EDTECH DIGEST

STATE

OF

EDTECH

2020-2021

THE MINDS
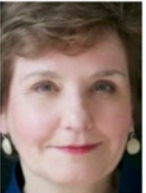
BEHIND WHAT'S NOW &

WHAT'S

NEXT

Discovery EDUCATION | EXPERIENCE

EXPERIENCE
EQUITY FOR ALL LEARNERS

Discovery Education Experience offers dynamic curated K–12 curriculum resources combined with on-demand instructional strategies, ensuring all students have opportunities to unlock their true potential.

REAL-WORLD CONTENT & EXPERIENCES

Leverage standards-aligned multimodal teaching resources and exciting content that mirrors the unique interests of students.

INSTRUCTIONAL STRATEGIES ON DEMAND

Access embedded research-based strategies, step-by-step guides, interactive courses and professional networking.

PERSONALIZED CHANNELS

Select preferences to build custom content channels that support specific subjects and students.

CREATION & COLLABORATION

Save time designing lessons with grab-and-go activities you can modify or assign as-is. Students can collaborate and demonstrate what they know.
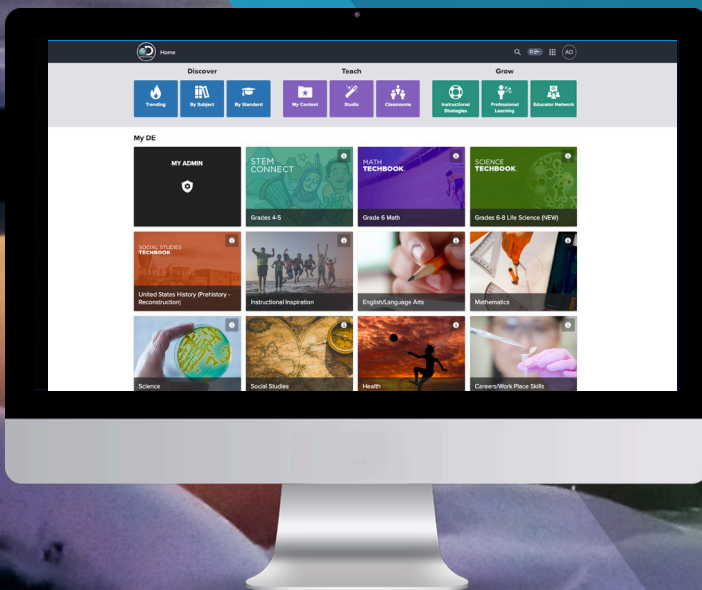
EXPERIENCE THE FUTURE OF EDUCATION:

- Exclusive content from Discovery Channel, MLB, NBA, Reuters and more
- Curated curriculum resources and lesson plans
- Personalization for students and teachers
- On-demand professional learning

START YOUR EXPERIENCE
DiscoveryEducation.com/Experience

National Coalition for Technology in Education & Training

A non-partisan, non-profit 501(c)(3) organization of education stakeholders that promotes universal access to innovative teaching and learning by acting as a convener and catalyst for the effective use of technology in education.

We envision a world where educators empowered by technology prepare all learners for success in the workforce, citizenship and life.

. . . .

Promoting the effective use of technology to improve education and training in America • www.nctet.org

---

Boost Student Success
with a mobile-first learning environment

Learning in a Mobile-First Digital Environment

Digital learning boosts student achievement and is vital to the modernization of school curriculums and long-term success of educators. The next-generation wireless classroom lets everyone thrive when they use WiFi enabled devices and apps that create a richer learning experience.

E-rate Funding Like Never Before

Since the Modernization of the E-rate Program in FY2015, there has been enough funding to meet the demand in both Category One and Category Two. Find out how to maximize your E-rate funding with Aruba.

Learn more at: www.arubanetworks.com/K12

EDITOR'S LETTER

THE PURPOSE OF EDUCATION (AND TECHNOLOGY'S ROLE)

Civilization, to progress, needs people who can understand words, ideas, objects, and methods—and communicate with others toward attaining targets in accomplishing something of value.

When technologies ease and enhance learning, assist in presenting a subject in its most interesting and engaging form, and allow people to fully and conceptually understand an area of study with direct practical benefit to

their life and the lives of others—then 'edtech' is working well.

