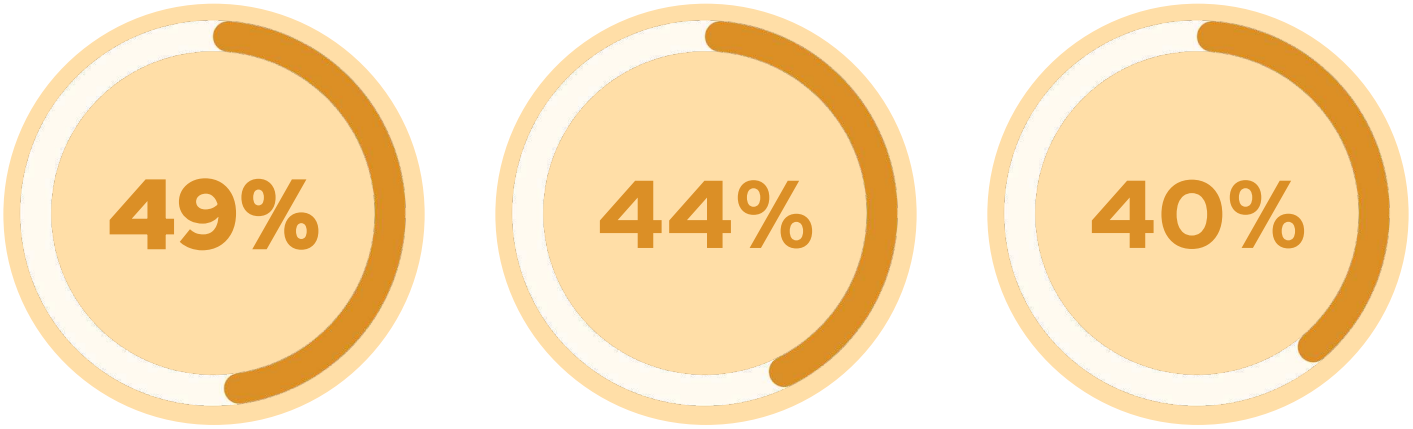


*Three topics were tied for the #2 spot (Designing Effective Digital Ecosystems, Digital Equity, and Scaling Innovation & Inertia of Education Systems). The Editorial Team considered the Advisory Board discussions, the timeliness of each topic, and the relationships between topics in breaking the tie. The #2 Hurdle for 2023 is Designing Effective Digital Ecosystems and the #3 Hurdles is Digital Equity.

EXPLORING THE **2023 ACCELERATORS**

... BY IMPORTANCE

Top 3 most important Accelerators for education systems to address in 2023 (63 respondents):



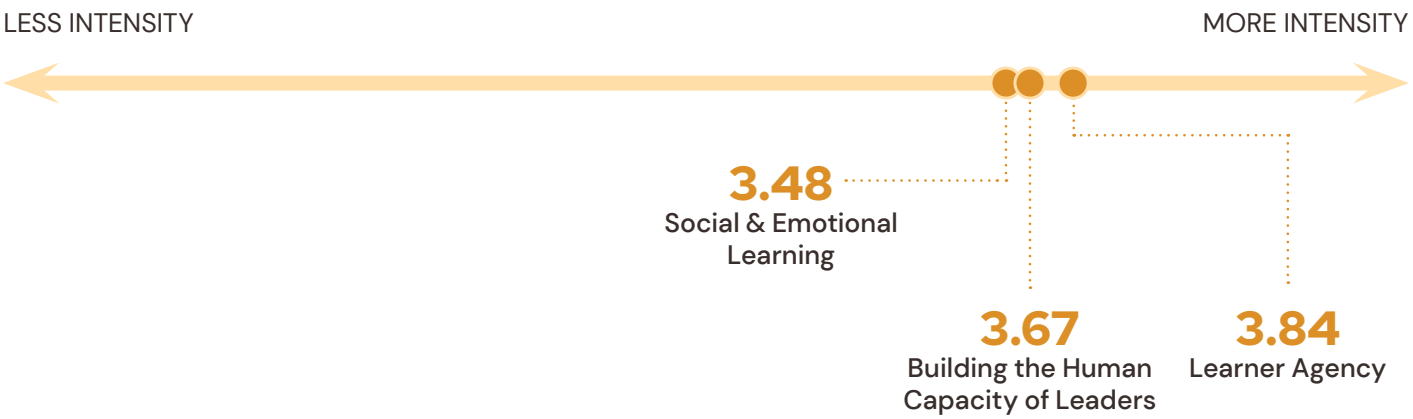
1. Building the Human Capacity of Leaders

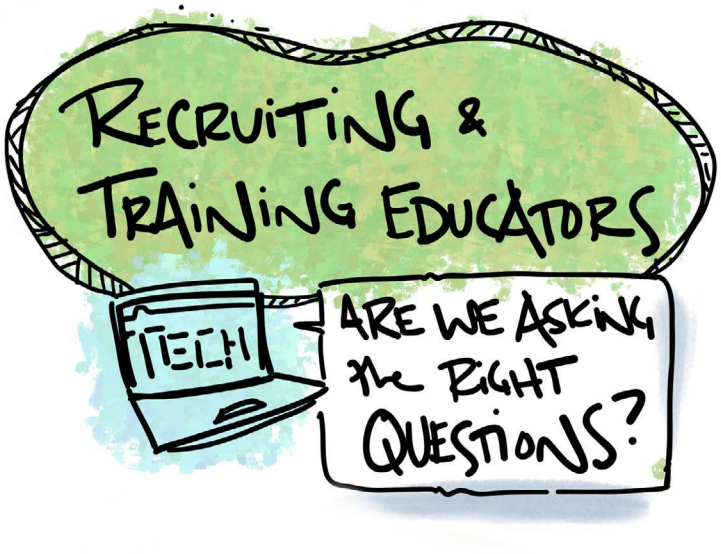
2. Learner Agency

3. Social & Emotional Learning

... BY INTENSITY

Top 3 Accelerators in order of degree of intensity of K-12 impact, as ranked by the Advisory Board (Scores reflect the average score out of 5, with 1 being the least intense and 5 being the most intense; 63 respondents):





1 ATTRACTING & RETAINING EDUCATORS AND IT PROFESSIONALS

The global pandemic, stress, low pay, poor working conditions, lack of flexibility, inadequate support — these are just some of the reasons why education systems are having a difficult time both attracting and retaining educators and IT professionals. According to the National Education Association[1], 55% of educators are thinking about leaving their teaching careers earlier than planned, while 86% of those surveyed said they've known of an educator who left or retired in 2020.

