

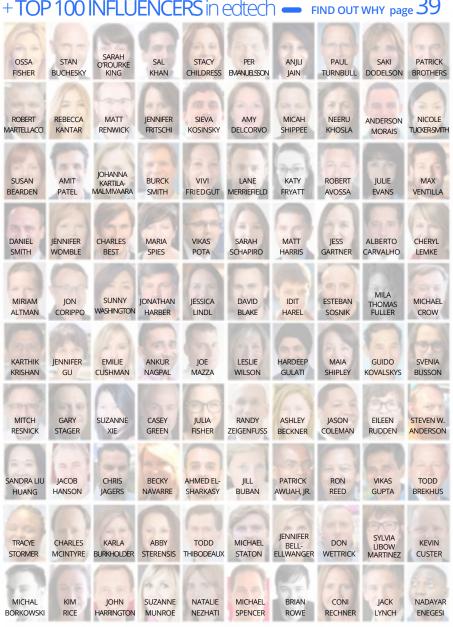
**EDITOR'S LETTER** 

#### ON THE CUSP OF A NEW AGE IN LEARNING

Something magical is afoot in the realm of learning and education. It relates to the idea, famously posed by Arthur C. Clarke, "Any sufficiently advanced technology is indistinguishable from magic." It coincides with a greater awareness of what it means to be human in a machine age. And it has everything to do with the realization of our own humanity in the face of forces that might attempt to subvert that through nefarious means. There was once a great enlightenment where

rational thought and human improvement reigned. Today's schools of thought and practice—have an opportunity to draw deeply from such an age of reason, and even more deeply from the sort of science seen 'a long time ago in a galaxy far, far away' and increasingly appearing in our midst. But with one exception: now, we have an opportunity to do it better than before. On the cusp of a new age, let's make our learning come alive to serve us all better, and in so doing, may we draw most deeply not from our devices, apps, and platforms, but from the inexorable power of each other.

#### +TOP 100 INFLUENCERS in edtech — FIND OUT WHY page 39



#### STATE OF EDTECH 2019-2020: THE MINDS BEHIND

## WHAT'S NOW & WHAT'S NEXT

**EDITOR-IN-CHIEF** Victor Rivero **LEAD AUTHOR** Mark Gura



#### Mark Gura

Mark taught at New York City public schools in East Harlem for two decades. He spent five years as a curriculum developer for the central office and was eventually tapped to be the New York City Department of Education's director of the Office of Instructional Technology, assisting over 1,700 schools serving 1.1 million students in America's largest school system.



#### Victor Rivero

Victor tells the story of 21st-century education transformation. He has toured the country with the Bill and Melinda Gates Foundation; contributed to various education and technology pubs, and provided editorial support to the Consortium for School Networking. He oversees The EdTech Awards, the annual recognition program featuring edtech's best and brightest.



#### EDITOR-IN-CHIEF Victor Rivero

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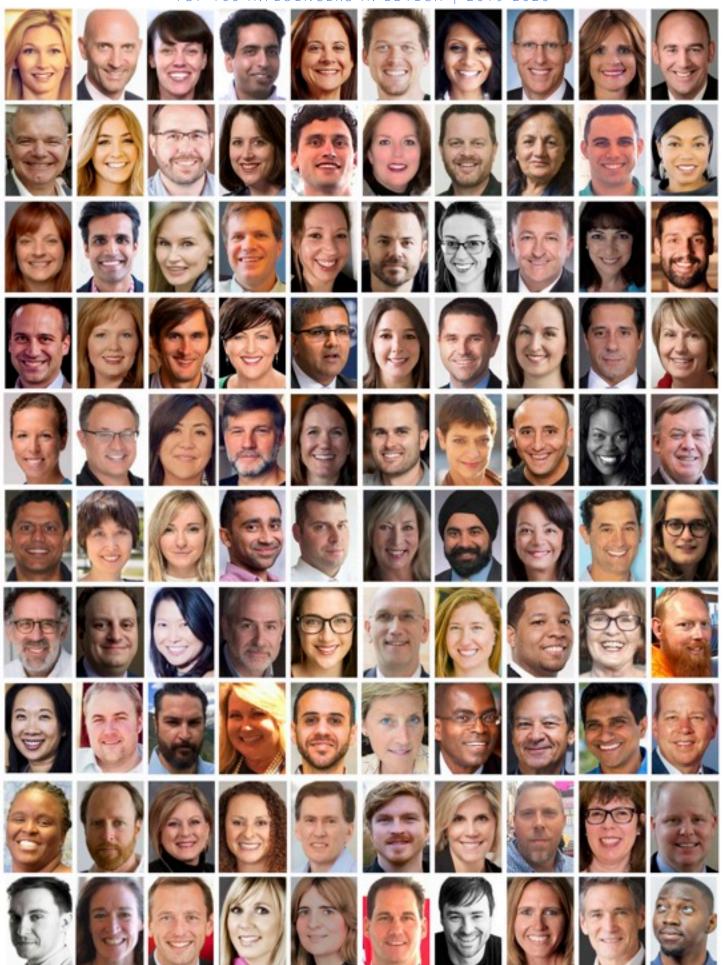
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STATE OF EDTECH 2019-2020:THE MINDS BEHIND WHAT'S NOW & WHAT'S NEXT | EDTECH DIGEST www.edtechdigest.com

IN THIS REPORT:

"Knowledge is the eye of desire and can become the pilot of the soul." —Will Durant

## an important You are part of a digital shift in learning

The numbers and the highlights are all looking very bright for the field of edtech, a nascent sector with a long and lively future ahead, with all indicators pointing to steady growth and continued expansion. And not to mention increasingly great people.

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NUMBERS TELLING THE STORY OF WHAT'S NOW AND WHATS NEXT IN EDTECH



Weighing in with his thoughts on the current state of education, technology's role in improving it, and what's ahead.

Sunil Singh, Mathematics Specialist // PAGE 15

**There are plenty** of numbers in edtech, but what do they all add up to? Here are a few that help tell the story. Which numbers get *your* attention?

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/ \_\_\_\_\_\_11 IMD

11 IMPORTANT TRENDS IN EDTECH

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**THE MINDS BEHIND** what's now and what's next are all around us, and this year we highlight 100 more innovative leaders shaping the future of learning.



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PERSPECTIVE A TALE OF TWO SCHOOL REALITIES



Her professional learning network includes educators from around the world. "These connections encourage me to grow, ultimately impacting the learning of students" she says:

Nikole Blanchard, Member of the Board of Directors, ISTE // PAGE 38

**We're shining a** spotlight on the people behind the tools, schools, leaders, and all things edtech—people who lift others up and push education forward. Spend some time with these innovative leaders:

IN CLOSE WITH | **Don Wettrick (10), Rose Reissman** (28), Gary Israel (32), Jon Drescher (33), Robert Avossa (37), and Nikole Blanchard (38), Mitch Weisburgh (55).

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THE EDTECH AWARDS



NUMBERS TELLING THE STORY OF 21ST-CENTURY EDUCATION TRANSFORMATION

STATE OF EDTECH: FROM NICHE TO MAINSTREAM

11 IMPORTANT TRENDS

- TRILLION. Education is a \$6T industry growing to \$8T by 2025 globally. Expenditure on education and training from governments, parents, individuals and corporates (worldwide) continues to grow to historic levels and is expected to reach USD\$10T by 2030.
- PERCENT. Education is grossly under digitized, with less than 3% of global education expenditure on technology. As a sector, education is a digital laggard with less than 3% of overall expenditure allocated to digital, presenting a serious challenge given the scale of what's to come.
- BILLION. Digital spending is changing fast, though—forecast to grow to \$342b by 2025. In 2018, education spent \$142b on digital. While this is forecast to grow to \$342b by 2025, it is still less than 5% of overall expenditure.

  For above numbers 6, 3, 342, SOURCE:www.holonig.com
- MILLION. According to the 2018 State of the States report from EducationSuperhighway, 40.7 million more students have high-speed internet access than did in 2013. This means that *98 percent* of U.S. school districts can now take advantage of digital learning: 2.3 million students to go. SOURCE: <a href="https://www.educationsuperhighway.org">www.educationsuperhighway.org</a>
- BILLION. That's how many U.S. dollars were invested in educational technology companies between 1997 and 2017—a full 62% of that funding was in just the *last three years* between 2015 and 2017. For two decades the edtech sector moved along like so, and then, *boom!*—a whole new phase. *SOURCE: www.metaari.com* 
  - MILLION. The number of educational apps has swollen to 2.1 million available for download in leading app stores as of 2018. This is just a rough estimate, but the idea is that keeping track of the app explosion is now nearly incalculable. SOURCE: www.statista.com
  - MILLION. Among the very biggest edtech investments of 2018, the company that raised the most money was BYJU's (tutoring), weighing in at a whopping \$540 million. DreamBox Learning (adaptive learning) comes in at number 7, having raised a cool \$130 million. SOURCE: <a href="www.hackeducation.com">www.hackeducation.com</a>
    - MILLION. Number of K-12 stakeholders that have shared their ideas with Project Tomorrow's Speak Up survey over the past 15 years. Speak Up has collected and reported on the authentic views of more than 5.5 million K-12 students, their parents, teachers, librarians, media specialists, technology coordinators, technology administrators, principals, district administrators, and community members. The largest survey of its kind in the U.S. asks and shares your views and what you value about digital learning.

SOURCE: www.tomorrow.org

### STATE OF EDTECH

## From niche to MAINSTREAM

Guiding education further along in its journey, *edtech* has morphed from special niche to simply, mainstream education—fully realizing its potential through the application of technology.

#### By MARK GURA

Moving into 2019, the symbiotic relationship between education and technology continues to deepen and reveal its richness in inspiring ways. The field has fully reached that point in which Best Practices across the curriculum involve technology.

In other words, edtech *is* education, the lines between the two continue to blur and become faint memories of the way people used to teach and learn.

And while it's easy to see all the winning associated with this veritable force of nature, it's difficult to see much lost that will be missed.

Thinking deeply about all of this at the start of 2019, *EdTech Digest* offers this report to share reflections and 'ah-ha's that it feels need to be posted.



What's happening in education now is the realization of long-term goals as well as the emergence of new, more relevant, and

important ones; both coming about through the application of digital resources that are increasingly varied, powerful, and effective. It follows that:

## Technology is now doubly mission critical for education.

Current education, when implemented in ways that informed educators understand to be best, is technology supported, even technology defined.

This is a development that's been long in maturing.

In fact, EdTech Digest has been describing this in articles like the 2017 ISTE Conference follow-up piece "Unpacking EdTech ... All grown up, edtech is ready to show 'vanilla ed' how to get the job done!"

#### How is this so?

In one very easy-to-see way across the curriculum, best practices involve technology.

Quick example: ASCD's
(Association of Supervisors and Curriculum Developers) recent newsletter "Our 10 Best Articles of 2018"

features Engaging Student Journalists to Cortell Their Own Stories which states "...First, we published our stories on a website that we created for teens by teens. We even (its enlisted peers at other high schools in our city to write for our website. Then, we got

in touch with our city's daily newspaper to share what we wrote. Editors were impressed..." There's so much best

Technology
continues to
make new and
best practices in
core curriculum
instruction
possible and
practical; the field
is revisiting and
reinvesting
emphasis in
teaching
technology itself as

an important body

practice in that single short statement: Traditional Student Writing Skills elevated to 21st Century Learning, Student Collaboration and Peer to Peer Learning, Authentic Activities, Real World Learning, Applied Technology Skills, and more, all of it guided and contextualized by digital technology that now defines the world these young people live and learn in and are preparing to enter at graduation.

And, at the same time that technology continues to make new best practices in core curriculum instruction possible and practical; the field is revisiting and reinvesting emphasis in teaching technology itself as an important body of curriculum.

Classes in Computer Science, Computational Thinking, and Coding have become standards based, commonly offered, and even required in our schools. (See page 29 of this report for an article about the return of technology (itself) to favor in the curriculum and the rise of coding and Computer Science in the overall course of study.)

How will these two, long divorced focus areas: technology to drive improved subject area instruction and technology as a focus, in

and of itself, cross and blend to produce something still more potent and fresh in 2019 and beyond? We'll be observing, reflecting, and reporting.

**2019 will see** "education" (the field, the institution, the organizations through which it shows up in the world) moving in giant steps toward realization of important shifts.

Yes, The Digital Shift, the inevitable drift toward acrossthe-board digital solutions to handle the vast majority of its needs; but also smaller, constituent changes that will contribute to the full transformation—the increasing availability of affordable devices and services will contribute, but also greater acceptance of the inevitable establishment of a fully digital platform as evidenced by surveys conducted throughout 2018.

For instance, a broad-based survey (School of Professional & Graduate Studies/Mid America Nazarene University) of experienced teachers showed

that "73% of teachers agreed that technology had dramatically changed the classroom in the last five years...56% of their tools have become tech based—such as smart boards, student portals, laptops, tablets, learning software, and learning apps (a far cry from the worksheets and pencils of yesteryear).

These tools have not only brought the classroom into the modern age, but they have also enhanced learning and teaching,

> according to 82% of the teachers surveyed."

We expect to see and evolution of important trends,

- continued development among them:
- 1. Teaching Technology -Deepening the curricular focus and fit of Technology, Itself
- 2. Student Robotics (and related Hands-on Applied STEM Activities) are more often finding their way further into the regular daytime instructional program of school
- 3. Addressing the Need to Nourish Student Creativity
- 4. Technology as Catalyst for the Evolving Nature of Literacy and Continued Establishment of a Set of a Reinvigorated Power Tools for Literacy Instruction
- 5. The New Student (well, a new understanding of the student and how to best serve learners).
- 6. The New Professional Learning, online connections and communities and a broader range of learning opportunities for educators to grow and improve their practice

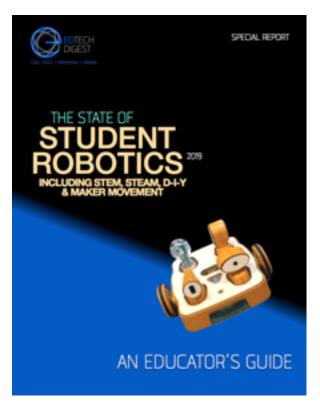
73% of teachers agreed that technology had dramatically changed the classroom in the last five years ... These tools have not only brought the classroom into the modern age, but they have also enhanced learning and teaching...

- 7. Preparing Students for Careers and Learning Beyond School
- 8. Renewed View of EdTech Leadership
- 9. New Resources and Practices for Next Level Teaching and Learning
- 10. Technology Armed and Freshly Empowered **Teachers**
- 11. Trends to Watch for 2019 and BEYOND... Blockchain in Education, Data Visualization, etc.

Continue to the HIGHLIGHTS section of this report for more in-depth discussion of the above.

FYI: EdTech Digest intends to offer SPECIAL REPORTS on many of these themes throughout 2019!

One particularly exciting report: "The State of Student Robotics: An Educator's Guide." Contact our editors for details.





"While I think that many educational thought leaders are important, I wanted to feature people that were passionate/opinionated about education, but on the other side." —Don Wettrick, Founder, StartEdUp Foundation

#### IN CLOSE WITH | Don Wettrick

THE VOICE AND mind behind the increasingly successful StartEdUp podast, Don Wettrick created the podcast to introduce educators to entrepreneurs, authors, and thought leaders who are not in education. Entrepreneurs are the embodiment of "life long learners," and they learn by doing; they embrace failure. They also fail early and often, collaborate, communicate, and "have grit. You know—all the buzzwords/concepts we celebrate in education." By having these conversations with these leaders, STARTedUP is driving a conversation about what it means to be successful- beyond the school walls. Guests have included entrepreneurs and authors such as Gary Vaynerchuk, Seth Godin, Amy Wilkinson, and Daniel Pink. Don is the Innovation Coordinator at Noblesville (IN) High School, and author of "Pure Genius: Building a Culture of Innovation." He has worked as a middle and high school teacher; educational and innovation consultant; CEO, and host of the StartEdUp podcast. He is also the President of the StartEdUp Foundation, an organization that empowers student entrepreneurs and innovators with collaborative immersive experiences, accelerator programs and is the first seed fund for students under 20. //

**HOT LINKS** •(YouTube video) Innovation Specialist on Unlearning - Don Wettrick Inside Quest #35 <a href="https://www.youtube.com/watch?v=KRoGNqKGnUw">https://www.youtube.com/watch?v=KRoGNqKGnUw</a> FORBES Articles "Endorsed By Entrepreneurs: How This High School Teacher Is Making The Classroom A Safe Place To Fail" and • "Teacher And Students Visit New York To Pitch And Learn From Leading Entrepreneurs"

# -HIGHLIGHTS

EDTECH LEADERS WEIGH IN ON THE STATE OF EDUCATION, TECH'S ROLE & WHAT'S AHEAD

BREAD CRUMBS, CONNECTED DOTS, AND 'AH-HA' MOMENTS

TECHNOLOGY'S RETURN TO FAVOR

A TALE OF TWO SCHOOL REALITIES: HOW FAR ALONG ARE OUR SCHOOLS IN FULLY SHIFTING TO DIGITAL?

EDUCATOR'S DOING GREAT STUFF W/ TECH

TOP 100 INFLUENCERS IN EDTECH

### STATE OF EDTECH

## LEADING VOICES ·

## What is the state of education and technology's role—and what's ahead?

#### By VICTOR RIVERO

**Again this year**, we asked technologists, CEOs, founders, investors, students, parents, policy makers, and edtech leaders to chime in with their thoughts on these questions:

- What is the state of education these days?
- What is technology's role in education?
- What's just ahead?

Their insights in response to these questions provide a good look into the realities we are facing and the current state of edtech.

Those realities extend through the full spectrum of education: from pre-K through 12th grade, vocational and technical education, community college, traditional 4-year colleges and universities, to corporate learning, workforce training, bootcamps, and lifelong learning.

#### **Common Themes**

Themes include the continuing expansion of AR/VR, STEM, and coding, to the role technology plays in assisting students and teachers through personalization of their learning pathways.

For better or for worse, we are advancing into an age of an ever-increasing prevalence of technology, and rapid acceleration of new and emerging technologies impacting learning.

The people behind the technology will decide which it will be—better, or worse—and if you are reading this, you are those people. We are those people.

May this sampling of what's on the mind of some of your colleagues inspire you to have a look at your own thoughts about these questions, and to continue your work in this most important area.

Your work in education technology lays down the foundation for generations to come. It is challenging work, it is sometimes daunting work. But in the end, the work is worthwhile.

As you peruse these viewpoints, consider your own purposes and mission in education and technology and how these ideas might inform, enhance, or improve your own "leading voice."

Happy reading!



"What is the state of education, of technology in education, and what's ahead? "Expansive, transformative—

and amazing possibilities!"—Darryl Loy // Director of Technology,

— Darryl Loy // Director of Technology Good Shepherd Episcopal School



"Technology is playing a larger role than ever in education. Education institutions are playing catch-up in

terms of utilizing technology in the most efficient way in order to adapt to the current climate."

**—Juan Yanez** // Regional Marketing Manager, Squiz



**"We know that**teaching and learning take place and are

measured in many different ways, areas, and systems across campuses.

Measuring only distinct pieces of that picture is insufficient. Key to improving education is embracing the concept of educational intelligence. This means being able to leverage data at multiple points across the student lifecycle to make intelligent decisions to positively impact student outcomes. It's a holistic approach to data that is informed by

large amounts of connected and integrated data that is easily accessible to campus leaders. It will provide a more comprehensive view and empower institutions with the ability to extend the life cycles of their data so they can focus efforts on how to improve both student learning and institutional outcomes."

**—Kevin Michielsen** // Chief Executive Officer, Watermark



"Technology is a great tool in the hands of an innovative entrepreneur."

**—Kyra Pahlen** // CEO, LingoZING!



"Education is moving inexorably toward personalization/ individualization. Gone are the days of the 'one

size fits all' and bell curve approaches to instruction where it was just expected and accepted that a percentage of learners would fail. Today's technology is what makes such personalization possible. Diagnostic screening and individual learning pathway prescription used to be solely the province of Special Education. Now, it should apply to every student. Of course teachers do not have the bandwidth to do this manually for every student, and schools continue to face budget restrictions—so personalization/individualization will continue to remain an uneven element from district to district. Applying for grants and forming inter-district consortiums are ways districts can

mitigate the growing gap between the 'haves' and 'have-nots'."

**—Susan McLester** // President, McLester PR, Content and Communications



"I feel the main challenge is still not different; that is, how to get maximum kids engage in the platform. This is in

reference to school children. Technology has to play the role of a friendphilosopher guide to the children. Here we are talking about the UX of the platform that should be interactive, engaging, and entertaining—along with providing the right guidance to students on how they can get the most out of it in the easiest way to get ahead. Keeping this in view, I feel the UX design, product mix, as well as Artificial Intelligence enabling adaptive learning to a newer level where machine engagement / learning is at its best—is the future." -- Manish Wahie // Co-Founder & CEO. Budbeed Learning LLC



"Education is not just about pushing out content, but to help learners think creatively, collaboratively and

critically. Technology should support thinking, not just rote learning, and provide ways for teams of students to work together, whilst still being able to see how individuals contributed.

Teachers are starting to become more facilitators of learning rather than sage-

on-the-stage, and so, edtech tools need to move to ways that allow them to better do so without adding on additional workload. We're also seeing greater privacy controls as well as integration of applications into platforms."

—Jeremy Lu // CEO, GroupMap



"Today's classrooms are in a major state of flux. There are so many new ideas and gadgets being offered that it is

extremely difficult to know what to use and when to use it. If we look at technology having a role in education, I think we are very near sighted to the real focus of what should be happening in the classrooms. Instead, we should be looking at the role of technology in pedagogy to find the real answer to solving some of the issues facing today's teachers."

—Jeff Bradbury // Tech Coach, TeacherCast Educational Network



"Edtech's role is to assist in changing outcomes for students using technology as a tool. It has become an incredible resource for educators globally and has increased our ability to connect with people from any background, area or

location, broadening the classroom experience and further developing our empathy. Although mostly positive, it has also shortened our attention spans and become a replacement for real human interaction—and allowed people to become increasingly more politically, demographically and ideologically divided. We need ensure our students learn how to use technology ethically and effectively. Tools like Artificial Intelligence (AI) will change how we teach, learn and interact with each other. Al and robotics are the future of education and will lead how we engage students with hands-on exposure to real-world experiences and application to real-life situations."

-Jeffrey Piontek // Head of Education, **UBTECH Robotics** 



"The state of edtech in 2018-19? **Ephemeral** enigma. Current technology can simultaneously

obscure and reveal human connection. It both magnifies and dampens messages about who we are, what we need, and how we know. As the technology continually changes, the only constant in dealing with technology is the self. Educators must be prepared to help students maintain authentic selves by carefully navigating through the continual stream of content."

-Rebekah S. Davis // Digital Learning Graduate Assistant/PhD student, NC State University



"I'm not sure. It seems like technology is helping improve content in the classroom, but I am

concerned that it is taking a toll on some of the critical-thinking skills that traditional education methods promote. What's ahead? More technology; hopefully more tactile technology inventions—with real-world applications."

—Angela Ortquist // PM, Tech Defenders

"The power shift is underway! Students are taking back control of their learning. The sage-on-the-stage is a dying breed. 1-to-1 devices, equitable internet access, and the emerging suite of free learning applications is allowing students to further their ownership in their education space."

-CEO, QwertyTown



"There is a shift in education today toward increased collaboration and heightened interactivity.

Technology can change the way we assess student performance and productivity in the classroom by pinpointing how and when learning happens, and maximizing physical classroom flow. New education tools and testing platforms based on AI and machine learning are allowing educators to adjust learning based on individual student needs. By creating a more

expansive picture of how students learn, we can also change how we measure how to best serve their learning needs. In the coming years, we'll see how technology will allow educators to better assess students' knowledge, and further evolve a more effective and efficient curriculum."

—Jon Roepke // Director of Product Management, Belkin International



**"Education is going** through some much needed turbulence in this age of disruption. Ideas of content, assessment, and general purpose for education—are all being filtered through more horizontal and democratized ideas of learning in the 21st century. What is consistently coming out is that education needs to be re-imagined and re-engineered to be more equitable, relevant, and human for the future. Technology must greatly assist in this endeavor, and not contribute to any chasms of opportunity and success. But, beyond that, as our world gets more digitized and entrenched in the cult of speed and efficiency, edtech has to create resources and platforms that support the humanized goals of education."

—Sunil Singh // Mathematics Learning Specialist, Scolab



"As we enter 2019, the world's wealthiest countries now have incomes 100 times higher than the poorest

countries. Globalization is making it untenable for such dramatic inequalities between high and low living standards to continue. Education is the disruptor to poverty. We now have the compelling opportunity and ability through new educational technologies to effectively build bridges of literacy, empathy, opportunity and support throughout the most under-resourced areas of the world to achieve transformative, selfsustaining development. We have the edtech tools to find creative solutions to society's greatest challenges. There are many opportunities to make a difference. It's time for commitment and engagement to achieve edtech's greatest potential."

-Dayton Johnson // President & Managing Partner, Dayton Johnson **Executive Search and Consultancy** 

"Al is poised to dramatically disrupt education in 2019. I'm not talking about replacing teachers with robots, but rather empowering educators and institutions with the same automation, prediction, and data-science capabilities that AI has brought to almost every other industry—from retail and manufacturing, to IoT. In 2019, we expect AI will become more mainstream in education. Al-enabled learning tools and technologies will help educators deliver on the promise of one-on-one instruction at scale. Their predictive capabilities will help institutions



proactively manage the needs of students at risk of dropping out or failing. And

their full feedback loops and data insights will elevate the entire educational community—from students and educators, to administrators—by delivering learning that gets smarter and more effective with each student interaction."

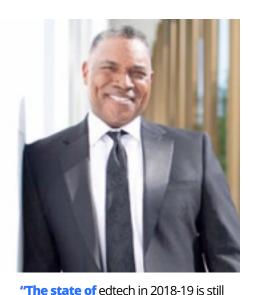
—Patrick Weir // CEO, Fulcrum Labs



"As districts nationwide continue to struggle with teacher shortages, it's more important than ever

that they support and ultimately retain educators. Providing more personalized, job-embedded professional learning will help. Using technology like video reflection eliminates the need for teachers to leave the classroom for professional development, which can be costly for students. Sharing video of their instruction with coaches and colleagues allows teachers to collaborate and receive direct feedback based on their actual teaching practices. This approach to PD offers an individualized learning experience for educators, much in the same way we expect today's classroom to be for students."

-Adam Geller // Founder & CEO, Edthena



transforming and emerging despite an absence of leadership from Washington, D.C. It appears that the desire to educate all and eliminate the digital and technological divide is being ignored by some in D.C., and in most states, the situation is not much better! With technology's role in our world increasing, it is imperative that we educate students for the changing world of work. Our work environments will increasingly continue to rely heavily on automation, robotics, and artificial intelligence. Despite these changes, there's a lack of graduates in the computer sciences because STEM/ STEAM programs aren't readily available to all. With new leadership and a new resolve at the federal, state and local level, we can level the playing field for all and provide a holistic and vibrant education that truly prepares students for college, career and citizenship." -Dr. Darryl Adams // former Superintendent; Founder & CEO, The Center for Democracy and Education



"Education is **going** through a reformation and lots of things need to change. Technology is just an enabler

and we must be careful to put the student at the center of our interventions, not the technology. In a time of robotics and AI, we need more human-to-human connection (and social learning), or what I like to call 'human sense'."

-Ameet Mehta // CEO, Inspiral Education



"Coding is a valuable 21stcentury skill that is heavily used and sought after in todavs workforce. As

such, coding and STEM education in general continues to receive significant policy and funding support at the federal level. Schools and districts will increasingly incorporate coding into their science curricula to help students, even those in early grades, develop this skill and engage in practical applications that build math and science skills. Realworld problem solving activities—ones in which students use hands-on technology to build, test, and refine a program—will further inspire students to follow studies and career paths in this growing industry."

-John Wheeler // CEO, Vernier Software & Technology (www.vernier.com)



"In 2019, AR/VR will continue to be explored in the K-12 classroom and as such, there will be a demand for content

to create genuine learning experiences. Although the potential to create a deep, immersive, collaborative environment exists today, the structures and delivery mechanisms that come with packaged content have yet to develop into a powerful enough technology for widespread adoption. As early adopters continue to explore AR/VR technology, we will see a viable market emerge to attract more content developers. Meanwhile, we're likely to see more students dip their toe into what could become a more integral part of the learning experience through singular instances of exploration." -Matt Dascoli // Education Strategist, **Dell EMC** 

"Universities nationwhide are facing

the same challenge: how to make textbooks more relevant, meaningful, and engaging for students. This problem has grown as the lack of student engagement—especially among general education classes—continues to be a contributing factor to today's rapidly declining RPG (retention, progression, and graduation) rates. To ignite change among college classrooms, educators need to move away from old-fashioned teaching models and focus on interactive, self-guided approaches that equip students with emerging technologies." -Brian Rowe // CEO & Founder,

Perceivant



"Sustainability is about creating systems that work now and in the future. While we often think about it in terms of agriculture or energy or cities, we should also think about sustainability in education—for learners and teachers. To be sustainable is to be economically viable, environmentally sound, and socially just. Technology can make education more economically viable as it makes new ways of education possible. Economic viability is whether we can afford to do something now. Environmental soundness is whether we can keep doing something in the future. Is education making good use of resources, natural resources, and human resources? 'Socially just' means bringing into the educational ecosystem those who have been left out. Technology can help reach the disenfranchised, but is it?" —Julie Willcott // Adjunct Faculty (and

"In recent years, coding became the skill everyone wanted children to learn. With many free online resources available for coding, it enjoyed heavy focus in the classroom and at home. 2019, however, will bring a greater

consultant to private companies),

Kennebec Valley Community College



emphasis on 'classic' hands-on engineering activities. These lessons—such as building a bridge or folding a paper airplane—require students to learn a concept, design and build a prototype, and test its effectiveness. Then, using what they know about the scientific concept they learned and the scientific method, they improve their designs for the best results. To help facilitate this shift, I also see educators more frequently using STEM toys as tools for introducing science concepts."
—Shai Goitein // CEO, POWERUP Toys



"Technology in the classroom is no longer about any particular piece of equipment; instead, it has

become more like an ecosystem. It's about finding solutions—such as student devices, large-format projection, interactive software, and wireless networks—working seamlessly to create an immersive, engaging learning environment for students and teachers. This tech-rich environment with wireless collaboration capability has the ability to improve students' productivity and

access to information, and give secondary students a taste of college and a future career. For elementary school students, hands-on interactivity will continue to be a priority."

**—Jason Meyer** // Group Product Manager - Projectors, Epson America, Inc.



"Students will become more vocal about how they want to learn. They've been creating, publishing and

learning using social and digital tools for years, and will simply expect education to change to meet their needs.

Educators have an opportunity to use this momentum to embrace change and reimagine how we're preparing tomorrow's leaders. Technology is one tool of many—combined with passion, focus and commitment by humans—how we learn will become more geared for our digital age."

—Jodie Buenning // VP, Marketing & Communications, bulb Digital Portfolios



"Project-based Learning is gaining momentum as a way to engage students more deeply in content and build 21st-century skills. High-quality PBL has students working individually and in

teams to research and find solutions to real-world, complex problems and creating products or presentations to share with an audience. Today's movement toward tech integration, such as 1-to-1, provides the opportunity for schools to seek out tech tools to manage and facilitate PBL projects and their culminating products. In 2019, companies will develop new systems to meet this growing need."

**—Bob Lenz** // Executive Director, Buck Institute for Education



"A new age of edtech tools are emerging— amazing nichefocused, light, and purposeful applications

incredible at meeting the unique needs of students and adults. They set up learning to be personalized and put the learner in the driver's seat. The days of large-scale administrative solutions mostly irrelevant to students, teachers, and parents are numbered. Students and educators want and need comprehensive edtech applications focused on teaching and learning—apps providing clarity, that ease the information/application overload, and serve the teacher and learner over a lifetime."

**—Erik Petrik** // Co-Founder & Chief Creative Officer, bulb Digital Portfolio

#### "Schools' responsibilities have

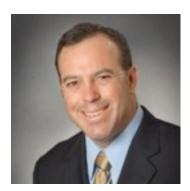
expanded to include student safety and wellness as core areas of focus along with academics. Schools must therefore



adopt policies, programs, and curriculum that will support these goals. Technology plays an

important role in this shift. Schools are increasingly adding technology for students to use in the classroom including adopting 1-to-1 programs, so they must be provided tools for analyzing technology's use with students; tools that look at productivity and safety will be in high demand."

-Richard Fuller // CEO, Impero Software



"Fifteen years ago, '21st\_century learning' was an emerging concept in the education system—today, it's reality. The push for schools to leverage technology to serve more students with an equitable and effective education has only been gaining momentum as costs go down, methodologies improve, and support for school systems and teachers grows at the federal and state levels. With states' ESSA plans coming into effect, and accountability systems seeking to measure school and student performance beyond test scores, there is also an increased demand for educators at all levels to use data to inform their instruction and assess their results. This is where technology, and

edtech companies, have a major role to play in supporting districts with not only accessing, but utilizing all of the data that we have available."

-Stuart Udell // CEO, Achieve3000



"Three words that describe the state of education today are: challenged, groundbreaking, and

exciting. Education is challenged to prepare students for jobs that don't exist today. It is groundbreaking because we're introducing technology and teaching methodologies that are changing the way we engage students. It's exciting because we have an incredible opportunity to transform education and improve learning outcomes.

Students learn by doing, researching, and receiving feedback. The interactivity of technology supports this, while allowing students to learn anywhere, anytime. It also enhances teaching methodologies such as blended learning, flipped classrooms and collaborative learning. The explosion of products utilizing VR/AR, robotics, gaming, and voice recognition is having an immediate, positive impact on engagement and how students learn. We expect this trend to continue."