For the second year in a row, the Driving K-12 Innovation Advisory Board Members have ranked Attracting & Retaining Educators and IT Professionals as the number one Hurdle affecting education systems around the globe. What's more, this year a tremendous 68% of Advisory Board Members who took the Final Survey expressed that this Hurdle was key.

David Jarboe (District 2 Harrison Schools, Colorado, United States) shared how his home state of Colorado is experiencing teaching shortages like everywhere else, but also noted that there's a gap between the low pay that teachers earn compared with other college-educated professionals. "I think this gap concept is important to the discussion," said Jarboe. "Another factor is life/work balance. I think this is another reason we lose so many teachers. The pressure and stress to demonstrate achievement while managing 25-35 students in a class is more intense than most outside education realize." According to the Colorado Educator Shortage Survey[2], there were about 2,500 open positions at the beginning of the school year from 2021-2022, compared with 880 open positions in 2018-2019.

This staff shortage also affects those who are currently employed in education systems. "As the supervisor of both IT staff members and the library media specialists, many of my library media specialists are pulled from doing their library duties to substitute for teachers that are absent or who have suddenly left the school district," said Sandra Paul (Township of Union Public Schools, New Jersey, United States). "In an average week, the library media specialists have been pulled once or twice to sub for other classes. This has affected a few library media specialists' duties to assist the IT department with the distribution and repair of Chromebook devices for students in our high school. A few times the library media specialists were pulled to substitute for a teacher rather than performing their duties to assist with student devices."

Paul added that, when it comes to the IT department, "school districts cannot compete with the salaries that the IT industry can provide for IT staff. After completing Google or Cisco certification through the district, IT staff can either double or triple their salary somewhere else. Also, with the expansion of IT including Internet of Things (IoT), cloud-based services, cybersecurity, etc., IT staff is being stretched to cover all these duties without additional resources to do a proper job."

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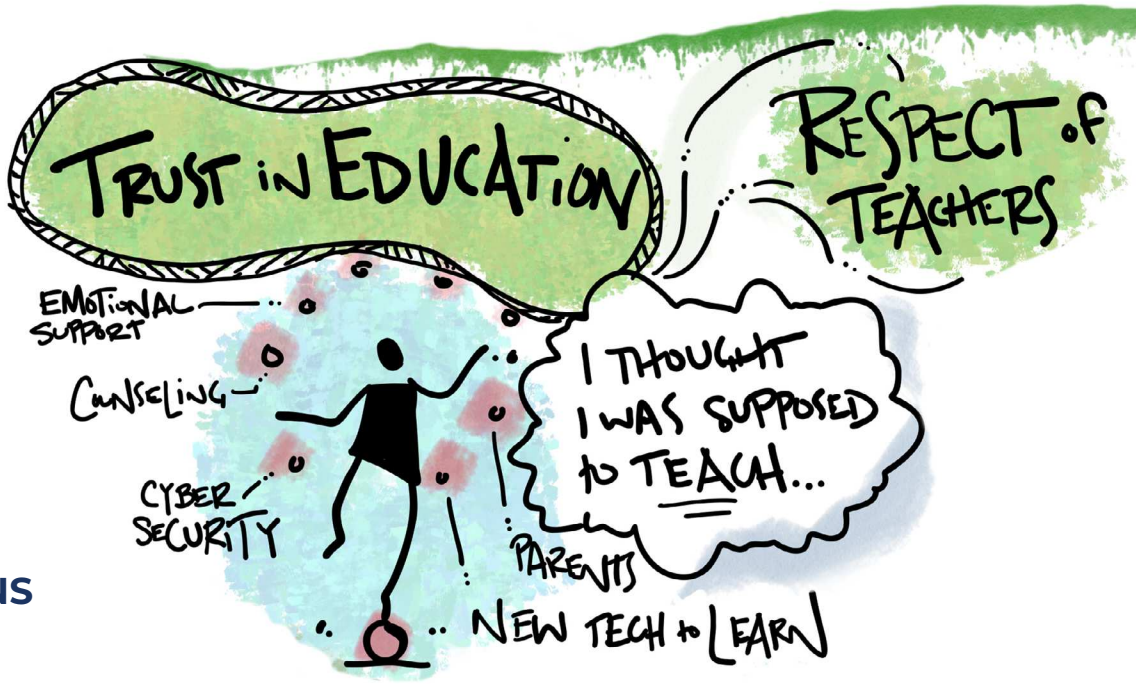
1 Walker, Tim (2022, February 1). Survey: Alarming Number of Educators May Soon Leave the Profession. National Education Association. https://www.nea.org/advocating-for-change/new-from-nea/survey-alarming-number-educators-may-soon-leave-profession.

2 (2021-2022) Colorado's Educator Shortage Survey Results. Colorado Department of Education. https://www.cde.state.co.us/educatortalent/edshortage-surveyresults.



TIPS & RECOMMENDATIONS FROM THE ADVISORY BOARD

CONSIDER THAT SCHOOL IS MORE THAN JUST WORK

"Create clubs, trips, or activities for employees and their families, show the employees that schools are not only their place of work. It is not always money, it is **creating an environment where people work comfortably and are recognized**" (Jackson Vega, Colegio Roosevelt, The American School of Lima, Peru).