-Erez Pikar // CEO, CDI Technologies

"Districts are focusing on areas for continued improvement with support from new technology, including streamlining testing and addressing the equity gap. In an effort to test smarter, schools are looking to tech-enabled



formative assessments to provide robust data on students' strengths and challenges. These tools make data an

accessible, integral part of the classroom's DNA, informing instruction and supporting growth. As these robust offerings often do the job of multiple existing assessments, implementing them reduces testing volume and gives back precious instructional time. Technology-driven instructional materials will focus on providing equitable support to all students, including those living in poverty and learning English. English learners will benefit from culturally-responsive lessons and those providing strategic scaffolds that make on-grade level content accessible by integrating language-based activities."

**—Rob Waldron** // CEO, Curriculum Associates



"Technology has tremendous power if used in a thoughtful, innovative manner to

empower students and teachers. In 2019, it's essential that edtech move beyond novelty and marry itself to sound pedagogical practice in order to have meaningful, positive impact in the classroom. Fostering soft skills and collaboration will continue to be an important trend as we look beyond grades and develop more sophisticated ways of teaching to the whole child.

With data-driven decision-making affecting how schools and districts are managed, A.I. will become more prevalent in these practices and have an increasingly disruptive effect on how we teach our students. It should be an exciting year!"

—**Devin Young** // President, Classcraft



"Education is a must, lifelong learning is nowadays a reality—but immediacy has permeated education with a preference for short courses, with a 'prize' at the end—like a degree or a diploma—that makes you enter directly into a sector, a job, or a bidding. Technology is still seen with caution by those who've tried tech-based courses with the expectation of simply having fun or being surprised. The 'wow' effect is not what matters, what you learn is the important fact. Tech is one of the biggest facilitators of a learning future that I can hardly imagine—but one in which methodology, good content, superb specialists, and people—will be the differential factor."

—Claudia Alcelay // CEO (I+D), certificacionpm®

"Adoption of hybrid and multi-cloud environments is quickly growing within the education industry. Use of various devices in the classroom is up amongst both students and teachers, from computing devices to AR/VR, and IoT devices and beyond. K-12 and higher ed institutions are faced with significantly more data; as a result there's a need for a flexible and budget-friendly method to securely store and access it. Education institutions will double multi-cloud datacenter usage by 2025 as it becomes the new norm."

—Breck DeWitt // Education Strategist, Dell EMC

What are your thoughts on

- · the state of education,
- technology's role in it, and
- what's just ahead?

Write to us: edtechdigest@gmail.com

The goal of education cannot be the student's internalization of a fixed curriculum. Rather, it must be the student's discovery of himself as a learner, exploration of the phenomenon of learning itself, and his evolution as a self-directed, motivated, masterful learner."

—Mark Gura (from State of EdTech 2017-2018)



#### The ABC's of this article:

Α

The Shape of Things: Reading the Tea Leaves of Education News

В

Not the Teaching and Learning We Remember! The Tools and Resources Behind the Change

C

21<sup>st</sup> Century Learning Going on Right Now, in Schools Nearby!

## Bread Crumbs, Connected Dots, and 'Ah-Ha' Moments

Observing events, noting developments, reflecting on signals that emerge from the hum; hard work, but someone's got to do it and well, it's what we do. We kinda love it.

HIGHLIGHTS | by Mark Gura

**Taking the measure** of something, the state of education, for instance, involves drawing on a range of sources, especially if what one's after is an authentic take on it all, the big picture in 4D: where we're coming from, are right now, going to, and what it all means.

There are patterns one sees and trends one identifies after reflecting on them.

Sometimes these confirm conclusions that have been long in solidifying and sometimes one is gifted with fresh insight through the serendipity of what shows up in the old In Box.

And then there are moments, thankfully, when one simply has to stop to regain one's

equilibrium, having just stumbled over something full of information and significance.

There are instances in which the weight of something that one finds provides the final bit of pressure needed to produce a gem of understanding from under a mountain of data.

Tracking the progress and current state of edtech involves the picking up important breadcrumbs and the focused connecting of dots. But one is rewarded with 'ah-ha' moments; here are some from 2018's journey.

#### A

### The Shape of Things: Reading the Tea Leaves of Education News

#### 1. The Fortunes & Future of STEM

Are we at that moment where what we've been pushing for has been heard and embraced?

#### "White House Outlines Five-Year STEM

**Push** - The administration is issuing what it describes as an 'urgent call to action' to bolster skills that will be necessary in the years ahead... a "North Star" that "charts a course for the Nation's success... an urgent call to action for a nationwide collaboration with learners, families, educators, communities, and employers... The administration's goal is threefold: for every American to master basic STEM concepts, like computational thinking, in order to respond to technological change; to increase access to STEM among historically underserved students; and to encourage students to pursue STEM careers. **SOURCE: U.S. News** 

If so, we need to walk this next step wisely, as pointed out in this <u>infographic</u> published by *Education Week*.

■ "The data shows that STEM fields are in demand—but, depending on the job, pay and educational requirements vary."

Invest our future in STEM by preparing students to master STEM concepts and skills? Sure, but as always, the devil's in the as-yet-to-be-envisioned-and-planned-for details!

- "Most teachers say tech tools improve teaching and learning—tech tools can increase student engagement and intellectual stimulation," teachers say... Eighty-two percent of teachers in a recent survey say they believe tech tools have enhanced teaching and learning, and most say they have access to the tools they want... On average, teachers say 56 percent of their tools have become tech based, and 80 percent of teachers say they have access to most of the tech tools they want in their classrooms. Those tech tools include interactive whiteboards, student portals, laptops, tablets, learning software, and learning apps..." SOURCE: eSchool News
- "The Changing Face of STEM Why are we losing so many young women from the STEM pipeline when they clearly have the aptitude to learn math and science (and compete with aplomb) in the early teen years?.. In the United States, we have been unable thus far to plug the hole in the pipeline that leaks out some of our most talented and gifted young scientists before they can make their own contributions in the workforce...Let's plug the hole in the STEM pipeline, if need be, one woman at a time."

  SOURCE: National Board for Professional Teaching Standards

#### 2. Big Players Offer Up Some Real Value-Add Learning Experiences

Large providers of devices, resources, and support services continue to offer up broad scale, high quality learning activities that far outstrip those local districts might be able to create on their own.

■ "Solve for Tomorrow - Designed to boost interest and proficiency in Science, Technology, Engineering and Math (STEM), this nationwide contest challenges public school teachers and students in grades 6-12 to show how STEM can be applied to help improve their local community. The contest challenges students in grades 6-12 to show how STEM can be applied to help improve their local communities. 250 state finalists will be selected to submit an activity plan..." SOURCE: SAMSUNG

Another such impactful challenge-based program is **Microsoft's Imagine Cup.** 

- "Amazon's new goal: Teach 10 million kids a year to code Amazon wants to get more kids thinking about becoming computer engineers. The company launched a program Thursday that aims to teach more than 10 million students a year how to code. Amazon said it will pay for summer camps, teacher training and other initiatives to benefit kids and young adults from low-income families who might not have learned to code otherwise. It hopes the programs spur more black, Hispanic and female students to study computer science..." SOURCE: AP News
- "High-School Students around the U.S.
   Take Virtual STEM Field Trip to
   Lockheed Martin's Famous Skunk

**Works®...** Lockheed Martin and Discovery Education, the leading provider of digital content and professional development for K-12 classrooms, today took high school students on a virtual field trip to Lockheed Martin Skunk

Works,® where they learned about five advanced technology developments being pioneered by Lockheed Martin engineers and scientists, or "skunks," who work there. The immersive experience was designed to introduce students to the exciting work a career in science, technology, engineering and math (STEM) can offer. **SOURCE: Discovery Education** 

#### 3. Computer Science Has Arrived!

Computer Science has emerged from an 'interest area' subject to being a contender as required, basic body of knowledge for all to demonstrate some mastery in by graduation. Two announcements in 2018 illustrate the momentum behind this:

■ ISTE Releases Draft Computer Science
Standards For Educators "The new ISTE
Standards for Computer Science Educators,
exclusively sponsored by LEGO Education, will
establish a vision for the knowledge and skills
educators need to effectively teach CS to all
students across curriculum and will guide
professional learning for all educators. Updating
the ISTE Standards for Computer Science
Educators is a critical step to reaching the goal of
providing computer science opportunities to all
students," said ISTE CEO Richard Culatta."

SOURCE: ISTE.org

#### ISTE Announces New Computational Thinking Standards for All Educators

"The ISTE Computational Thinking Competencies are designed to prepare students with the skills needed to solve problems of the future ... The CT Competencies provide a framework to help teachers leverage computational thinking across all areas of the curriculum, not just in CS classes." **Source: ISTE.org** 

Traction for Computer Science in the real world of real schools? One example:

■ "Middle School Rolls Out New Computer Science Course...The school's new computer science class is required for all

students in fifth and eighth grade and is being offered as an elective for students in sixth and seventh grade. In Maryland, Gov. Larry Hogan has made computer science a priority for schools." **SOURCE: The Dispatch** 

## 4. Virtual Schooling Helps Make it Work

Virtual Schooling continues to find its fit as it solves difficult organizational and budgetary problems for schools and districts. This phenomenon showed up in 2018 in a variety of ways:

• "High school teacher shortage forcing schools to go digital... Teacher shortages across the country are getting so dire that they're forcing some school districts to live stream lessons, replacing educators in many classrooms... tens of thousands of high school students nationwide are now getting lessons taught by a remote teacher...) SOURCE: YAHOO! FINANCE

## ■ "Nashua floats idea of eliminating high school substitute teachers...

Struggling to find enough substitute teachers, school officials are exploring a concept that would eliminate the need... The Board of Education is studying the benefits and drawbacks of creating an independent digital learning center at each school where students could go when their usual teacher is unavailable...)." **SOURCE: New Hampshire Union Leader** 

#### "The Beginning of the End of Snow

**Days...** Districts around the U.S. are working out policies and procedures for having kids work at home when inclement weather closes schools... In districts across the country, snow days...for example, the schools around Camden, Maine, will replace two snow days per year with so-called Remote School Days, when students will complete coursework at home using internet-connected devices." **SOURCE: edutopia** 

#### 5. The Coding Rules!

Making Coding part of the instructional program enables schools to offer a highly visible and practical variety of technology integration, often without great additional expense beyond providing basics. Highly engaging and easy to see results from, and with plentiful resources and curriculum available. Coding has become a veritable snowball rolling downhill, picking up mass and momentum.

## • "Kindergarten coders: When is too early to put kids in front of screens?

... Twenty-five percent of all U.S. students now have Code.org accounts and 800,000 teachers use the site for class lessons... two-thirds of all fifth graders in the country have an account." **SOURCE:** The Inquirer Daily News/phily.com

- "Press Start: BISD brings coding to all middle schools... The Brownsville Independent School District... BISD's Career and Technical Education department is making the GameSalad software available to all middle school students this year as part of an effort to make coding part of the curriculum from elementary school to high school." SOURCE: The Brownsville Herald
- "K12 students code beyond computers
- Computational thinking gives students a learning edge in all subjects... As coding becomes ubiquitous for students of all ages, educators are looking for ways to use computational thinking in other content areas. Advocates say this integration should start in elementary schools...." SOURCE: District Administration

#### 6. Leadership

"Using teacher-leaders to improve schools...'Opening the door for innovation' by extending the impact of the best teachers to more students...

Each school that embarks on creating an Opportunity Culture does so in a unique way, based on its needs. One of Edgecombe's elementary schools created three teacher-leader positions to focus on improving literacy among students in third grade and younger. A middle school recognized its area of need was in high-quality math instruction, so it hired a teacher-leader to work in that subject. Another elementary school has a teacher-leader supporting English language arts teachers." **SOURCE:** The Hechinger Report

## 7. Career Preparedness – Getting Kids Ready to Boldly Go...

How young is *too* young to start introducing students to future careers?

■ One California district's "World of Work" program starts in kindergarten In

Southern California's Cajon Valley Union School District, career exploration starts in kindergarten. Five-year-olds learn about police officers, doctors, artists, teachers, bakers and farmers. Over the next eight years, until they leave the district for high school, they will cycle through learning about 54 different careers, including real estate agent, paralegal, dietitian, reporter, graphic designer, sociologist, urban and regional planner and financial analyst..." **SOURCE:** The Hechinger Report

#### 8. Turning Tide – Celebrating Teachers (Finally)

■ "Little Steven and the Disciples of Soul have announced a headline tour that will introduce TeachRock, a free, multimedia, K-12 interdisciplinary curriculum from Steven Van Zandt's Rock and Roll Forever Foundation. The Soulfire Teacher Solidarity Tour 2018 concerts are free for all types of educators... The initiative is in recognition of the work that educators do across North America, and will highlight the TeachRock curriculum, which meets prevailing standards in English Language Arts, Social Studies/ History, the Fine and Performing Arts and includes STEAM and advisory material..."

## 9. Let's Get Ready to... Compete Digitally!

- "Gamers Are the New High School Athletes: Rise of Esports... Trend gains traction in K-12 and college... Esports, a movement that features competitive video game play that grew out of the commercial gaming industry, is popular at the college and professional levels. Now, it is gaining a greater foothold in K-12... Some teachers and administrators have found that esports engages students who might not otherwise participate in school activities, teaching teamwork and potentially opening new college and career opportunities..." SOURCE: Education Week
- New York Institute of Technology "NYIT Launches eSports Facility... Just two days after the CyBears dominated Molloy College to win the East Coast Conference (ECC) Overwatch eSports Invitational at Nassau Coliseum, NYIT unveiled its eSports arena at a ribbon-cutting

ceremony on December 4 at NYIT-Long Island (Old Westbury, N.Y.). The event, held in Wisser Library, welcomed students, faculty, staff, and eSports partners and included opening remarks by community members who exemplified NYIT's multi-dimensional commitment to the rapidly growing field of eSports..." **SOURCE:** NYIT BOX

#### ■ "K-12 educational escape rooms on

the rise... Students take clues back to a laptop computer where they must read and answer questions. Correct answers lead them to a "golden ticket" and eventually a way to escape... the escape room creates unique learning experiences for students and allows them to find a deeper connection to the underlying subject at hand, which is part of a larger lesson aligned to the state's English language arts standards. 'We have to make learning high-end and tap into their interest, learn to tie it to those things we are trying to teach. This is invigorating for teachers and offers a 21st-century approach to learning for students.." SOURCE The Detroit News

#### 10. Tech Redefines Literacy

The act of communication, the very core of Literacy, is being transformed through the application of technologies that support those whose communication needs and preferences lie beyond traditional text alone...

#### "Facebook's VideoStory dataset trains Al to 'automatically tell stories. Video

content on social media platforms constitutes a major part of the communication between people, as it allows everyone to share their stories," the researchers wrote. "...if someone is unable to consume video ... this severely limits their communication. Automatically telling the stories using multi-sentence descriptions of videos would allow bridging this gap." **SOURCE: Venture Beat** 

B

### Not the Teaching and Learning We Remember! The Tools and Resources Behind the Change

#### 11. Tools and Resources

"How Using Slack Can Improve Socratic Seminars... In our search for an appropriate space where we could promote and monitor our student's digital discourse, we landed on Slack, an online messaging app used primarily in businesses. While not explicitly designed for the classroom, we have found Slack to be a powerful platform for stimulating high-level online discourse centered around key concepts and core habits of discussion..." SOURCE: EdSurge

#### "Has video killed the red grading pen?

Teachers are experimenting with video feedback as a replacement for traditional written mark-ups... In the past few years, a handful of educators, working in different disciplines and various education levels.. have been experimenting with video feedback... They've created a website with recommendations for teachers who want to try it out themselves. To date, Phillips and Henderson have helped instructors use video feedback for classes from 20 to 700 students, across high schools and universities, in subjects as far ranging as philosophy and engineering..."

SOURCE: <u>Hechinger Report</u>

## 12. New Tech for the Classroom

"Why our district is investing in AI, AR,

**VR, and MR...** the world today is changing at a faster and more immediate pace than at any time in our history... New technologies like Amazon's

Alexa and Google's Expeditions and Pioneer programs will be the next generation's Facebook, Twitter, and Instagram. Voice technology allows for screen-free interactions and gives students much-needed life-skills practice in the areas of forming questions and focused listening. Augmented reality (AR) and virtual reality (VR) enables students to learn by doing, which increases student engagement, helps with retention, and enhances learning outcomes..."

**SOURCE:** <u>eSchool News</u>

#### 13. Digital Tutors and Assistants ("Alexa, how do I do square roots?")

- "Alexa Hits the Classroom... For better or worse, a new technology is making its way from consumers' homes into America's classrooms: voice-controlled "smart speaker" systems from companies such as Amazon and Google. The internet-enabled devices listen to what users say, send audio recordings to the cloud, translate that information into commands, and respond accordingly—providing users with a personal digital voice assistant such as Amazon's Alexa, which teachers are now using to help with everything from setting a classroom timer to leading a group of 3rd graders through a spelling test..." SOURCE: Education Week
- Amazon Echo Dot vs. Echo Dot Kids Edition "The Echo Dot Kids Edition, which comes in red, blue, and green, looks almost identical to the regular...The device is really just a kid-friendlier version of the Echo Dot, with many of the same features, but toned down for younger audiences. Right out of the box, you can tell the device is for a child because of the bright colors and comic book-style user guide that comes with it. .." SOURCE: Digital Trends

#### C

### 21st Century Learning Going on Right Now, in Schools Nearby

#### 14. The Upside of Social Media for Students

Study of Teen Facebook Use Provides **Insights** "We asked teens to give us access to their list of Facebook friends. This allowed us to see whether teens who are information brokers use their social brain networks differently than teens whose friends all know one another. ... We found that information brokers use their social brain networks more when making choices about what to recommend to others than people whose friends all know one another...information brokers have more opportunities to practice using their social brain when translating ideas between different groups of people. More broadly, people who are better at selling their ideas, literally and figuratively, also tend to engage ... more than people who are less successful... (e.g., what will the person I'm going to share with think about this idea?) helps the sharer tune her message to resonate more clearly with the mental state of the listener..." SOURCE: Scientific American

■ "A Look At Social Media Finds Some Possible Benefits For Kids... 9 and 10 year-old children taking part in a study... greater social media use, such as scrolling through Instagram and texting, was associated with some positive effects, including increased physical activity, less family conflict and fewer sleep problems..." "There's a lot of pre-existing biases that if we expose kids to media, something terrible is going to happen. What we show is that's not the case," said the study's director. SOURCE: National Public Radio

#### 15. MAKING Learning Engaging and Rich

• "...New research shows that makerspaces can be highly effective at helping elementary students develop skills such as critical thinking, design thinking, and problem solving...Using the makerspaces led to higher student engagement, confidence, and determination to try new approaches to tough challenges, according to the report. Struggling students in particular seemed to to benefit from maker activities..." SOURCE: eschool News

## 16. Authentic Participation (Learning Through Student Real World Action)

From the "Be Careful What You Teach Them!" Category...

- "After two fifth-graders started a petition to ban homework, the district is considering options to lighten their load. At the behest of two fifth-grade students, a New York school district is considering doing away with homework assignments...The petition gained traction in their district...In arguing their case to officials with the school district, DeLeon and Keelie said many of their classmates agreed with the proposed homework ban and the school district did as well..." SOURCE: U.S. News & World Report
- "Scaffolding Social Action for Your

**Students** - A framework for guiding middle schoolers to plan and engage in social action that's relevant in their coursework and their lives. Students Taking Action Together is currently in place in seven urban middle schools in New Jersey, and it is making a difference. Social action can be encouraged with regard to current events such as gun violence in schools..." **SOURCE: Edutopia online** 

#### 17. Applied Learning

With digital tools and information, students can to apply their learned skills to needs and problems that interest and move them. Young learners, at long last can participate in and impact their world positivity. Project Based Learning aligns with Social Activism in inspiring ways with remarkable results. Some noteworthy examples from this past year:

- "Cupertino High student's app helps visually impaired 'read'... senior Sanket Dange is developing an app to help the visually impaired recognize objects and read text. When you point a smartphone or tablet camera at an object, the Pigen app can speak the object's name or read aloud the text in a sign..." SOURCE: The Mercury News
- "Changemaker: Enumclaw teacher motivates students to help solve homeless crisis -'Really, we're going to build a house? No, we're going to design a house first. Then we're going to build it...Adults sometimes underestimate the power of teenagers, Interlake High student Youri Babakoff said. And it's nice to show, when we come together we can make a difference in the world." SOURCE: 013FOX
- "Passion Projects and Community
  Partners Create Relevant Learning for
  Teens in School... BIG classes are focused around
  big projects that students care about...As students
  work on their projects they get support from teachers,
  who also ensure that students are meeting the state
  standards required for the course. Teachers meet in a
  daily "scrum" where they talk about projects, individual
  students, who needs more support..." SOURCE: KQED
- "Robot a high-tech way to serve biscuits and gravy - Standing in Southmont High School's automation lab, senior Ross Lippencott fired up a robotic arm, using a controller to guide a ladle into an empty bucket. As the utensil reached the bottom, it began spinning like the beaters of a kitchen mixer. The process was one of the new tricks for the school's

Fanuc training robot, which gives hands-on lessons to up-and-coming engineers..." SOURCE: Journal Review

"Oak Park teen saving local law enforcement hundreds of dollars with robotics project The self proclaimed "Tom Boy" has a passion for sports and robotics. In fact, her efforts on a project will save her local law enforcement office hundreds of thousands of dollars...Jaeza and her Oak Park High School's robotics team are building a robot that will be a part of the department's crisis negotiations team... it will be used in hostage situations to get necessary items to those requesting them..." SOURCE: fox4kc.com





"Technology exponentially deepens student engagement. For learners who are not engaged well by print-alone content, it transforms that content in ways that make a great difference to visual, multilingual, auditory, kinesthetic, and musical learners."—Rose Reissman, Ed.D., Literacy and Technology **Education Writer** 

#### IN CLOSE WITH | Rose Reissman

A GOOD PART of Rose's work involves addressing the great untapped potential represented by classroom teachers who still haven't crossed the great divide, joining colleagues in using technology to align their practice with 21st Century Learning. She is a prolific writer of articles that explain how the use of technology will take classic Literacy Instruction to the next level, adding the richness, meaning, and relevance for today's students. Many of her articles can be found at the Literacy Special Interest Blog of the ISTE Literacy Professional Learning Network. Her article there, Tapping Multi-platform Reading for Social Justice - A Review of Khaled Hosseni's latest work, Sea Prayer (scroll down for links to many others). Dr. Reissman is the founder of the Writing Institute, now replicated in 200 schools including PS 205 in The Bronx, New York City. She is a featured author in New York State Union Teachers Educators Voice 2016 and was filmed discussing ESL student leadership literary strategies developed at Ditmas IS 62, a Brooklyn public intermediate school. Contact Rose through her email: <a href="mailto:roshchaya@gmail.com">roshchaya@gmail.com</a> //

## Technology's Return to Favor

The return of tech to favor in the curriculum—and rise of coding and computer science overall.

#### OR

From learning <u>about</u> technology to learning <u>with</u> technology; now, and back again.

CONTEXT CLUES | by Mark Gura

Over the past few years the role of technology in the curriculum has taken a significant change in direction. A reversal in fact, has happened. I'm speaking about the trend to make learning *about* technology an important part of the curriculum.

To fully understand this development, a bit of edtech history is needed.

#### Back It Up

In its very first phase, edtech was established by a very small group of restless innovators; teachers who became aware of the emergence of personal computers, their availability to the general public and to schools, and who decided to experiment with using them in the context of their classroom teaching.



They made a big splash. Personal computers (PCs) were a major novelty back in the early 1980s and anyone involved with them was sort of instantly considered something of an innovator celebrity—this was certainly true of teachers.

Close on the heels of bringing a few personal computers into the classroom, teachers began to wrestle with the "what can I do with them?" issue, which was thoroughly related to the "how do I justify using a computer in my teaching?" issue. After all, this was cutting edge new and not all administrators, parents, and colleagues were so impressed with the 'Wow! What's that in the corner?" factor that a plausible justification wasn't ever called for.

Bear in mind there was no software that was specifically intended for use in teaching and learning in the very beginning; that would take a few years to emerge.

But clearly, there were instructional applications for computers.

For instance, students could transcribe their

handwritten work to a word processed document, making it infinitely clearer, astoundingly easier to edit and revise than the handwritten version, and they could print out as many copies as they wanted of something that looked vaguely professional—eureka! Student publishing!

In math, too, common business applications like the spreadsheet had immediate application to traditional classwork.

After a short while, computerusing teachers had identified and shared among themselves a body of such solid applications and what resulted was an understanding among those who cared about it, that students could learn with technology.

However, there was also a competing strand of thought during this period: that students should learn *about* the technology itself.

"Hey, computers are important in the world right? So we should be teaching kids about computers: how they work, how to program them, how people use them in the real world, etc!"

This went on for a good while.

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his lab. It was a
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topics as...

I remember how once, on a learning junket to San Diego, as the head of Instructional Technology for the NYC schools, I was taken

> to see an exceptional Computer Class at one of the very best schools in that city.

I was shocked when the teacher handed me a copy of the syllabus that was posted on the wall and taped to the desktop next to every computer in his lab. It was a sequence of lessons on such topics as:

- How computers work / what are the parts of a computer?
- Basic file management,
- Keyboarding,
- Word Processing,
- Spread Sheets,
- eMail.
- PowerPoint, and on and on.

There was no attempt, whatsoever, to *integrate* those skills into the curriculum that the rest of the school was teaching and learning, though!

#### **Split in Orientation**

For a good, while this split in orientation of what to do with school computers and what would be worthwhile to have students learn and do with them continued.

Eventually, the field agreed that the overarching true value of technology in our schools was technology's power to support



**WOMEN IN STEAM.** Author Jacie Maslyk and friends in Orlando at the **Future of Education** Technology Conference. Her book: STEAM Makers: Fostering Creativity and Innovation in the Elementary Classroom (Corwin). From left to right: Johanna Mukai, 1st-grade teacher; Marlene Motsch, pre-K teacher; the author; Katy McGillan, middle school teacher social studies and math teacher; Katya Echenique, Media Specialist. All of these educators teach at St. Joseph Catholic School in Winter Haven, FL.

students in learning across the traditional curriculum (Language Arts, Math, Science, Social Studies, etc.).

In other words, Learning with Technology, not Learning *about* Technology.

And, of course, classes and programs to learn about the technology itself did persist (in small measure), although they were conceived to be part of Career and Technical Education or as an enriching, broadening 'minor' or 'interest' subject, like Art and Music.

By consensus, it was conceded that Technology Across the Curriculum would be the field's principal thrust.

#### **Fast Forward**

Fast forward three decades and onward: the trend described above has begun to reverse somewhat with the emergence of several strands of instructional thrust in which learning about technology is the focus.

Among these are:

- Coding
- Computer Science
- Student Robotics
- Maker-based Learning

"CODING for ALL" (Harvard Magazine) A worthwhile overview article on the movement that bears that name shares "...as technological innovations drive virtually every industry and shape social spaces online, advocates like Margolis (Jane Margolis, Ed.D. '90, senior researcher at UCLA's Graduate School of Education and Information Studies) view computational participation as central to the health of democracy. "Computer science can help interrupt the cycle of inequality that has determined who has access to this type of high-status knowledge in our schools... (and with co-author Yasmin Kafai, Ed.D.) Students who have this knowledge have a jump-start in access to these careers, and they have insight into the nature of

innovation that is changing how we communicate, learn, recreate, and conduct democracy."

Computer Science. Many now consider Computer Science a must learn element to be added to the curriculum for all. The recent report "Pre-College Computer Science Education: A Survey of the Field 2018" (commissioned by Google). The Connected Learning Alliance's description of the states "Computer science is important for a few reasons. First, almost all professions need some sort of CS knowledge in one way or another: artists, scientists, journalists..."

A Gallup report on the state of Computer Science in our schools Trends in the State of Computer Science in U.S. K-12 Schools states, "Although crucial to U.S. students' future success, access to a computer science (CS) education is still not universal. Education leaders must better understand the perceptions of CS and access to CS learning opportunities to maximize students' potential for growth in an ever-changing technological world. The findings in this report present positive growth in the area of CS...

"More than 90% of parents feel that opportunities to learn CS are a good use of school resources.-40% of K-12 principals say their school offers at least one CS course including coding or programming.-84% of parents, 71% of teachers, 66% of principals 65% of superintendents say that offering CS is more important than or just as important as required courses like math, science, history and English."

**Student Robotics.** Student Robotics has been around for decades. However, it has, in recent years, made its way into the general, daytime instructional program in subject classes. I reported on a number of good



"Over the 20 years I've been involved in robotics I've seen students who have had no background in science use robotics as a vehicle to gain an appreciation of science and technology. Whether or not they became scientists or engineers, they learned how to work with others, how to set goals and achieve them." —Gary Israel, Student Robotics Advocate and Team Coordinator (pictured above, far left)

#### IN CLOSE WITH | Gary Israel

TWENTY YEARS AGO, Gary Israel, a teacher at Morris High School in the Bronx (New York City) was asked to start a student robotics team for the school. Morris, a failing high school in a run down, inner city area was an unlikely place to establish a robotics team; at that time a gutsy, visionary, out-of-the box thing to do. Since then, the team, 2TrainRobotics, has become one of the most successful and celebrated teams anywhere. The team has consistently traveled the country, winning important FIRST competitions and over the years the team has had many landmark highlights. It has been sponsored by the New York Yankees who invite the team out on the field before games begin and is supported by Columbia University, which has made its engineering lab available to the team. Many student members of the team have gone on to higher education and successful careers. Importantly, the team has been sharing its unflagging spirit to succeed through STEM Education with schools around the NYC area. The story Morris HS's 2TrainRobotics celebrates 20th anniversary recently appeared in the Bronx Times. More information about the team is available on the CLASSROOM ROBOTICS blog. Their team site is 2train395.com and Gary's email, he'd love your feedback, is: <a href="mailto:Gary.G.Israel@gmail.com">Gary.G.Israel@gmail.com</a> //

examples of this half a dozen years back in the book Getting Started with LEGO Robotics and recently in a post on my Classroom Robotics blog http://classroomrobotics.blogspot.com/ 2018/09/great-advice-from-lego-education-master.html

By the way, Robotics, as a subject is a broad based STEM theme that includes the mechanical and electronic dimensions of machines along with digital technology, which is involved in programming (coding or its alternative, object (icon) based programming) computers to direct robots in their behaviors.

Maker-Based Learning. Not strictly speaking an area of technology education, Making address students' needs to explore, create, build, etc. and the cognitive impact of these as well as their connections to the standard curriculum. Nevertheless, some of the very most popular resources and materials employed in this area are technology items, including:

- 3D Printers (and other computerized fabricator devices) (e.g. https://www.makerbot.com/)
- Student Robotics, like LEGO Robotics (e.g. Mindstorms, EV3, etc. https:// education.lego.com/en-us/shop/mindstorms %20ev3)
- Little Bits and similar electronic device components kits (electronics, circuitry, etc.)\*

The level of interest in the above varieties of technology as curricular focus and resultant actual efforts to bring them into school instructional programs was very significant in 2018 and promises to continue to increase.

\*(suggested supplemental article) **Resources for Maker Education** 

An excellent, very comprehensive article on Maker Education for Edutopia <a href="https://www.edutopia.org/article/">https://www.edutopia.org/article/</a> maker-education-resources





"The primary purpose of U\*PAL is to develop a practical and creative leadership state of mind that involves: Trust, Collaboration, Sharing of Perspectives, Coherence, Community and Balance."

—Jon Drescher, Director of U\*PAL (Urban Principals Academy at Lehigh University)

#### IN CLOSE WITH | Jon Drescher

AS THE FOUNDING director of U\*PAL, Jon Drescher leads a truly out of the box educational leadership program that places a special emphasis on developing visionary, creative, urban school leaders. They do this through team projects, special seminars at Jazz @ Lincoln Center, The Metropolitan Museum of Art and through workshops in Improvisational Theater Techniques which align with research regarding what successful schools look like. Running throughout the U\*PAL experience is the belief that traditional schooling needs to be replaced with something different, something more appropriate and relevant to the population receiving it. Through a series of improvisation workshops U\*PAL participants are "opened up" to see their own creative potential. Students tackle problem solving through collaboration and design processes applied to formal challenges that require working within set parameters. Importantly, all of this involves reflective exercises, too, in which students relate the creativity awareness and skills they acquire to the types of problems and situations they will face as school leaders, including a focus on issues of inequity in education <a href="https://ed.lehigh.edu/cduel/upal">https://ed.lehigh.edu/cduel/upal</a> //

## A Tale of Two School Realities

How far along are our schools in fully shifting to digital?

PERSPECTIVE | by Mark Gura

**Teaching edtech leadership** courses for two universities, I receive, through interactions with my students, a stream of insights into the state of education and the progress of the great movement to apply technology to impact it positively.

My students tend to be early or mid-career, practicing teachers.

And while their goal in studying with me is often to qualify themselves for state certification as School Technologists, I find that their comprehension of the depth, breadth, and variety within the field of edtech is far from complete. This partial apprehension of the dimensions of edtech is something I attempt to address strongly in the courses I teach.

Explaining their goals to me, many students verbalize a desire to simply know technology better so that they can apply it in their own teaching.

These folks are invariably core subject teachers in math, science or other areas; and their goal often is to move from such a teaching position to become a school's Computer or Technology Class teacher.

#### A Significant Degree of Edtech Leadership

I understand and agree that in these times of uncertainty about careers; by choosing edtech they have selected an area of apparent, continued growth and importance.