IMPLEMENT LONG-TERM SOLUTIONS

"It is imperative that the country takes immediate and **sustained action to implement long-term strategies to achieve a full and diverse educator workforce**. Some evidence-based solutions that address both recruitment and retention include competitive and attractive pay and benefits, student debt relief and forgiveness, and better working conditions" (Justin Thompson, National Education Association, Washington, D.C.).

RETHINKING THE HIRING PROCESS

"**We need to review how we retain and hire**. Perhaps, teachers make a recommendation and if hired, she/he can receive a bonus...and if the 'hired' teacher is outstanding and stays, let's say, a total of three years, the recommending person receives an additional bonus at the end of the individual's three-year commitment" (Michael Lambert, True North School, Hanoi, Vietnam).

RECRUIT EDUCATORS AUTHENTICALLY

"Consider what is currently working, has promise, or is not working. **We do not try to be who we are not**. We celebrate and sell our rural lifestyle away from the hustle and bustle of urban areas. We have been successful in recruiting some teachers from larger populated areas to try our rural setting" (Timothy Taylor, Virginia Society of Technology in Education, Virginia, United States).

ASSESS WHAT YOU CAN COMPETITIVELY OFFER

Consider the structure of your collective bargaining agreements for more flexibility in aligning compensation with job responsibilities. "For example, if you are a supervisor, depending on the service area you are in, your role, responsibilities, certifications, etc., may be different and therefore, warrant different compensation. In IT, we tend to have only one person in each role. We want to examine the possibility of having levels within a given role. We are hoping these levels will provide the opportunity for staff to grow professionally and allow the administration/board to promote with a given role, and ultimately extend the retention of staff" (Vince Humes, Northwest Tri-County Intermediate Unit #5, Pennsylvania, United States).

2 DESIGNING EFFECTIVE DIGITAL ECOSYSTEMS

A digital ecosystem is a group of connected information technology resources that allow students and teachers to connect in a valuable way. Interoperability, constant improvement, and data visibility are just some of the ways in which these ecosystems can be "effective." But a highly functional, productive digital ecosystem can be difficult to achieve.

Some schools simply don't have the technology for systems integration. Advisory Board Member Claus Gregersen (Herning Gymnasium, Herning, Denmark) explained that his school system's current structure does not enable an effective digital ecosystem to exist, to a sufficient extent. "Integration between the different systems is typically based on proprietary solutions and is not possible in all cases and not to the full extent," said Gregersen. "A future structure will probably have to be built on serverless functions across clouds, so that data becomes available across subsystems for data analysis, data visualization, data mining, etc."

Gregersen went on to share that accessibility for all stakeholders — students, teachers, parents, etc. — must be available, so that they can connect via any device. Important areas that must be taken care of include:

- Access for students with special needs
- Data privacy and ownership
- Digital literacy and digital citizenship

While the use of digital environments is widespread in K-12 culture, Advisory Board Member Laura Motta (Rural Godparents Network, Uruguay, Uruguay) explained that some schools have introduced digitalization without observing and listening to the children, what they need, and how they use the ecosystem. "An effort is being made to give access to devices and connectivity, but little is being done to understand the way that kids use them," said Motta. "In Uruguay, although every child and teacher have a computer, they are not always used in the everyday life of schools."

Advisory Board Member Kim Flintoff (Peter Carnley ACS, Australia) explained that these digital ecosystems vary significantly across school systems in Australia, with differences in approaches and experiences. Some concerns he has when developing an effective digital ecosystem include:

- school-supplied technology is often very limited by enterprise policies;
- hardware and available applications are often not optimal for tasks students want to achieve;
- useful analytics are often hard to come by — schools use a lot of proxy data without much validation that it correlates to what they really want to measure;
- learners will often gravitate to simple-to-use, single-function applications rather than develop mastery of enterprise-level software deployments — use of Canva over InDesign for example.

Additionally, "schools tend to ignore the fact that many teachers are not especially skilled in instructional design or user experience design and as a consequence, the modalities employed in classroom technology requirements are often ill-matched to learning goals," said Flintoff.

TIPS & RECOMMENDATIONS FROM THE ADVISORY BOARD

DEFINE YOUR WHY

Seamless access to devices and broadband does not necessarily mean that the technology tools and resources are being used effectively or efficiently. "School systems still need to think about the 'why' when leveraging tools and resources" (Christine Fox, CAST, Massachusetts, United States). "**Digital ecosystems must address the needs of all learners**,

including those with disabilities. Ensuring that devices are interoperable with assistive technologies and that all educational materials are accessible is not only essential for learning opportunities, it is a civil right (Joint Letter U.S. Department of Justice and US Department of Education, June 29, 2010[3]). Understanding inclusive technology systems and acquiring accessible materials can be challenging. Resources to support this work include resources supported by the Office of Special Education at the U.S. Department of Education including Center on Inclusive Technology & Education Systems (CITES), Acquiring Accessible Materials[4] and Creating Accessible Materials[5] by AEM Center."

MAKE SURE YOUR GOALS ARE SPECIFIC TO YOUR DISTRICT

"Define 'effective' and design your district KPIs (key performance indicators) for the ecosystem. It is the clarifying activity to give focus, and the process informs the selection of the ecosystem vendor and customizations. **Start with the end in mind**" (Gordon Dahlby, Educational Technology Leadership and Policy Consulting, Iowa, United States).

ALLOW STUDENTS TO CUSTOMIZE THEIR ECOSYSTEMS

"In researching how students use LMSs (Learning Management Systems) and online learning environments, I was surprised to find just how important this is for students and how little the designers and implementations of such systems **consider the students as the 'user' of such systems** — generally seeing the user as the school or teachers" (Jason Zagami, Griffith University, Queensland, Australia).