However, based on long term observation of the ways schools are evolving, it's clear to me that to hold a School Technologist certificate and position at this period of time, and over the next number of years in which the Digital Shift plays itself out in our schools, is to assume a role that very likely will include a significant degree of edtech leadership.

The Digital Shift, by the way, is the predicted change in schools away from traditional, hard copy based practices to a situation in which the vast majority of tasks and chores, both instructional and support oriented, will be done digitally.

Importantly, my students, a group who overwhelmingly teach in inner city areas, most often in New York City, seem to hold to the view that the Digital Shift exists, still as an idea only and that at best, there are rare schools 'out there, somewhere' which have made important progress toward achieving that state.

Conversely, when I go to the annual ISTE conference, and to other gatherings like it that address edtech, I often find myself in conversations with school-based individuals (teachers, coaches, curriculum specialists, etc.) who share with me that their day-to-day work reality is quite the opposite.

There are, in fact, a great number of schools in the U.S. who do a very significant amount of their daily business on a platform that involves small connected devices that access content,



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when the

materials, and tools from a broad range of sources on the web.

And when the conversation at these gatherings turns to the current state of edtech in many of our urban schools, they accept my descriptions, but don't quite comprehend how it could still be possible that other schools could so far behind in the adoption and implementation of technology.

#### The Greater Truth

So what's the greater truth here? Is edtech still a novelty, an extra, special add-on in our schools? Or is it already, in a very significant number of schools across the country, the primary platform on which the school's business (especially, Instruction) is carried out?

taped to the My personal conclusion is that desktop next to there is a very significant subset of American schools in which the level of technology every computer saturation (technology available for use in teaching and in his lab. ... learning), actual technology use, and acculturated body of practice that is based on the frequent and favored use of technology, is high enough to consider that the school has either already achieved or is close to achieving what could best be described as a transformation from the traditional classroom to the 21st Century Digital Learning Environment.

In understanding all of this we should focus on two dimensions of technology's

penetration and impact on our schools: 1) The level of technology available for use in the schools, and 2) The level of technology

> Considering available resources, I have included a section below that supports this personal conclusion; if not beyond a doubt, then at least to the level sufficient to illustrate its soundness.

> However, I want to point out that the presence of technology itself is not indicative of a full and successful Digital Shift.

use in the schools - for their core business, Teaching and Learning, and for the other things that schools do that can be seen as supporting Instruction.

#### For a Full and Successful **Digital Shift**

For that to happen, the technology would have to be actively used as the prime (or one of the prime) resource types for teaching and learning.

Further, the school would have integrated technology not only into its current

body of practice, but also into its culture of teaching and learning.

As a way to visualize how technology can transform schools from traditional to 21st Century Digital Learning Environments, the table below lists defining indicators.

_ Project Based Learning
_ from Content Consumer to Student-as-Content-Creator
Creativity (digital arts activities, student publishing, student media products, etc.)
Research
_ Collaboration
Expanded Platform (learning activities enabled to happen beyond traditional, brick & mortar space and time constraints)
Thinking Curriculum (movement of instructional goals to higher level of Bloom's Taxonomy)
_ Student Voice and Choice
Communication (e.g. writing, publishing, oral/audio learning products, presentations, etc.)

TABLE 1 *Approaches to Instruction / Instructional Practices Indicative of 21*<sup>st</sup>-Century Digital Learning Environments. The table above offers some common transformational practices indicative of the Digital Shift. *This table might be used as something of a check list, too, to determine how far along the process of shifting to the new paradigm a school has moved.* 

Many of these approaches either can only practically be implemented or are overwhelmingly best implemented through the application of technology.

Thus engagement in these may be used as a measure of the penetration of technology into the professional culture of a school or district.

The following are some recent 'bread crumb data points' which may be cobbled together to give an idea of the digital state of things in our schools'

The nonprofit, Education Super Highway, in its "State of the States 2018" report stated "40.7 million more students have high-speed Internet access than did in 2013 - 98% of school districts can now take advantage of digital learning.

Since 2013, 94% of schools without scalable infrastructure have upgraded to fiber-optic connections.

That's 21,600 schools. Two-thirds of districts that hit the 100 kbps/student goal have continued to boost their bandwidth.

The BlueRange report titled "The Prevalence of 1:1 Computing in 2017 and Beyond"

- 3 out of 5 teachers and administrators said their use of technology will increase in the 2016-2017 school year.
- 80 percent of educators said their students' individual access to technology is either "good" or "great."
- 75 percent of teachers and administrators said they implement technology into their daily schedule with their students.
- Over 50 percent of educators said they have implemented 1:1 computing, a 10 percent increase over last year.

Freckle Education's survey "2017 Technology in the Classroom Survey Results" reported the following:

- 80 percent of teachers believe access to technology in their schools is already either good or great.
- 75 percent of teachers use technology daily with their students.

The largest driver of the rise in technology use is the increased access to devices. Over 50 percent of teachers say they now have a 1:1 student-to-device ratio.

#### **Far From Complete**

While far from complete, the perceived destination of the character of schools as moving from a traditional hard copy environment to a digital one is well borne out by the data shared above. The pace of movement toward that destination has increased, as well.

Those who set policy for schools and those who administer their development would serve their constituents well by embracing this change and facilitating its progress.

Mark Gura is a Contributing Editor to EdTech Digest. He is former director of the Office of Instructional Technology for New York City department of education. Write to: markgura@verizon.net



"As the world around us continues to become personalized or customizable educators must rapidly change the way they approach their work. Parents and students want choice programs that specialize in unique areas of interest - when, where and how they learn, and connect learning to real world problem solving."—Robert M. Avossa, Ed.D, Senior VP at LRP Media Group

#### IN CLOSE WITH | Robert Avossa

**RECENTLY RETIRED FROM** his position as superintendent of Palm Beach County Schools (11th largest district in the country with a student enrollment of more than 193,000 students) has turned his attention to a wide variety of LRP Media's efforts, including the shape and future of FETC (Future of Educational Technology Conference), an important annual event. He intends to see FETC expand and become richer in content, increasing its value to the field. Among other things, e sees important potential in including a deeper and more well defined body of offerings at the conference for administrators and leaders; something that EdTech Digest agrees may resonate deeply for the field. Follow him on Twitter: @Robert Avossa

#### The field of edtech has its issues and challenges. In 2019, here are its issues:





























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"Let's involve students in the learning process by encouraging them to create and build. I will continue to develop curriculum that meets objectives, but in a hands-on, relevant way that fosters creativity."—Nikole Blanchard is a new, recently elected, Member-at-Large of the Board of Directors of ISTE (International Society for Technology in Education).

#### IN CLOSE WITH | Nikole Blanchard

SHE ENTHUSIASTICALLY SHARES her passion for connecting educators, pointing out that "together we are better" and maintaining a professional learning network that consist of educators from around the world. "These connections encourage me to grow, ultimately impacting the learning of students," says Nikole Blanchard, an ISTE Board Member. She's keen on encouraging teachers "to step outside their comfort zone and use Social Media for professional learning. It gives you ultimate control of your professional learning from the comfort of your sofa!" Nikole travels the world training teachers on technology and working with educators on one-to-one best practices. EdTech Digest looks forward to her positive input into ISTE's development over the next few years. Nikole is the Director of Innovation and Technology at The Dunham School in Baton Rouge, La. Before her current position, Nikole taught grades 2-5 in public schools. She is a National Board Certified Teacher, Apple Distinguished Educator, Google Certified Trainer, and Google Innovator. One of Nikole's greatest honors was speaking on the stage alongside Tim Cook at an Apple Education Keynote. Nikole is honored to represent educators around the world as a newly elected ISTE Board member. //

# STATE OF EDTECH

# EDTECH'S TOP INFLUENCERS -

The minds behind what's now and next.

### By VICTOR RIVERO



There's a lot of energy in the field of edtech. Whenever I meet someone new to the sector, and there are plenty of these people, the common idea they enthusiastically express is:

"I love the people working in edtech, and I really get the feeling that I'm part of a larger mission."

So true.

There are other worthwhile fields—*finance, healthcare, manufacturing, etc.*—but there's something about edtech.

Education reaches all those fields and more. Technology runs along underneath education and learning as a tool, platform, and support mechanism to enhance and improve it.

Together, education and technology are a great fit and a tremendous alloy when directed by people with the innovative leadership it takes to pull off the big wins available by leveraging their combined strength.

A sampling of those people can be found right here in our second, and now annual, class of the Top 100 Influencers in Edtech. With millions of educators worldwide now using technology, more than 15,000 companies in edtech, and tens of thousands of edtech-passionate people descending on various conferences nationwide and beyond, these are people working in one of the most important fields of human endeavor, and leading others forward.

By their example and their reach, they are influencing others in a big way, and are dedicatedly part of a larger mission to help future generations thrive.

By their actions, by what they write, communicate and the products they create, they are interacting with those around them, making the world a better place through their work in education technology, and this year, they join a growing list of our field's top influencers.

Here they are—and why.

Enjoy!





Ossa Fisher -President & COO IStation

Her company serves 4 million+ students, she was Tinder and

match.com SVP Strategy & Analytics; on Board of Directors for Uplift Education, one of the largest not-for-profit charter school networks in Texas, the Yale grad is a dual citizen of the U.S. and Sweden.



Stanley Buchesky Managing Partner EdTech Fund, Interim CFO US Dept of Ed

Led M&As for McGraw-Hill, founding trustee of Equality Charter School ranked

in top 3% NYC middle school math, at EdTech Fund the former Airborne Ranger and West Point grad with a BS in computer science invests in, advises seed stage companies in both K-12 and higher ed.



### Sarah O'Rourke King Senior Manager, Brand Strategy

Leads marketing efforts for Tinkercad growing from 100K to 10M community

users, the contagiously energetic Bay Area writer and communicator is into personal design, 3D printing, and maker education—and expert at generating enthusiasm in youth.



Sal Khan Founder Khan Academy

Proving a free world-class education for anyone, anywhere, the online teacher

synonymous with the learning model that caught Bill Gates' eye and Harvard Business School and MIT grad continues to deliver keynotes, and results: his non-profit now employs over 150.



Stacy Childress -**CEO** NewSchools Venture Fund The former Bill and Melinda Gates

Foundation Deputy Director and HBS

lecturer now leads the national nonprofit venture philanthropy working to reimagine public education, investing nearly \$200M in 200 education ventures, creating edtech products serving 60M+ students.



#### Per Emanuelsson Managing Director Soundtrap at Spotify

The original CEO and co-founder and now managing director of a company helping students to learn by doing, in this case, doing music, is rocking out with Soundtrap for education and opening up music education through a platform enabling collaboration for 10k+ teachers.



Anjli Jain 💳 **Managing Partner** EVC Ventures The communicative VC is also founder

and chair of Campus Consortium, a

consortium of 2k+ colleges and universities; with the Chicago-based \$50M fund she's committed to converting ideas into compelling fundable propositions and viable businesses very quickly.



#### Paul Turnbull -**President Mid-Pacific Institute**

This inspiring innovator leads a pre-K-12 college prep school in Honolulu, helping

students become innovators, artists, and individuals through a model tech integration program asking, 'How can technology amplify the human experience rather than drive it?' to amazing results.



#### Saki Dodelson -**CEO** Invest in Literacy

Well known for her tenure as founder and CEO of Achieve 3000, a leader in differentiated instruction, she now

focuses her efforts on equity for all children using the best content and technology to create the very best platform—garnering commitment from industry leaders.



#### Patrick Brothers -**Co-Founder & Managing Director** HolonIQ

His Royal Military College (Australia) experience in strategy, leadership, management, warfare, and tactical operations has translated well into education, where he's lucidly aggregated, organized, and classified the entire industry for a new age of cradle-to-gray learning and work.





#### Robert Martellacci Founder & CEO MindShare Learning **Technology & Workspace**

Canada's foremost edtech thought-

leader, the affable host, curator, and connector works tirelessly in uniting industry and education, and serves as a champion for igniting student success through innovative solutions and partnerships in Canadian schools—and beyond.



#### Rebecca Kantar -Founder Imbellus

Her venture-backed tech co reinvents how we measure human potential. She

attended Harvard—proposed a special concentration in leadership and organization; it was never approved—dropped out, didn't look back, but looks forward to changing the face of learning.



#### Matt Renwick **Principal** Mineral Point Elementary

18 years and counting as a public educator, this Wisconsin principal

tackles technology integration head on, and sets a good example for other school leaders through his inspiring perspective in articles and tweets about learning, leading, literacy, technology and teachers.



#### Jennifer Fritschi Independent Contractor EdTech Strategies

She's coordinated the refresh process of ISTE Standards for Administrators, a resource used worldwide to support digital age learning; she's done work for SETDA, Digital Promise, and Smithsonian; the D.C.-based former teacher is a behind-the-scenes mover and doer.



#### Sieva Kozinsky **CEO** StudySoup

A Forbes 30 Under 30, he's also an edtech star with a social learning

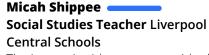
platform that helps more than 1M students get good grades every month; he's raised millions of dollars and is an active tech investor, writer, and advocate of entrepreneurship amongst college students.



#### Amy DelCorvo -**CEO & Executive Director NYSCATE**

20+ years dedicated edtech leader on local, statewide and national level; past

ISTE, CoSN board member; superintendent for tech, director of instruction, and for the last decade managing 250 employees, multi-million dollar budgets with a keen eye for workable, effective solutions.



The innovative ideas man, outside-thebox thinker and speaker is just the sort of social studies teacher any student would be lucky to have; not to worry, he's sharing himself with educators as a consultant and speaker on adoption of emerging tech in innovative school cultures.



#### Neeru Khosla -**Co-Founder & Exec Director CK12** Her nonprofit organization provides

K-12 learning materials that are

customizable, aligned to requirements, and free for all; she's also busy serving on boards of The Nueva School, High Tech High School Graduate School of Education, Stanford U's School of Ed, and more.



#### Anderson Morais -CEO & Co-Founder Agenda Edu

The business law grad (focus: startups) is an enthusiastic education entrepreneur,

initially encouraged through an entrepreneur competition win over 25k other registrants. His platform assists more than 1k Brazilian schools with communication and management.



#### Nicole Tucker-Smith -Founder & CEO Lessoncast Learning

The former teacher and professional learning leader for Baltimore County

Public Schools, she's worked in turnaround environments and knows what it takes to improve student outcomes; she developed a process which evolved into a software to replicate teacher success.





Susan Bearden -**Chief Innovation Officer CoSN** 

The musician, Director of IT, and Senior Education Pioneers Fellow at the U.S.

Department of Ed is now lending her expertise to the Consortium for School Networking, assisting other leaders in strategic, growth-oriented approaches to innovative teaching and learning.



#### Amit Patel -**Managing Director Owl Ventures**

The consummate listener is taking close notes; he's on a team backing some of

the world's leading edtech companies with one of the largest capital funds for education. Find him at LearnLaunch, GESF, ASU GSV and other conferences around the country and across the planet.



#### Johanna Kartila-Malmivaara **CEO & Co-Founder** Cuppla Technology

The Finnish business leader formerly with Nokia and Microsoft is now

confronting the digitalization of schools; her startup is expert in mobile technologies including mobile device management and content sharing, two key elements in creating tools for teaching and learning.



#### **Burck Smith CEO** Straigherline

His successful Baltimore-based firm helping colleges offer innovative pathway

programs to improve enrollment and retention by helping prospects and students reduce the price and risk of pursuing a degree is an outgrowth of his pioneering thought leadership in education.



#### Vivi Friedgut = **CEO & Founder** Blackbullion

The London-based Aussie is changing the world by ensuring people have

access to the right learning to develop the right skills at the right time; with Blackbullion, that means financial education, a perfect base.



#### Lane Merrifield Co-Founder FreshGrade

A brilliant entrepreneur with a passion for the convergence of creativity and

technology, he co-founded learning portfolio platform FreshGrade back in 2012, now in use around the world in more than 70 countries; he's also an investor-dragon on Dragon's Den (Canada's Shark Tank).



#### Katy Fryatt Founder & CEO Learnit

After taking Bett, the world's largest edtech exhibition, from the UK into

international markets (Latin America, Asia), now the 30-something is uniting education's global community with Learnit, "an intellectually honest conversation about the current state and future of education."



#### Robert Avossa **Senior VP** LRP Publications

After 25 years in public education, the former Superintendent of Schools for

Palm Beach County, Fulton County Schools, and Charlotte-Mecklenburg, heads up the organization behind the Future of Education Technology Conference, leading other leaders forward.



#### Julie Evans 💳 **CEO** Project Tomorrow

This accomplished strategist, entrepreneur, and leader is a nationally

recognized speaker, writer and researcher - and gets her information from the largest survey on digital learning, with more than 5 million participants, 35,000 schools, and all 50 states chiming in on the future.



#### Max Ventilla -Founder & CEO AltSchool

In a class of his own, though nonetheless creating classes for

everyone through a new model of how to open and operate 21st-century schools delivering highly personalized education without resorting to on screen learning, having secured \$200M to do it from some very big names.





Daniel L. Smith **GM Education** Amazon

He likes to build businesses from no team and \$0 to hundreds of millions in

revenue and global business units—and works at the perfect company to do so, with SaaS, ecommerce, and cloud infrastructure to back any ideas that prove robust enough.



#### Jennifer Womble **Program Chair FETC**

The future is bright with this much-loved leader of edtech responsible for all of that

great content, keynotes, panels, and presentations at the largest independent edtech conference in North America; she's nearly a decade into it and going stronger than ever, enjoying the show.



#### **Charles Best** Founder DonorsChoose.org

The former Bronx public high school classroom history teacher was one of

Oprah's ultimate favorite things; his company was named by Fast Company one of "50 Most Innovative Companies in the World," the first time a charity has received this recognition—and deservedly so.



#### Maria Spies -**Co-Founder & Managing Director** HolonIQ

The global intelligence platform, like most machines, needs a human mind to give it that spark of life—that would be Maria; her mission is to connect the world with the technology, skills, and capital to transform education—and she's well on her way.



#### Vikas Pota **Group Chief Executive Tmrw Digital** Founding chair and Chief Executive at the Varkey Foundation for 8 years, host

of the Global Education & Skills Forum; now boldly leading Tmrw Digital, the holding company for education entrepreneur Sunny Varkey's edtech investments and associated companies.



#### Sarah Schapiro **VP Education PBS**

Dedicatedly involved in education as an Education Pioneers Fellow, a program

analyst for Chicago Public Schools, a Pearson consultant, the Founding Director of the Digital Promise League of Innovative Schools, and now at the nonprofit edu programming giant, she's on a roll.



#### Matt Harris **Consultant** International EdTech

He's been chair of the board of directors for ISTE, Director of Technology and

Operations at an independent school, worked for The International Baccalaureate, Head of Learning Resources at the German European School Singapore—be sure to read his blueprint.



#### Jess Gartner -**CEO & Founder Allovue**

She's been a social studies teacher, marketer, and now works with school

districts across the country to budget and manage \$25B+ in education spending through her software platforms, seamlessly integrating into existing accounting systems—a very smart move.



#### Alberto Carvalho 🕳 **Superintendent** Miami-Dade County **Public Schools**

Approaching technology as an environment that can be leveraged for the benefit of public education, the longtime superintendent (appointed 2008) of 4<sup>th</sup>-largest U.S. district oversees 345k students, 40k employees across 392 digitally transforming fully 1-to-1 laptop schools.



#### Cheryl Lemke — **CEO & President** Metiri Group

Served as state Dir for edtech in an era preceeding widespread tech use in

schools (1985-1995); she's been an associate superintendent for Illinois State Board of Education, VP of Milken Family Foundation, and for the last 20 years, heads up the widely-sought ed research firm.





#### Miriam Altman -Co-Founder & CEO Kinvolved

This former NYC Department of Ed high school history teacher now leads a social

enterprise catalyzing communities to elevate student attendance. The award-winning entrepreneur is a Social Innovation mentor, Women's Launch Pad at her alma mater, Brown University.



A natural when it comes to putting on an edtech training event, he's developed learning for nearly 50k educators, he's the co-author of The Eduprotocol Field Guide, and doubled CUE membership under his leadership; he's worked for several different California school districts



#### Sunny Washington -**CEO** Because Learning

Like her name says, an inspiring and upbeat leader with experience building

new programs, particularly those bringing handson science, tech, engineering and math lessons to classrooms and homes through her Salt Lake Citybased company now in more than 400 schools.



#### Jonathan Harber 💳 **Adjunct Professor** NYU Steinhardt

In the school of Culture, Education, and Human Development, he serves as prof

of Edtech Entrepreneurship; he's chair of StartEd, which aims to accelerate edtech entrepreneurs to tackle the world's greatest education problems, and he runs 3-month bootcamps to make it so.



She works for one of the world's most widely used realtime 3D platforms, is an advisory board member for GSV AcceleraTE and California State University Entertainment Alliance Advisory Council; she's also served as COO at LRNG, and GM at Common Sense Media.



#### David Blake -**Executive Chairman** Degreed

He's on a mission to help create an educational system that will drive the

cost of learning to zero, promote universal access to education, create meaningful indicators of personal educational outcomes and success, to restructure the physical learning environment, and more.



#### Idit Harel **Founder** Gazelle Learning

An accomplished serial entrepreneur, tech innovator and futurist of global

learning systems, she's passionately committed to educating and empowering entrepreneurs globally. The former competitive gymnast mother of 3 served in the Israeli army and holds 4 degrees.



#### Esteban Sosnik — **General Partner** Reach Capital

Previously executive director of the co.lab, an edtech accelerator leveraging

the power of games to improve educational outcomes; former co-founder Atakama Labs; pioneer in leveraging Latin American talent for design and production.



#### Mila Thomas Fuller -Assistant Director U Illinois Urbana-Champaign

As the President of the ISTE Board of Directors, she earned her doctorate of Education, Instructional Technology from Towson University, she's also an EdNET advisory board member, and member of the board of directors for Champaign Urbana Schools Foundation.



#### Michael Crow -**President** Arizona State University Academic leader, educator, designer of knowledge enterprises, science and

tech scholar, ASU's 16th president; guided its transformation into one of the nation's leading universities, served since 2002 and, this past decade, collaborated with GSV for an edtech summit like no other.





#### Karthik Krishan **Global CEO** Britannica Group

"I love transforming cultural and business organization and unlocking their true

potential," says Karthik. The group: 1768-founded Britannica, Merriam Webster, Britannica Knowledge System, and Melingo. He also serves as Urban Upbound board member, and NYU Stern adjunct prof.



#### Jennifer Gu **COO** IXL Learning

Formerly sr. dev. manager for Oracle, she earned her MBAs from the Haas

School of Business and Columbia Business School; now COO for an edtech company asking over 25 billion questions and answers—helping schools use tech to improve teaching and learning.



#### Ankur Nagpal -Founder & CEO Teachable

For the past five years, he's led his NYC-based company to success

offering a platform for creating and selling beautiful online courses. From creators, YouTubers, niche experts, authors, businesses and others, MOOC or not, online education is alive and well.



#### Emilie Cushman **CEO & Co-Founder** Kira Talent

Colleges and universities can access prospective students through her

unique holistic admissions platform, combining the old way—grades and test scores—with new: competency-based assessments through text and video, to get a full picture of every applicant.



#### Joe Mazza **Principal** Seven Bridges Middle School

His dissertation was on school principals' use of social media to communication between home and school; he's been a 3<sup>rd</sup>-grade teacher, bilingual assistant principal, middle school vice principal, elementary principal, and all the while written and shared about it.



#### Leslie Wilson **CEO** One-to-One Institute

Laptop school pioneer Mark E. Weston says, "Leslie is the world's leading

authority on one-to-one computing in primary and secondary schools." For 12+ years, she has tirelessly helped countries, states, and school districts improve student achievement and engagement.



#### Hardeep Gulati **CEO** PowerSchool

A veteran of the software industry with time spent at SumTotal Systems,

Oracle, and SpinCircuit, the EdTech Awards 2018 Leadership Award winner brings his passion for education and strategic mindset to one of the largest K-12 edtech companies in the world.



#### Maia Sharpley **Partner** Learn Capital

An education scaler active in the edtech startup arena, she's also been VP of

innovation and strategic initiatives for Charter Schools USA, VP for strategy and innovation at Kaplan, worked at NYC Department of Ed directly with the chancellor, and is fluent in several languages.



#### Guido Kovalskys -Co-Founder & CEO Nearpod

He's founded and run companies in the U.S., Latin America, and Europe; the

former fellow and lecturer at Hasso Plattner Institute of Design at Stanford U (the "d.school"), is a big fan of design thinking and human centered design, a key element to his current success.



#### Svenia Busson -Founder LearnSpace, Edtech Tours Rubbing elbows with industry leaders,

startups, policy makers, educators, and

students to examine the scalability and efficacy of learning technologies and edtech adoption worldwide, her Paris-based LearnSpace accelerates efforts of European edtech startup founders.

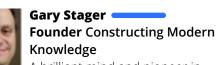




# Mitch Resnick Professor MIT Media Lab

For 27 years, his research group has developed technologies and activities

that engage people, particularly children, in creative learning experiences. Scratch programming is the world's leading coding platform for kids; Mitch is a computing world pioneer and legend.



A brilliant mind and pioneer in creativity, collaborative learning and computing, this constructivist advocate worked in edtech well before "edtech" was even a thing with Seymour Papert and others; provocative approach driven by a deep belief in learner-centric success.



# **Suzanne Xie Founder & CEO** Lightwell

Her vision for modernizing children's storytelling for the digital age through

creator software is something only she could pull off; energetic, relentless, and a bright light shining for others, she's challenging students to use tech to be creators of their own story.

# **Casey Green Founding Director** The Campus Computing Project

The largest continuing study of elearning and information technology in American higher education was launched way back in 1990 by Casey; he's a sought-after consultant, speaker, moderator, panelist, and definitive source for the higher education transformation conversation.

#### 

She leads a team researching effects of disruptive innovation on the public and private education landscape; published and spoken extensively on edtech, new school models, competency-based education, and emerging tools and practices to expand social capital.



The lifelong educator with 3 decades of teaching, learning, and leadership also has a background in instructional technology, and education technology leadership; makes himself available for others to help whenever he can through http://shiftyourparadigm.org/ and other channels.



# Ashley Beckner Venture Partner, Education Omidyar Network

She built and ran organizational functions for Bricolage Academy, was co-president of the Wharton Social Venture Fund, and was an Education Pioneers fellow with Silicon Schools Fund; she currently focuses on U.S. education strategy and investments for the firm.



His nonprofit is on a mission to prepare minds and create pathways for underrepresented students to pursue STEM careers; the Eisenhower Fellow was a Senior Mechanical Engineer at Motorola and also worked on the re-design of Black Hawk Naval helicopters.



# **Eileen Rudden**Co-Founder LearnLaunch

The social entrepreneur is a seasoned general manager and board member in

the tech and education sectors; she's dedicated to connecting, educating, and growing New England's entrepreneurial ecosystem and edtech startups through the world-class accelerator.



# Steven W. Anderson Co-Founder Web20Classroom

The former science teacher and instructional technologist worked for

Promethean, ASCD, currently assists West Corporation as their National Director of Solutions Engineering, Education Division; he's a seasoned presenter, social media sharer, and overall digital evangelist.



#### Sandra Liu Huang < Head of Education Chan Zuckerberg Initiative

The Stanford grad served as a bridge between cultures for her immigrant parents (Taiwan) who depended on her English skills; applies this 'agency' in creating tech products for schools and leading a multidisciplinary 100member team mapping the future of learning.

#### Jacob Hanson -**Managing Partner Storyteller PR** with Panache!

Jacob's firm earned The EdTech Awards 2018 Leadership Award Winner status from EdTech Digest; he's consistently provided effective PR behind the scenes for scores of edtech startups as well as established companies serving the market and is a true pleasure to work with.



He's setting the global standard for blockchain-secured digital credentials

(independently verifiable, tamper evident, and owned by issuers and recipients, issuable at scale). That's huge for educational institutions; the next few years will be educating leaders why that is.

#### Becky Navarre -Ass't Superintendent of Technology Fort Worth ISD

This teacher from Beaumont decided to further extend her reach, studied Policy Leadership, became a director of edtech, moved up to an assistant superintendent, and draws inspiration from other likeminded leaders at ISTE Digital Leadership Summits.

#### Ahmed El-Sharkasy -CEO & Co-Founder Knowledge Officer The head of this London-based startup is on a mission to organize the world's

knowledge and build personalized learning paths to help people reach career goals; every Sunday night, just to pay it forward, he dedicates 2 hours to helping anyone anywhere in the world for free.

#### Jill Buban **Chief Academic Officer Unizin**

Due to rapid higher ed tech growth, 25 research institutions and 900k learners

formed one of the largest educational organizations in the country; the Austin-based nonprofit consortium's mission is to improve learner experiences with digital teaching and learning resources.

#### Patrick Awuah Jr -Founder & President Ashesi University

Ghanaian engineer, educator, and entrepreneur, former Microsoft program manager who lived 15 years in the U.S. then returned to his homeland to establish Ashesi ("beginning") University with a mission to educate the next generation of African leaders.

#### Coni Rechner **Senior VP Partnerships** Discovery Education

For more than a quarter-century, she's worked with her company, and now oversees their K-12 partnerships and innovative collaborations with school-based partners, ensuring teachers and admins have access to best-in-class digital content and professional development solutions.

#### Vikas Gupta ——— Co-Founder & CEO Wonder Workshop

At 14 years old learned BASIC; first company acquired by Google; the father of two was inspired by time spent with his daughter, his first child, to start this consumer electronics company used in 20k+ schools and leading a student robotics phenomenon

#### Todd Brekhus — **Chief Product Officer Renaissance** Learning

Champion of literacy and its convergence with tech, led creation of myON student-centered personalized literacy program with 6k age-appropriate enhanced digital books; taking it all up a notch in his leadership role at the learning analytics organization.





#### Tracye Stormer 🕳 **Director of Technology** Jasper **County School District SC**

Her tightly-run 5-person technology team serves over 3,000 users using over 3,000 devices; she's overseen the strengthening of servers, infrastructure, and switches to complete wireless installation in all buildings; they've also equipped all teachers with mobile devices.



#### Charles McIntyre -**Chairman & CEO IBIS Capital**

In 2013, the investment banker founded EdTechX, a series of global conferences convening edtech influencers in Europe,

Asia, and coming soon to Africa; his passion shines through with EdtechX Holdings, the world's first edtech special purpose acquisition company.



#### Karla Burkholder -**Director of Technology SCUC ISD**

The Texas educator, an instructional leader and veteran of edtech planning,

purchasing, and implementation in large and small school districts is also an adjunct professor at Baylor University and is a past president of Texas Computer Education Association (TCEA).



#### Todd Thibodeaux — President & CEO CompTIA

Heading up the trade association for the global tech industry, the technophile

reps more than 2k member companies, and 3k business partners worldwide. He's expanded the association through education and training programs, market intelligence, pro certs, and advocacy.



#### **Abby Sterensis** Founder & CEO cheaning success

Opens communication lines with tools for creating a common language to

discuss teaching strengths and improvable areas; formerly Director Community Outreach for Advanced Learning Centers, owned and operated by 2 gens of the Sterensis family; believes in giving back.



#### Michael Staton -**Partner** Learn Capital

Led investments into Coursera, Minerva, Brilliant, VIPKid, and Minerva;

co-founded Uversity, pioneer in social enrollment management tech; the former teacher also secured the first venture investment from the Bill & Melinda Gates Foundation for a private company.



#### Jennifer Bell-Ellwanger -**President & CEO** Data Quality Campaign

The lifelong educator guides educators, families, and policymakers with quality information to ensure students excel. From the classroom to the U.S. Department of Ed, she also put time in at the central office of the NYC Department of Education as a senior advisor.



#### Don Wettrick Founder StartEdUp Foundation

The Innovation Coordinator at Noblesville Schools (Indiana) wants to move students from passive consumers to creating

producers; exuding entrepreneurial can-do approach, connecting students to big names, big ideas, and better learning through his podcasts, books, and videos.



#### Sylvia Libow Martinez **Co-Founder CMK Futures**

Wrote the bible of the classroom maker movement (Invent To Learn: Making,

Tinkering, and Engineering in the Classroom); this speaker, consultant, and PD expert was an aerospace engineer before becoming an educational software producer and VP of a video game company.



#### Kevin Custer -Founding Principal Arc Capital Development

Driven, cut-to-the-chase leader of earlystage advising and investing firm for the education market; has advised nearly 100 companies, achieved 50% U.S. K-12 market penetration, generated over half a billion dollars in revenue, and maintains 20+ active investments.





#### Michał Borkowski **CEO** Brainly.com

One of the world's largest social learning communities, his company convenes

middle and high school students to strengthen skills from math, science, history and beyond. The Warsaw School of Economics grad's NYC- and Cracow-based edtech co helps 100M+ monthly users.



#### Kimberly A. Rice Secretariat CIO Executive Office of **Education MA**

FableVision founder Peter Reynolds says of her, "Boston is a lucky city. It has Kimberly Rice as its CIO for Boston Public Schools." Indeed, the former 4<sup>th</sup>-grade teacher has been on a mission for students that has seen her rise through the ranks with a boost from the right technology.



#### John Harrington -**CEO** Funds For Learning

For two decades he's been committed to helping students receive the best possible

education, passionate about the significant role internet access can play in equipping students and teachers for success; he's led the firm that helps schools and libraries get their e-rate money.



#### Suzanne Munroe -Teacher, Founder TinkerEd

Elementary school teacher and edtech entrepreneur; founded TinkerEd, won

Startup Weekend Edu in San Francisco. Seeing firsthand the disconnect between edtech founders and classroom teachers, her platform matches teachers to test, advise, and shape edtech offerings.