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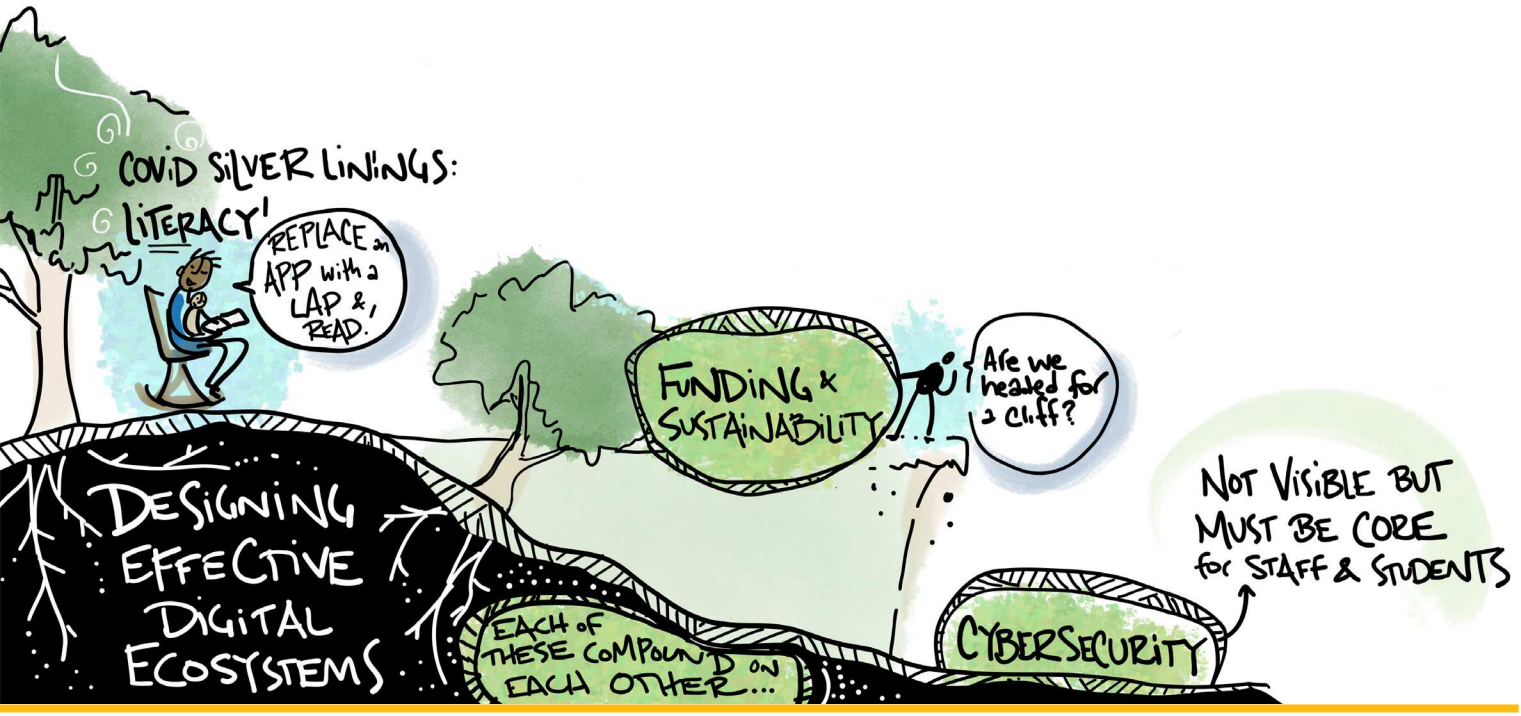
3 (2020, January 16) Technology Accessibility. U.S. Department of Education. https://www2.ed.gov/about/offices/list/ocr/frontpage/pro-students/issues/dis-issue06.html.

4 (2023) Pathways to Acquiring Accessible Materials & Technologies. National Center on Accessible Educational Materials. https://aem.cast.org/acquire/pathways-acquiring-accessible-materials-technologies.

5 (2023) Designing for Accessibility with POUR. National Center on Accessible Educational Materials. https://aem.cast.org/create/designing-accessibility-pour.



3 DIGITAL EQUITY

For students to be able to learn and participate fully in society, digital equity must be achieved. Seeing as Digital Equity has been listed as a top Hurdle for the past five years (every year that the Driving K-12 Innovation Report has been published), we are still on the journey to overcome this ongoing international challenge.

While there have been some wins in digital equity—CoSN's 2022 Student Connectivity Study Findings[6] indicate that student home connectivity must continue to be a priority for educators and policymakers. Significant gaps remain by poverty, ethnicity, and geography.

Remember, though, that digital equity is about more than access to high-quality internet and powerful computing devices. It's also about making sure that learners:

- have the knowledge and skills (digital literacy) to use technology in the service of learning;
- interact with robust and accessible content and programs;
- have their identities represented with and by the technologies themselves; and
- experience meaningful opportunities that support them as learners.

When students are empowered through digital literacy[7], specifically, they are more comfortable and confident in online learning environments, practice increased safety online, and better understand their digital responsibility.

Advisory Board Member Lisa Gustinelli (St. Vincent Ferrer School, Florida, United States) regularly works with students and families of underserved communities in Belle Glade, Florida, where 41% of the population are migrants and live under the poverty level. "Recently, I was able to obtain a grant to purchase Wonder Dot and Dash Robots, as well as iPads for block coding of the robots for the students. We traveled to their afterschool program to work with the K-5 students. We taught them how to use and program the robots. These children had never seen a robot and knew nothing of coding. Coding has been in K-12 schools with programs like code.org for years, why not their school?" said Gustinelli. "I must say, I'm not shocked by the poverty, but I saw firsthand how there is such a disparity of offerings in our public schools. Some schools in my area of Delray Beach are given an A+ rating and the money flows to these schools because we are an affluent touristic area. The way that school funding is structured is a huge impediment for schools in low-income areas. This starts the cycle of inequity."

Additionally, the pandemic highlighted how our rural areas are an internet desert, explained Melissa McConnell (NSPRA, Maryland, United States). "It didn't matter if we parked buses in these areas or gave them hot spots for their homes, it was not enough. It wasn't robust enough if more than one person was in the home needing to learn or work, especially when streaming videos for learning were involved."