#### Michael Spencer -**Co-Founder & CEO** ASSIST Education

The former director of international business for K12 also served as senior VP

at The American Education Corporation. Fluent in Spanish, the world traveler is an edtech specialist in strategic business planning, raising capital, international sales development and online learning.



#### Natalie Nezhati **Director** Edtech Mark

A behind-the-scenes edtech connector and communicator in London and

beyond, for the past 5 years she's designed and executed webinars, marketing programs, and strategic relationships for a number of edtech startups.



#### **Brian Rowe CEO** Perceivant

Indianapolis-based edtech entrepreneur helping people live better lives with

innovative higher ed courseware linked to powerful analytics and real-time data to provide students with active learning experiences and easy-to-use analytics for educators to see their actual efficacy.



#### Ron Reed -**Founder & Executive Producer** SXSW EDU

Involved in educational publishing and technology since his University of Texas days; helped launch Optical Data Corp in mid 1980s, pioneered first state-adopted tech program to access traditional textbook funding; expert in producing perpetual sources of edu energy.



#### Jack Lynch 💳 **CEO** Houghton Mifflin Harcourt Understands value in teacher-student

relationships; inspiring team-oriented

leader deeply interested in what's right with students, focusing on their abilities, and nurturing that—great approach for BU-grad exec of \$1.4 B/yr publishing giant in midst of a shift toward digital.



#### Nadayar Enegesi -Co-Founder & Director Andela

Heads up the company's internal incubator, aptly named Launchpad,

with his technical and entrepreneurial background; also built the company's learning infrastructure and curricula teams. The Nigeria-based computer science engineer is a University of Waterloo grad.

# FUTURE

BRINGING THE BLURRY, PROBING EDGE OF EDTECH INTO FOCUS

EDTECH1000: COMPANIES TRANSFORMING EDUCATION



10 COMPANIES TO WATCH & WHY

THE EDTECH AWARDS

WITH GENEROUS SUPPORT FROM

# Bringing the Blurry, Probing Edge of Edtech into Focus

It's hard for anyone in edtech to avoid being a futurist.

#### FUTURE FUN | by Mark Gura

Our recent history is full of examples of unrealistic predictions of futures that didn't materialize. This clip, the intro for the network broadcast show *The Jetsons* (1962), is an instructive and fun example of how speculating about the future can be difficult, sometimes bordering on silly.

We educational technologists cannot avoid being, at least in part, futurists.

It's also true that we must reflect well to avoid becoming advocates and creators of today's equivalent of a Jetsons vision of education, getting it wrong and consequently misguiding our colleagues.

One of the oldest areas of concern, argument, and confusion related to the use of technology in the classroom has been the



old "Computers will/will not, replace teachers!" ditty.

And for the longest time, those of us who have had even the thinnest layer of experience with computers in the classroom, who dispassionately have observed and reflected, have understood that as crises go, this one is a total "nothing burger", a non-issue conjured up out of the uncomprehending fears of folks reflexively suspicious of change.

To the contrary, our understanding quickly came to be that computers are tools for teachers to use with their students; tools that increase their reach and efficacy.

#### Remapping the Edtech Landscape

But the landscape of education changes, and its geologic features, even those long thought to be solid bedrock, do move over time. A number of impactful things have appeared in recent years that require us to re-map a bit with the end in mind of not only understanding the nature of where we are, but where we will arrive at in the not so far off future.

There are many examples of technology "improving" teaching in the sense of making classrooms more efficient by helping to make processes and chores easier and more effective.

For instance, digital grades books make the recording of student performance data more reliable and easier to store, retrieve, and share those records. An LMS (Learning Management System) can similarly improve the distribution of instructional content and the collection of student responses to it.

There are examples, as well, of technology improving the quality of the learning experience through applications to instructional activities of things like interactive, media-rich content.

There are technology applications, as well, that have somewhat transformed the very format of school by expanding its reach to deliver, and for students to access, instruction. Virtual field trips, after school availability of content and paths to peers, and student access to experts in the field are a few.

As impressive as the above examples have been, they all largely make their contributions in a liner fashion by offering the possibility of more of

the possibility of more of what was done traditionally –or of supporting students and teachings in doing it better. We are now beginning to experience applications of technology to the work of teaching and learning that truly are different.

This approach deepens the potential value of teachers. In a sense, many emerging digital items are oriented similarly, intended to relieve teachers and students of the need to interface directly for basic functions that now can be handled by machines, so that human bandwidth is freed and expanded, allowing for deeper, more relevant and more meaningful learning to be accomplished.

#### A Sampling of Instructional Items

Here's a sampling of some prominent instructional items to include in our reflections on "Instructional Continental Drift" (Sorry, couldn't resist the temptation to follow through on the topography metaphor):

#### In the Flipped Classroom

students access and familiarize themselves with content on their own through means driven by digital communications technologies (e.g. video, audio, animations, game oriented, etc.) so that their face-to-face class time with

their teachers can be maximized for higher order thinking goals: reflections, analysis, meaning making, and application of facts and skills in important, often real-world contexts. Thus, this approach deepens the potential value of teachers. In a sense, many emerging digital items are oriented similarly,

intended to relieve teachers and students of the need to interface directly for basic functions that now can be handled by machines, so that human bandwidth is freed and expanded, allowing for deeper, more relevant and more

meaningful learning to be accomplished.

Stude

Personal Digital Tutors. It's already common for students to have their own personal digital devices that offer calendars, calculators, search engines, and more. Students interface with these generally through keyboarding. AND now verbally, with digital entities like Siri, that the ever so polite and perky little digital assistant who will guide your iOS device by engaging in a conversation with you. Many now have (the Google Dot) Alexa at home (I do), she's that little digital assistant who will ask you what you want to hear and then retrieve Led Zeppelin's Stairway to Heaven from a music streaming service if you direct her to. These digital assistants are cropping up in many places, my online bank offers one, the downloadable GPS App, Waze, for instance, will

App, Waze, for instance, will take requests for driving directions verbally and advise you when to turn left verbally, as well. So what happens when these technologies are reconceived for the learning of young people? Alexa and her peers put out by other providers have already established a presence in classrooms. Stay tuned for a serious

development in what classrooms look and sound like, as well as how they function. But much more is finding its way into the classroom...

Students access and familiarize themselves with content on their own through means driven by digital communications technologies (e.g. video, audio, animations, game oriented, etc.) so that their face-to-face class time with their teachers can be maximized for higher order thinking goals: reflections, analysis, meaning making, and application of facts and skills in important, often real-world contexts.

A. I. (Artificial Intelligence). When the Google search engine improved its interface algorithm a number of years back, many of us had an unsettling, almost spooky "ah ha" moment with it as we suddenly came to understand the reality of working with a technology that tracked our preferences and interests and predicted the relevance of items to present us with. I remember my own experience when one day I was totally astounded by what at first appeared to be magical synchronicity. Out of the tens of thousands of advertisers Google must have had, vendors who in the aggregate were offering a very, very broad range of goods and services... how did Google manage to feed me ads for things that actually caught my attention? How, I wondered, could it be that the ads that

showed up on my screen as I was working were for particular brands of kayaks and electric guitars and tours of Thailand, etc.— the very things that I was most interested in at the time? And then, it hit me like a ton of bricks (remember, this was cutting edge new back then and it was not explained to the public at first)—that while I was learning with

Google... IT was learning about me! Those ads were for things I had been searching for information about... were the same things for which I had recently been clicking links for. Son of a gun! Google was figuring out what I was interested in, what I liked, what I wanted to see more of... and it was doing it in a spiral of specificity and relevance and accuracy that was uncanny. My computer was working with me and it was working with other individuals behind it who wanted to increase their chances of presenting me with things that resonated. Duh! Welcome to the age of machines that learn and that act on what they learn.

From Amazon's online store to **Instructional Software - Adaptive Digital Instructional Resources.** This same general principle used by Google to find out about its users has more recently been applied to teaching and learning; the idea being that by identifying a student's interests and preferences, his strengths and weaknesses, his ways to approach learning, and on and on, highly personalized learning experiences could be provided to him. Each student no longer has to access the same content as his classmates; nor does his content have to have the same form, look, and feel as that offered to others; nor does the path established for him to react and respond to the content have to be the same, either. Enter to the world of Adaptive Digital Instructional Resources. Of course, this is a new development and some attempts at bringing the ideas above to life for actual student use are better than others. There are varieties and grades of A.I. available to resource designers and there are designs that are better than others as well. This is an area that we will be seeing a great deal more of in the immediate future.

**Data Analytics and Visualization.** Schools have embraced the collection of data and its application into their cultural repertoire over the past couple of decades, an important change. But is that body of practice fully defined? Are they maximizing the impact this new focus offers? In "A Discussion on Data Visualization in 21st Century Education," (from University of Michigan/ Academic Innovation) some next-level questioning is shared "As data collection has proliferated within the classroom and across industry, those responsible for discerning meaning from data are faced with a challenging task – cutting through the noise. Data visualization tools allow these individuals to synthesize and interpret complex data in new and innovative ways, analyzing key data trends to gain a deeper understanding of the statistical insights the data provide.... it's beyond human ability to grasp the useful information hidden in the mass of data points. Visualization serves as a summarization, guidance, metaphor and eventually a gateway to understanding the data. Like the old proverb says, "sometimes a picture is worth a thousand words."

Blockchain. Blockchain has found a place on the exploratory edge of Education. Forbes recently ran the article "20 Ways Blockchain Will Transform (Okay, May Improve) Education." Most of the applications for Blockchain listed relate to Education in ways that are other than instruction, but there are several that do. While number 3, "Student records", seems to be yet another approach to more efficient management of what for schools is an essential chore, number 11, "Learning marketplace", has a great deal of potential to impact student choice, motivation, and satisfaction with the learning experience... "

<u>TeachMePlease</u> is a Russian pilot on the Disciplina platform where teachers and students come together. It helps students find and pay for courses, registered by educational organizations or teachers."

#### **A Final Point**

It seems that whenever a new technology emerges there are some folks who quickly wrap their brains around how it may be applied to Education.

Granted, some of these folks are simply tech enthusiasts, but other truly understand that these new technologies (especially after areas of work other than Education have adopted and gotten significant value from them) represent potential for Education, deep potential.

The stream of emerging technologies seems to be a constant; it would be wise for educators to keep yet another eye peeled for important technology innovations with potential impact for their work.

And, hey, isn't that one of the more interesting things the field has to offer?

Mark Gura is a Contributing Editor to EdTech Digest. He is former director of the Office of Instructional Technology for New York City department of education. Write to: <a href="markgura@verizon.net">markgura@verizon.net</a>



"The number one hurdle facing innovative education solutions is getting information into the hands of enough teachers and students to make a difference. Too much noise makes it incredibly difficult to get the attention of educators and administrators. That's my expertise; we help innovative solutions connect

to schools and teachers, and we help teachers and schools find solutions that can help them make a difference in the lives of kids."

—Mitch Weisburgh, COO, EdChat Interactive, an alternative approach to online professional development and focused information sharing for educators.

#### IN CLOSE WITH | Mitch Weisburgh

**IN THE ONGOING** series of Edchat Interactive events. instead of a long presentation, the event is a live video discussion. The leader present a basic concept in the first 5-10 minutes of the event, then participants break into small video chat groups to discuss the practicalities of the concept. Finally, representatives of the various groups discuss their findings with the event leader while the entire group watches and listens. This, more interactive format incorporates social learning and reflection into the learning process, which facilitates deep learning, and greater engagement. EdChat Interactive offers a broad range of Instruction oriented themes. A few of its past installments have been: Giving Voice to All Students, Discussing the Shift from Consumption to Creation, Five Ways Video Can Transform Your Classroom, and Data is not a Four Letter Word. These events are free to all and easy to access at Edchat Interactive: https://sites.google.com/site/ edchatinteractive/upcoming-seminars Mitch cofounded Academic Business Advisors in 2005 which helps organizations develop business strategies to align their products and services with the ways purchasing decisions are made and technology is used in schools and districts so that they can scale and make a difference to kids and educators. He is currently on the Board and Executive Committee, having just finished a term as president, of the Ed-Tech Industry Network (ETIN) of the SIIA. //

#### **HOT LINKS**

Blog: https://blog.academicbiz.com/ LinkedIn: https://www.linkedin.com/in/mweisburgh/

Twitter: <a href="https://twitter.com/weisburghm">https://twitter.com/weisburghm</a>

Contact: mitch.weisburgh@academicbiz.com or weisburghm on Twitter





In the fall of 2019, we will highlight a handful of companies from The EDTECH1000 List.
Watch for them on www.edtechdigest.com

# STATE OF EDTECH

# LET'S DO IT!

Purpose-driven individuals teaming up together in shoulder-to-shoulder efforts to create the future of learning.

# By VICTOR RIVERO



Among the most dedicated companies serving the education sector are those seen here among The EDTECH1000 List. They are leading-edge, innovative technology solution providers intent on transforming education. From small startups to larger, established firms in K-12, higher education, and workforce learning—the companies highlighted here represent committed individuals who teamed up, scaled up, and looked up toward the mountain of help they could provide others, and despite the odds, shrugged and said, "Let's do it!"



HAPPY TO PARTNER: Rajeev Arora, CMO of Nearpod, at FETC 2019 alongside 50+ partners.

#### COMPANIES TO WATCH



360 Alumni 3A EDucation 3Doodler 500 Startups A.D.A.M.

Aakash Educational Services Pvt. Ltd. ABC-CLIO **ABPathfinder** 

**Academic Progress** Accelerate Learning **Accel Partners** Accuplacer Achieve3000 AchieveTheCore

**Activate Instruction** 

Adaptemy

Adaptive Curriculum Ad Hoc Academic Limited

AdmitSee Adobe **ADTRAN** 

**Advancement Courses** AEFOL EXPOELEARNING

**Aeris Partners** Aerohive **Affirm** 

Age of Learning AirWatch Albert AlchemyVR Alcoa Foundation Alive Studios Alma AltSchool

Alumnifire Amazon Education **Amplify** 

Andela A Pass Ed. Group App Ed Review Apperson Inc. **Appleton** Arcademics Ardusat

Arivanza

Arma Partners Aruba (HPE) **ASCD** Assembly ASU+GSV **Atomic Learning Audio Essentials Authentica Solutions Autism Expressed** 

Autodesk

Autodesk Tinkercad

Avaya Aver USA **AWE Learning** awe Media AwesomeStories AWS (Amazon) Axonify BankersLab BCG

Because Learning! **Bedrock Learning Belkin Education** 

Bell Tower Schoolhouse

Benetech Beng BenchPrep BeRobot BFTT BiblioNasium Big Word Club

BigBlueButton Inc. BirdBrain Technologies Blackbaud

Blackboard BloomBoard Bloomz **Bloxels EDU** BNC BocaVox **Book Creator** BookNook Bookopolis BookPagez **BoomWriter** 

more next page >>

**Boulder Learning** 

**Boxlight Mimio** 

**Boundless** 

**Brain Hive** 



Britannica Group. Encyclopaedia Britannica, Britannica Digital Learning, Britannica

Knowledge Systems, Merriam-Webster, and Melingo comprise the group; Britannica celebrated its 250th anniversary year, Merriam-Webster its 180th, in 2018. Watching them will be a great indicator of how old meets new.



Capsim. Offering experiential learning solutions to develop the skills most critical

to career success in today's business landscape, here's a company with simulations, assessments, and corporate training for students, instructors, academic administrators, and corporate trainers that is up on the times.



**DreamBox Learning.** With a recent investment from The Rise Fund of \$130 million to support their mission to be a

powerful learning partner in every classroom, school, and district, DreamBox Learning is one of the highest-funded edtech companies in the world. The Rise Fund is the world's largest social impact investment fund.



Gale. Connecting libraries to learning and learners to libraries for more than 60 years by partnering with libraries around the world, empowering the discovery of

knowledge and insights for all people, for all purposes. They serve academic institutions, school educators, public libraries, and special libraries with their databases, primary sources, eBooks, eLearning, and more..

(continued)

#### COMPANIES TO WATCH (continued)



Brainly
BrainRush
Breaking the Barrier
Brett E Shelton

Bridge Int'n'l Academies Bridge U

BrightBytes

Britannica Digit

Britannica Digital Learning bulb digital portfolios

Buncee Busuu Byju's

C. Blohm & Associates

Califone

Callido Learning
Cambium Learning
Campus Suite
Canary Learning
Capstone Digital
Capti Voice
Career Power
CareerInSTEM
Carolina Biological
Carrot Rewards

Castle Rock Research Catalyst

Catapult Learning CatchOn

Cengage CEV Multimedia Chalkable

Chalkup ChatterHigh Civitas Learning

Checkmate Foundation Chegg Inc Chrome Warrior

Chronus CIOapplications Cirkled In

Cisco CLANED

ClassCraft ClassDojo Classera Classkick ClassLink

ClassLoom Classroom Inc ClassWallet Classworks Clearpath EPM Clever

CoCubes Technologies

Code Avengers CodeCombat CodeHS CodeKey Inc.

Codementor CodeMonkey CodeREV

CogBooks Cogent Education

Cognero
Cognero
Cognii
Cognotion
Collabco
College Ave
College Board
CollegeVine
Colvard Learning
Common Caches
Communications
Strategy Group
Compass Learning
Connected Data
Connections Academy

Connections Education Content Technologies, Inc. Copia Interactive

Copia Interactive
CoSN
Course Base
Course Hero
Coursera
Creation Crate
CreatieLIVE
Creya Learning &

Research Cricksoft CSG PR CSI Literacy Cudoo

Cudoo Cuppla Technology Curiosityville Curious World Curriculet

Curriculum Associates Curriculum Crafter

more >>



5

**MASTERCLASS.** They've been generating a lot of headlines, from the The New York Times to Vanity Fair and the TODAY Show, the world's top actors, authors,

musicians, business leaders and other notables are spilling their secrets to success in an easy to relate to online video format for \$180 / year. "Online classes taught by the world's greatest minds" — pretty much takes the cake.



6

**MobyMax.** Founded in 2010, today they are in over 83% of K-8 public schools and growing with their 27 complete subjects covering all grades, is a winner of The EdTech

Awards 2018 Best E-Learning and Blended Learning Solution, and is extremely well designed, thorough, attractive, workable, and aligned to standards.



7

**onQ.** Unleashing engagement is how they bill themseves, which is quite accurate considering the video

experience they've created to track reactions, conversations, and engagement; they do so moment-to-moment for the benefit of organizations looking to transform static video and other presentation media into immersive, interactive group experiences and engaged conversations around content that matters.

#### RENAISSANCE"

8

**Renaissance.** Creating assessment and practice solutions that put learning analytics to work for educators, their

products are in use in more than one-third of U.S. schools saving hours of prep time while making truly personalized learning possible.

(continued)

## COMPANIES TO WATCH (continued)



Curriki CyberFlow Analytics CYPHER LEARNING

D<sub>2</sub>L DaDaABC

Data Resources Inc. Dayton Johnson Exec Search

Declara

**Defined Learning Defined STEM** Degreed Delightex

Dell DFRobot DigiExam Dig-It! Games **Digital Theatre Plus Dinan Capital Advisors Direct Services** 

Disaster Records **Discovery Education** Docebo

DocentEDU DoctoralNet DonorsChoose DOT digital group

DreamBox Learning Dremel DubLabs

DuoLingo EasyUni.com eBackpack Edbacker **EdCast** 

Edco **EdFutures** Edgenuity **EdioLabs** Edmentum

Edmodo **EdNET** 

Edovo (Jail Education Solutions, d/b/a Edovo)

**EDpuzzle** Edsby

EdTechAfterDark EdTechLens

EdTechTeam

EdTechX Edthena

**Education Curb** 

**Education Data Solutions Education Elements Education Perfect** 

**Education Technology** Associates

Education.com **Educational Consulting** 

Services, LLC

EducationSuperHighway

**EDUCAUSE** EduChange, Inc. Educurious Edufolios Edulastic EduOne EduOnGo eduPad

Eduplanet 21 Eduporium EduSystem EduTechGuys

eDynamic Learning

Elesapiens

edWeb

**Ellevation Education** 

**ELMO USA Embibe Empow Studios Energized Minds EnGenius Technologies English Central** 

Engrade

**Enhance Knowledge** Services Pvt Ltd **Enrollment Rx EON Reality** Epic!

**Epiphany Learning Epraise Limited** 

**Epson ERPScan** eSchoolView eSpark eSplice EssayTagger

Essence Associates, LLC

**ROBOKIND.** A different kind of learning company, their mission is to create cost-

effective and inclusive education for all; they especially help the autism community, but also school systems around the world. For now, they offer two products: Robots4Autism, and Robots4STEM. For students with the Autism Spectrum Disorder, they offer Milo, "a socially advanced robot" that is 80% effective versus a mere 3% in traditional therapy.

StrongMind. Their mission is to create the most engaging and extraordinary 6-12th grade digital curriculum; they are doing just that with their next-gen courseware, leading edge assessments, advanced reporting and analytics, and their "loudmouth" communications portal, showcasing superior content, excellent design, and workable analytics.



VIP KID. A bonus: VIP KID is definitely a company to watch. China, as one might expect, has huge numbers. This edtech company is one of the largest in the world.

**Essential Spanish Vocabulary** 

Flashcards

**European Leadership University** 

**Event Leadership Institute** Eventbrite

EventTracker EverFi

EVO 40 Cart from LockNCharge

EvoText, Inc. Examity Excent ExecOnline **Explain Everything** ExploreLearning **Extension Engine** EZ Vidya Private Limited

FableVision

Faria Education Group Fast ForWord FastBridge Learning

**FETC** 

Fidelis Education FieldTripZoom, LLC Filament Games

Firecracker First Round Fishtree Flipgrid **FlipIt** Flocabulary

**FLVS Follett ForClass** 

Forward Thinking EDU **FourierEDU** 

FreshBiz Game FreshGrade Frontline Education

FrontRow

**Fuel Education** Fulcrum Labs

**Full Measure Education** 

FundersClub **Funds For Learning** FutureLearn Gadget Software Galvanize Labs

more >>



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## COMPANIES TRANSFORMING EDUCATION

Gather Education
GCI Education
General Assembly
Generation YES
GetSmarter
Getting Smart
Globaloria
GoConqr
GoEnnounce
GoGuardian
Goiimo

Google for Education

GoReact GPA Learn Gradeable GradeHub Grammarly GrandKeyEd Gridstore

GoNoodle

Griffin Technology Groupwerk, Inc.

Grovo GSV Capital Guidebook GuideK12

Hanover Research

Hapara

Harbinger Knowledge Products Harris School Solutions Hatch Early Learning Helix Education Her Interactive Hero K12

**Higher Learning Technologies** 

HireEducation HMH Marketplace

Hobsons Holberton School

Hootsuite Horizon DataSys HotChalk

Houghton Mifflin Harcourt

House of EdTech HoverCam HUE i-Clicker IBM

**Identity Automation** 

iKeepSafe IKIDSFUTURE Illumeo, Inc Illuminate Ed Impero Software Infinite Campus

ingram

Insight Education Group

InstaEDU
Instructure
Intellatek
intelliVOL
Interfolio
IO Education
iontuition
iPracticeMath
IStation
ISTE
Itslearning

ISTE
Itslearning
iTutorGroup
ITWORX Education
IXL Learning
J Harrison PR Group
JAMF Software
Joomla LMS
JoyTunes

Junction Education

Junyo
Jupiter Ed
K12
K12 Insight
Kaltura
Kaizen PE
Kaplan
Kapor Capital
Kaseya
KDSI

**KEH Communications** 

Kickboard Kidaptive KidPass

Kids Discover Online Kishmorr Productions

Kiwa Digital Ltd Knewton

**Knomadix Corporation** 

KnoteSter Knovation

Knowledgemotion

Knowledge Notebook, Inc.

KnowStory Kokoa Standard Kramer Kuder

L Wolfe Communications

Lab4u Labster

Kurzweil

Lambda Solutions Language Cloud Languagenut LapCabby LaptopsAnytime Laureate Education

Lea(R)n LeadID Learn2Earn Learn Capital Learning Ally Learning A-Z Learning Bird

Learning Coach Central Learning Curve

Learning Upgrade LLC

Learning Evolution Learning Games Studios, Inc.

Learning.com
Learning Counsel
LearningBird
Learnist
LearnLaunch
Learnosity
LearnPlatform
Learnsprout
LEARNstyle Ltd
LearnUpon
LearnWithHomer
LearnZillion
LEGO Education
Lerner Publishing Group

Lesson Planet Lenovo Lexia Learning

Lexia Learning Library For All Lifeliqe LightSail Lightower

**Lightspeed Systems** 

Lightspeed Technologies

Lingo Live Lion's Heart Listen Current LiteracyTA Literatu

Literatu Pty Limited LiveBinders

LivingTree LockNCharge LongLeaf Solutions

Lore LTG Exam Lumerit Education Lumos Learning L Wolfe Communications

Mac to School

Magic Lo School
Magic Leap
MajorClarity
MakeBlock
Makers Academy
Makey Makey
MangaHigh

Mansfield Sales Partners LLC

Marbotic

MaRS Discovery District

MasterClass

Masters and DoctoralNet

MasteryConnect
Mathletics
MathWorks
Matific
Mawi Learning
McGraw-Hill Education
MCH Strategic Data
MDR Education
ME Education

ME Group of Companies Measured Progress

MediaCore
MEL Science
Meru Networks
Metiri Group
Metria Learning
MIDAS Education
Middlebury Interactive
Milestone Documents

Mimio Mind Research

more >>



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# COMPANIES TRANSFORMING EDUCATION

MIT Education Mobile Beacon MobyMax Modern Teacher Modest Tree Media

Modo Labs Mojo Enforce MooreCo Mosaic451

Motivating Systems, LLC Motivis Learning

Movenote Mozaik Education Mrs. Wordsmith Muzzy Lane Software Mwabu (aka iSchool)

myly Mystery Science

n2y Naiku

Navigation North Navitas Ventures Ncomputing Nearpod Nepris Netmedia NETMINO

Netop

New Enterprise Associates New Intelligence Inc. New Schools Venture Fund

Newsela Newseum ED

Next Tier Education, Inc.

NextLesson
Noodle
NoRedInk
NovoEd
NS BASIC
NUITEQ
Nureva
NutKase
NWEA
Odysseyware
OER Commons
Ogment

OnCourse Systems for Education OnPoint Innovative Learning

Environments

OOHLALA Mobile Open Assessment Technologies Open English OpenED OpenStax Optolexia ORIGO Education

Osmo Otus Outcert Outschool Owl Ventures Packback Padcaster Pagamo Panasonic panOpen

Panorama Education

PAPERbasket
Paragon One
Parchment
ParentLink
ParentSquare
PASCO
Pathbrite

PBS Learning Media PBS Teacherline PD Learning Network

Pearson
Peekapak
Penda Learning
Penguin
Penveu
PeopleAdmin
Performance Matters
Performensation

pivotEd PlayMada PledgeCents Plotagon PLS 3rd Learning Pluralsight Pocket Prep PocketTutor Portfolium Portfolium, Inc.

Powerful Learning Practice

PowerSchool

PR with Panache
PrepMagic
PREPMYFUTURE
PresenceLearning
Primo Toys
ProctorU
Prodigy
Prodigy Game
Promethean
proprep
Proversity
PR with Panache

PR with Panache PublicSchoolWORKS

Qualtrics Qubed Quill.org Quizlet QwertyTown Qwickly, Inc. RaaWee K12 Solutions

Radix Raise.me

Raptor Technologies ReaderBee Reading A-Z Reading Horizons Readorium ReadSpeaker ReadWorks Ready4 Realityworks Redbird Learning RedShelf, Inc

Reed RefME

Remark Test Grading

Remind Renaissance

Renaissance 2.0 Media, Inc. Renaissance Learning Rethink Education Rethink First ReUp Education

RICOH Rikt AS RoboKind RobotsLAB ROI Print Manager Rosetta Stone Ruckus RUSHWORKS Said Business School Salesforce Trailhead Samsung School Sapling Learning Scenario Learning Schell Games Scholastic Scholastic Library

School Improvement Network

School Specialty

Schoold

Scholastico

SchoolMessenger SchoolMint Schoology Schoolrunner Schoolzilla Science Bits Science4Us Scientific Learning Seas Education SecondSite SharpSchool Shenzhen Cloudpoint

Technology Co., Ltd Shmoop Showbie Shutterfly Signal Vine, LLC Silicon Mechanics

Silverback Learning Solutions

SimpleK12 SKILLS Global Skookii SkySync Skyward Skyward, Inc. Slate Science SlideRoom Smart Ants Smart Horizons

Smart Science Education Inc.

SMART Technologies

SmartBrief Smarterer Smartly SmartTerm

more >>



## COMPANIES TRANSFORMING EDUCATION

Smithsonian Smrt English Ltd SnapComms

**Snaptech Digital Solutions** 

Snowflake MultiTeach

Social Assurity Social Capital Socratic Socrative

Sofatutor

SoFi SoftChalk Software2

Sokikom SolarWinds SolidProfessor Solution Tree

Soluzione IT Services Sonic Foundry Soomo Learning Soundtrap **Speakaboos** Sphero Splash Math

SpringBoard Square Panda Squirrels LLC SRG Tech ST Math

Standard for Success

Staymobile Steelcase STEM Revolution Story2

StraighterLine Strategy Institute StrongMind Study Hall Study.com StudyBlue

Studypool

StudySync/BookheadEd

Learning, LLC Sungard K-12 SuperMemo World

Superplus Swivl SXSWedu

Sycamore Education

Synclovis Systems Pvt Ltd Synergis Education

T4edu Tabtor

TAG Assessment **TakeLessons TAL Education Group TALENT Mentoring LLP** 

Tales2go Tangible Play

TCEA

TCS iON (Tata Consultancy)

TE21 Teach TCI

Teacher Gaming Network TeacherCast Educational **Broadcasting Network** 

**TeacherLists** TeacherMatch **Teachers Pay Teachers** 

Teachers With Apps **Teaching Channel** Teachscape Teachur

Teachwise Tech4Learning TechChange TechSmith Teenlife

**TEKMAN BOOKS TenMarks** 

**Tenpoint Academy** 

Teq Terrapin The BLE Group

The Bradfield Company The Campus Computing Project The Clayton Christensen Institute

The College Board

The Douglas Stewart Company

The Edtech Podcast The Game Audio Insitute The Renaissance Network The Social Sentinel

The Virtual High School ThingLink

Think Through Math Thought Cycle

Thread

Through My Window Tigtag Science

Tinkercad Tinybop Titan K12 Tobii Dynavox

Tolerance.org Tools4ever

Toolwire Top Hat

**Trading Technologies** Travels with Music Triad Interactive **Trilogy Education** 

Tripp Lite Triseum

Triumph Learning TrueAbility, Inc. Truenorthlogic TrueShelf

Turnitin Tuteria Tuva Labs Twig Tynker Typing Agent

Udacity Udemy UnboundEd Unigo Group Unimersiv

University Beyond UniversityNow **University Ventures** 

Upskill Usablenet USATestprep, Inc

Utelogy Vantage Learning Varsity Learning Tools vCloudPoint zero client

Vectra Networks Velocify Verbling

Verificient Technologies Vernier Software & Technology Vernier's Graphical Analysis for

Chrome Versal

Versifit Technologies

ViewSonic VIPKID

Virtual Schools of Excellence

VirtualSpeech

Virtual Speech Center

Virtway

VitalSource Technologies Inc.

Vocabulary SpellingCity

Voyager Sopris Learning

Vretta Waggle

Waterford Institute

WebAssign WeVideo

WeWantToKnow

Whetstone Education WinjiGo

Winter Group Wisetail Wisewire Woot Math Workbench

Working Voices Ltd World Education LLC

Wowza WriteLab WriterKEY

WriteSteps Writing Y Combinator Youth Digital

Y Soft Corporation Yuanfudao 7aniac

Zaption

Zinc Learning Labs 700m

Zoozil Media, Inc. zSpace



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edtechdigest@gmail.com

#### PAST WINNERS INCLUDE THE BIGGEST NAMES IN EDUCATION & TECHNOLOGY:

StrongMind Flipgrid ClassCraft FastBridge Learning zSpace WeVideo 360 Alumni Cognero Soundtrap Authentica Solutions Labster Mimio Top Hat Nepris Aruba Networks Instructure Padcaster WeWantToKnow Tinkercad Coursera Voxy Whetstone Education WebAssign BrightBytes ABC-CLIO Ardusat Silverback Learning Solutions Capti Voice Square Panda SlideRoom FreshGrade Zaniac Holberton School DreamBox Learning iTutorGroup GCI Education JHarrison Helix Education Triseum OER Commons Mountain Brook Schools Schoolrunner edWeb Bloomz TeacherLists ST Math Cogent Education HoverCam Cengage IXL Lea(R)n MobyMax Nearpod IStation Pocket Prep LTG Exam Languagenut Mozaik Education Edthena Kickboard for Teachers Teg Scholastic Library Carolina Biological **Education Elements Superplus** Buncee Gradeable Curriculum Associates House of EdTech MIT Education MediaCore Edmodo Epson SchoolMessenger Knovation Edsby Lightspeed Systems LearnWithHomer Learning.com Copia Interactive Skyward Sonic Foundry Teachscape ParentLink Vectra Networks Discovery Education Harris School Solutions Ncomputing ABPathfinder Meru Networks CB&A School Improvement Network Teacher Gaming Network TE21 FourierEDU eBackpack Science Bits Boundless Learnsprout PBS Learning Media Mathletics Versal SolarWinds AirWatch eduPad Promethean Insight Education Group Literatu Dell RobotsLAB BiblioNasium LiteracyTA D2L Connections Academy OpenED Shmoop

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