What are some ways in which we can address this ongoing Hurdle? "The solution to the problem requires collaboration and actions from a variety of government agencies (e.g. local, state, FCC), business entities (e.g. ISPs, device manufacturers, mobile technology companies), and community leaders/advocates" (Stacy Hawthorne, Hawthorne Education, United States). "Additionally, the Hurdle is nuanced with a variety of social issues, such as language barriers, trust in government, immigration fears."

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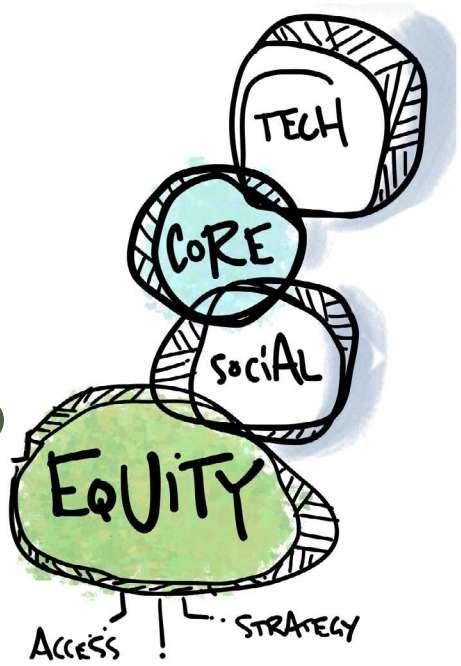
6 Boronyak, Jennifer (2022, July). CoSN Home Internet Connectivity Findings. Consortium of School Networking. https://public.tableau.com/app/profile/jennifer.boronyak/viz/CoSNHomeInternetConnectivityFindingsJuly2022/DataStory.

7 Learning.com Team (2022, April 19). Why Digital Literacy is Important for Students. Learning.com. https://www.learning.com/blog/reasons-digital-literacy-is-important-for-students/.

*It's important to note that this is the fifth year that **Digital Equity** appears as a **Hurdle** in this report.*

2019 **#2** Hurdle
2020 **#5** Hurdle
2021 **#1** Hurdle
2022 **#3** Hurdle
2023 **#3** Hurdle



TIPS & RECOMMENDATIONS FROM THE ADVISORY BOARD

ASSESS THE PROCESS

"Change is built on everyday choices. Choices are never neutral and calls to 'return to normal,' ignore the lesson that 'normal' wasn't working for most students. Every choice school leaders make will either push us to a return to past inequity or pull us toward a renewed commitment to future equity. No choice is too small, they all add up. **True equity is the ultimate impactful innovation**. To get there, challenge every choice you make against the goal of equity" (Mary Lang, Los Angeles County Office of Education, California, United States).

EQUAL RESOURCES FOR ALL

"Make sure that **all students have equal access to every resource** used to improve teaching and learning" (Robert Moody, Fort Hays State University, Kansas, United States).

PROVIDE HIGH-QUALITY DEVICES

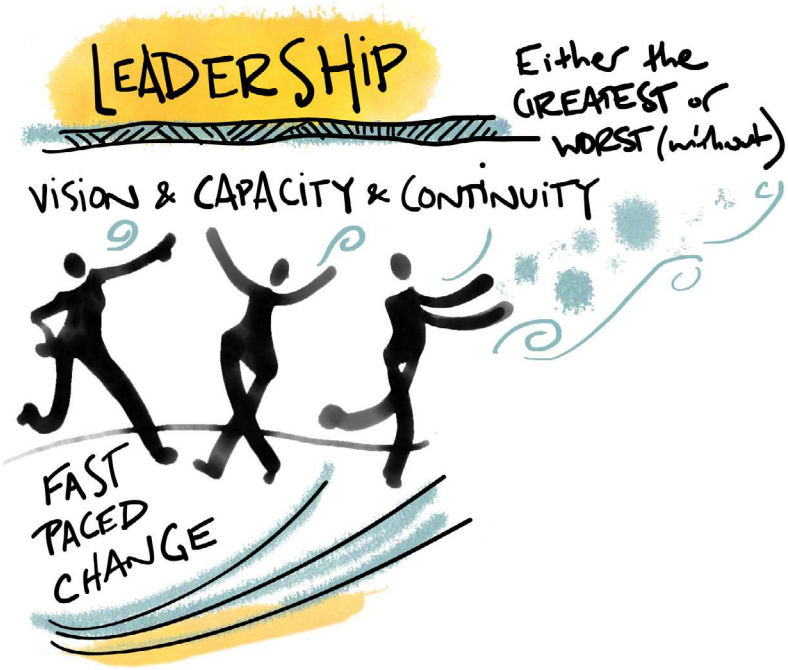
"An **area of digital equity that I often see neglected is the quality of the devices**, such as processing power and speed. This seems to be a common issue for some low-cost devices. The device may not have the processing power to run multiple programs at the same time. For example, imagine a teacher is on a video call with students and wants students to complete a collaborative activity using another digital tool. Some student devices may not be able to run a video call and the other tool at the same time. Sadly, I have even been at schools where teachers don't have access to high-quality devices, but I see it more with low-quality student devices," (Lindy Hockenbary, InTECHgrated Professional Development, Montana, United States).

MAKE SURE EDUCATORS HAVE DIGITAL LITERACY & EDTECH TRAINING

In addition to students achieving digital equity, **ensure that educators have the knowledge and understanding of the technology and the tools to teach them**. "The teacher as the facilitator of the lesson needs professional development on what to look for and how to teach lessons rich in technology, while remembering all the important opportunities to empower students by recognizing their personal situations," said Gustinelli. "Lack of time and training is a factor. Teachers are feeling overwhelmed with extra work and duties and are unwilling and frankly unable to find the time to learn about methods of teaching with digital equity."

MAXIMIZE EXPERT RESOURCES

There are many resources available to help you make strides in narrowing the digital divide in your community. Visit www.cosn.org/digitalequity to access toolkits and resources that will assist those in North America in getting funding committed to digital equity. Additional resources, like The Learning Accelerator's Digital Equity Guide for schools and districts and white paper, From Digital Access to Digital Equity, are also helpful.



1 BUILDING THE HUMAN CAPACITY OF LEADERS

"Great leadership with capacity and vision is either the greatest Accelerator or — the lack of it — the greatest Hurdle. Period" (Anonymous Advisory Board Member, United States).

These words from an Advisory Board member, shared during the initiative's Accelerator discussion call, ring true, as education systems look to both lift up and empower their staff, in order to attract and retain the best educators and IT professionals to their schools. Another group on the same discussion call explained that it's everyone's job to be a part of the leadership team: healthy workplaces lead to more equity and inclusion.

Advisory Board Member & Superintendent Kelly May-Vollmar (Desert Sands Unified School District, California, United States) shared that her district believes that "our human capacity must be strengthened if we are to offer the very best opportunities to our students." To accomplish this, the district hired a director of leadership development years ago, and, in partnership with NISL, they created the Desert Sands Leadership Academy. "This program is producing a group of leaders that are developing innovative solutions to systematic issues in our district as it pertains to teaching and learning," said May-Vollmar. Additional efforts in her school district include launching more leadership classes for all classified managers to build their capacity, and the director of leadership development works with all our new principals and all assistant principals on a monthly basis to build their capacity. "This has strengthened our pipeline for leadership in a time when it is desperately needed due to many leaving the profession," she added.

Offering leadership courses and professional development opportunities matters when it comes to building the human capacity of school staff because it allows educators to[8]:

- Expand their knowledge base
- Boost their confidence
- Meet other teachers
- Set and achieving goals
- Become a better educator

Investing in school staff members ignites the process of developing educational leaders. But with the never-ending to-do list that educators and IT professionals currently have, these professional development opportunities can often feel like a hassle. Advisory Board Member Paul Signorelli (Paul Signorelli & Associates, California, United States) explained: "If we see training as part of the job rather than a diversion (something that pulls us away from our 'real' work), we're on our way toward accelerating the process of 'building the human capacity' as an essential part of our day-to-day work."fears."

8 Robinson, Java (2019, February 11). Why Professional Development Matters. National Education Association. https://www.nea.org/professional-excellence/student-engagement/tools-tips/why-professional-development-matters.

TIPS & RECOMMENDATIONS FROM THE ADVISORY BOARD

LEADERSHIP MATTERS

"**Lead with kindness and joy** and that alone can be the contagion we need to be impactful in our districts and classrooms. With the right mindset anything is possible" (Holly Doe, RSU #40, Maine, United States).

SET CLEAR EXPECTATIONS

One way for a leader to strengthen professional learning within a school is by setting clear expectations that everyone contributes to the direction of the learning — i.e. truly shared leadership. **Being clear about what this expectation means and how it gets operationalized is key**. If the directives for learning are always generated "top down," then the agency for learning among teachers will be non-existent. School leaders need to be willing (and patient) to step back from the table and let teachers drive the conversation and the learning" (Larry Molinaro, The National Center on Education and the Economy, Washington, D.C., United States).

BE A VISIONARY TECHNOLOGY LEADER

"Step up and be part of the change that we need to plan for and see in our student's future so they may thrive in a global society and economy. Our world is changing. Education is changing. **We can either be a leader of change and a creator of innovation or someone else will**" (Frankie Jackson, Former K-12 CTO, Cypress Fairbanks ISD, Texas, United States).

2 LEARNER AGENCY

Now is the time for educators and IT professionals to break away from traditional thinking and approaches to how education is taught — learners are ready. "The prevalence of tech means information is everywhere; education will function as a guide for how to learn (select, reject, build upon) the mass of information" (Karen Swift, James Nash High School, Queensland, Australia).

To champion for learner agency, educators must also advocate for their own agency in school systems — the two co-agencies are actually very related. "In order to take advantage of technology and modern pedagogies, learner and educator agency is critical" (Marie Bjerede, E-mergents, Oregon, United States). "Specifically, learner agency requires an environment that fosters intrinsic motivation and metacognition. Without the will and the skill to learn, students will continue to see school as a necessary evil to be gamed rather than the opportunity to meaningfully prepare for college, work, family, and citizenship that it is. Without the experience of working in an Agentic environment, educators won't have the mindset necessary to shift from the sage role to the guide role. Without agency, tools for personalization and intrinsically motivated learning will be ineffective as they require even higher levels of student autonomy to realize their potential."

Bjerede goes on to describe Learner Agency as motivation plus meta-cognition: while motivation depends on autonomy, competence, and connection, meta-cognition involves more aspects, including self-critique required to self manage. If applied, students could transform from order takes to innovators and learn far more authentically.

Not only would the learner's education be more authentic, it would also be more enjoyable. "What if kids enjoyed school? What if kids wanted to go to school? What if kids had a burning desire to learn? Imagine the changes this would make to every facet of our society" (Lindy Hockenbary, InTECHgrated Professional Development, Montana, United States). "Family lives would potentially improve. Adults would potentially be happier and more productive citizens."

TIPS & RECOMMENDATIONS FROM THE ADVISORY BOARD

TRUST OURSELVES AND OUR STUDENTS

"We need to be more courageous, trust ourselves as educators, and, more importantly, **trust our students** — this is what agency is all about in the current 21st-century 'schooling'" (Guy Levi, Art of Learning Innovation, Tel Aviv, Israel).

HOW TO TAKE FIRST STEPS TO LEARNER AGENCY

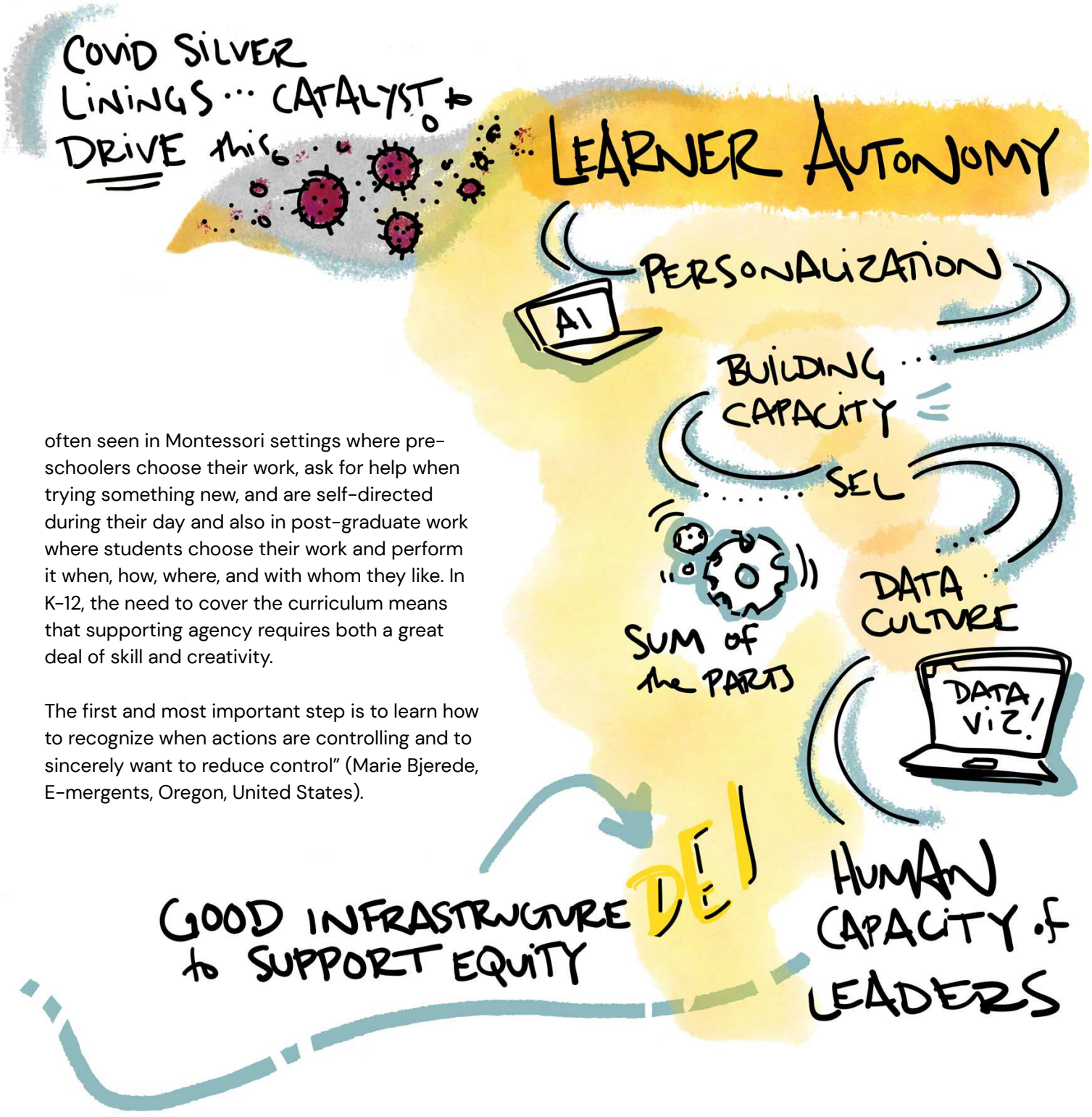
"The first stepping stone [of Learner Agency] is really through an implementation of station rotation allowing students to work through a playlist at their own pace and allowing them to show how they want to demonstrate mastery while in the collaborative station. **Station rotation is at least a stepping stone in the right direction**. Teachers can use choice boards to help provide the appropriate guardrails needed" (Ken Zimmerman, Lancaster-Lebanon Intermediate Unit 13, Pennsylvania, United States).

LET STUDENTS TAKE THE LEAD

"The innovation and agency will come from students. They will **guide their learning based on their interests and possibilities**" (Ximena Nunez del Prado, Colegio Franklin D. Roosevelt, The American School of Lima, Lima, Peru).

GIVE UP CONTROL

"Educators will always maintain authority in their classroom, but **both teacher and learner agency are most effective when they are able to turn as much control over to learners as possible**. This is most



often seen in Montessori settings where pre-schoolers choose their work, ask for help when trying something new, and are self-directed during their day and also in post-graduate work where students choose their work and perform it when, how, where, and with whom they like. In K-12, the need to cover the curriculum means that supporting agency requires both a great deal of skill and creativity.

The first and most important step is to learn how to recognize when actions are controlling and to sincerely want to reduce control" (Marie Bjerede, E-mergents, Oregon, United States).

3 SOCIAL & EMOTIONAL LEARNING

According to the Collaborative for Academic, Social, and Emotional Learning (CASEL)[9], 76% of principals and 53% of teachers in the United States reported that their schools used a social and emotional learning (SEL) program or SEL curriculum materials in the 2021–2022 school year.

What's more, in McGraw Hill's 2021 Social and Emotional Learning Report,[10] almost all educators reported that it's critical to develop key SEL skills — self-awareness (with 99% of educators rating it as either somewhat or very important), relationship skills (98%), self-management (97%), responsible decision-making (97%), and social awareness (96%) — in the classroom.

But how does technology play a role in SEL programming? "Social and Emotional Learning is a top concern on the part of educators and leaders and associations. Thinking about how technology enhances or gets in the way of being connected is critical" (Keith Krueger, CoSN, Washington, D.C., United States). In 2021, CoSN and CASEL partnered to produce "Making Social & Emotional Learning (SEL) a Priority[11]," a member-only brief that provided new guidance for K-12 school districts seeking to deploy technology to enhance social and emotional learning.

Advisory Board Member Sarah Margeson (Tippecanoe School Corporation, Indiana, United States) shared how her technology department has partnered with the school's mental wellness team to bring more digital well-being content to teachers, students, and caregivers. "We don't see technology and applied educational neuroscience work as being separate but rather very much linked together," said Margeson. "We actively participate in their initiatives, and they utilize our professional development strategies to reach teachers."

Both nationally and internationally, we must also consider how world events are impacting this great need for SEL in schools. Advisory Board Member Øystein Johannessen (Deputy County Governor of Trøndelag, Trøndelag, Norway) explained that pedagogical social and emotional learning is an important topic within the national curriculum in Norway. "The main nuance is that the embedding of social and emotional learning in teaching and learning is a responsibility of each teacher. Thus, there may be variations across schools with regard to how and to what degree this is taking place. The ongoing war in Ukraine has increased the likelihood of social and emotional learning being more at the forefront of teaching and learning than before the war started," said Johannessen.

"Recent events, such as the pandemic, the climate challenge, and the ongoing war in Ukraine, are good examples of how such phenomena can be levers for social and emotional learning because many young people are worried about how the future will unfold in the light of such events and the outlooks for the future."

MAKING SEL A PRIORITY

In partnership with CASEL, CoSN has shared four ways that IT leaders in education can collaborate with SEL teams to promote high-quality implementation:

1. Facilitate two-way communication and build engagement with SEL across staff, families, and community partners.
2. Identify interactive platforms for ongoing adult learning and collaboration around SEL.
3. Proactively support students, teachers, and families with technology that facilitates teaching and integrating SEL across classrooms.
4. Develop robust systems for collecting, disaggregating, and reflecting on SEL-related data.

Visit the Executive Summary[12] to learn more.

TIPS & RECOMMENDATIONS FROM THE ADVISORY BOARD

DEVELOP PROCESSES TO SUPPORT SOCIAL AND EMOTIONAL LEARNING

"At my school, we have made some concrete initiatives in this area. As a supplement to our study advisors, we have **employed a student coach** who focuses both on students with special needs and the school's work with social and emotional learning. We have introduced an annual dialogue where each student has an individual conversation with one of their teachers about their well-being in their class. As the latest initiative, we are in the process of **developing a toolbox**, where for each subject there are a number of activities that include Social and Emotional Learning as part of an exercise in the subject" (Claus Gregersen, Herning Gymnasium, Herning, Denmark).

DON'T FORGET: HUMANS FIRST

During the Accelerators Discussion Call, one of our Advisory Board breakout groups talked about how it is important, especially when problem solving, to **remember that we are humans first**.

UTILIZE OUTSIDE RESOURCES

Many schools **partner with outside organizations** to provide topics, resources, and prompts to encourage social and emotional learning. If this need is not being met within the district, consider collaborating to best support SEL.

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9 Schwartz, H. L., Bongard, M., Bogan, E. D., Boyle, A. E., Meyers, D. C., & Jagers, R. J. (2022). Social and Emotional Learning in Schools Nationally and in the Collaborating Districts Initiative Selected Findings from the American Teacher Panel and American School Leader Panel Surveys.Collaborative for Academic, Social, and Emotional Learning (CASEL). https://casel.org/sel-in-schools-nationally-and-in-the-cdi/?view=true.

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Phil Hintz, Director of Student Information Services-CIO, Barrington School District 220, Illinois, United States

Shauna Hobbs-Beckley, Director of Analytics, Innovation, and Research, Graded-The American School of São Paulo, Brazil

Lindy Hockenbary, Educational Technology Consultant, InTECHgrated Professional Development, Montana, United States

Beth Holland, Research & Measurement Partner, The Learning Accelerator, Rhode Island, United States

Vince Humes, Director Innovative Technology Solutions, Northwest Tri-County Intermediate Unit, Pennsylvania, United States

Frankie Jackson, Former K-12 CTO, Cypress Fairbanks ISD, Texas, United States, and Independent K-12 CTO, Success Partner, CoSN

David Jarboe, Director of Instructional Technology @STEAM, District 2 Harrison Schools, Colorado, United States

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Mary Lang, Officer, Organizational Change Management, Los Angeles County Office of Education, Californai, United States

Nicole Langford, Research Associate, ISTE, Illinois, United States

Guy Levi, Innovation Consultant, Art of Learning Innovation, Israel

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Sarah Margeson, Coordinator of Connected Learning, Tippecanoe School Corporation, Indiana, United States

Kelly May-Vollmar, Ed.D., Superintendent, Desert Sands Unified School District, California, United States

Melissa McConnell, Manager, Professional Development & Member Engagement, NSPRA, Kansas, United States

Tim McIlvain, Executive Director, Learning Technology Center, Illinois, United States

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Robert Moody, Professor of Education Administration, Curriculum, and Supervision, Fort Hays State University, Kansas, United States

Laura Motta, Coordinator, Rural Godparents Network, Uruguay

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Philip Neufeld, Executive Officer, IT, Fresno Unified School District, California, United States

Ximena Nuñez del Prado, Director of Technology and Learning Innovation, Colegio Franklin D. Roosevelt, The American School of Lima, Peru

Sandra Paul, Director of IT and Operations, Twp of Union Public Schools, New Jersey, United States

Richard Platts, CTO, Allegheny Intermediate Unit, Pennsylvania, United States

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Jeremy Shorr, Consultant and Education Futurist, Jeremy Shorr Educational Consulting, Ohio, United States

Shir Shwartz, Head of Learning Experience Design Unit, CET

Robert Sidford, Director of Technology and Innovation, Mt. Diablo Unified School District, California, United States

Paul Signorelli, Writer-Trainer-Presenter-Consultant, Paul Signorelli & Associates, California, United States

Andrew Smith, Education Services Australia, Victoria, Australia

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Karen Swift, Head of Department - Business and Digital Technologies, James Nash High School, Queensland, Australia

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Ken Zimmerman, Associate Program Director of Educational Technology & Innovation, Lancaster-Lebanon Intermediate Unit 13, Pennsylvania, United States

1325 G Street NW Suite 420
Washington, DC 20005
cosn.org