Right now, a lot of very good people are working on the problems of education and learning, and they are well intentioned. Not all of learning requires technology. Where technology advances our goals as a human race, it should be used. Where it diverts from these we should abandon it, but we should never abandon our drive toward better learning, a better system of education, and a mindset of continual re-connection—not to technology, but to ourselves, to each other; to our purposes for learning and teaching, and our purpose in education. —*VR*

+ TOP 100 INFLUENCERS in edtech ▬ FIND OUT WHY page 36

DAN CARROLL	ANGELA BAKER	JOHN WATSON	ANGELA AWONAIKE	JAIME MARTINEZ	RACHEL CARLSON	TROY WHEELER	MONICA BRADY-MYEROV	DEAN KAMEN	NADJA SHAW
BHAVNEET CHAHAL	GREG DAVIES	DORANN AVEY	RAY MARTINEZ	RACHELLE DENE POTH	NIGEL NISBET	VU VAN	SCOTT PULSIPHER	MELISSA DODD	SCOTT KINNEY
DEWAYNE J. MCCLARY	CAROLINE VANDER ARK	JOE SANFELIPPO	SABRINA MANVILLE	NATE DAVIS	MARCY DANIEL	MICHAEL FLOOD	EDEN DAHLSTROM	SEAN GALLAGHER	MARLO GADDIS
SUSAN S. WELLS	GEORGE PERREAULT	MERCEDES BENT	DAVID WHELAN	SANDRA WHELAN	VINAY MAHADIK	KIM KEITH BERGLUND	LIU YE	DOROTHY STANLEY	PETER H. DIAMANDIS
DROR BEN-NAIM	EARLENE PATTON	JETHRO JONES	LISA SPENCER	PAUL FREEDMAN	KRISTY SAILORS	JAMIE HARPER	JEAN TOWER	PETER ROBINSON	LAYLAH BULMAN
CYNTHIA HAYNIE	SONNY MAGANA	JASNA ALIEFENDIC	JASON BAILEY	KIMBERLY SMITH	ANNA IAROTSKA	SARA TRETTIN	KIRBY SALERNO	EILEEN BELASTOCK	KRIS HAGEL
JEREMY KEESHIN	CAROLINE FAY	BOB BERRY	JEANETTE HAREN	JAKE SCHWARTZ	BETTY VANDENBOSCH	ED HIDALGO	CANDICE DODSON	MICHAEL HANSEN	JEAN HAMMOND
CHRISTINE STOKES-BEVERLEY	BRIAN SEYMOUR	MICHELLE BOURGEOIS	RAAHSAN KING	ANTTI KORHONEN	ED DIETERLE	KATIE ONSTAD	JESS BORJORN	ERIN MOTE	ZACH VANDER VEEN
JEFFREY AVERICK	DANIAL JAMEEL	XAVIER ANGUERA	HADI PARTOVI	ANDY RAHDEN	MARIA ANGUIANO	JEREMY SHORR	AMANDA BICKERSTAFF	ANANTH KASTURIRAMAN	ALEXANDRA DIRACLES
ANGIE EILERS	BRIAN MOYNIHAN	KAI FRAZIER	ABHIMANYU SAXENA	VANESSA CASTANEDA GILL	KYLE LIAO	ALEX INMAN	JOHN KATZMAN	JODI GOLDSTEIN	HARSH PATEL

> "If you dislike change, you're going to dislike irrelevance even more."
> —*Eric Shinseki*

Driven by a purpose to help learners...

Numbers point to continued growth, **steady expansion** of the sector; leaders in education and technology press forward with **a digital transition**; the future of learning is what you are making it to be—and there's much to **look forward** to!

NUMBERS

She's putting people into the game with a skills-based job application platform that helps companies hire the best prospects based on what they can do, instead of where they came from. **Caroline Fay,** Co-founder, Skillist // PAGE 43

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?

page 36

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.

EDTECH DIGEST TOP 100 INFLUENCERS IN EDTECH

HIGHLIGHTS

"We need more comprehensive student-centered edtech tools," according to **John Faig**, Director of Technology, St. Patrick's Episcopal Day School // PAGE 16

FUTURE

– NUMBERS

NUMBERS TELLING THE STORY OF 21ST-CENTURY EDUCATION TRANSFORMATION

STATE OF EDTECH: A YEAR OF DEEP CHANGE AHEAD

STUDENT ROBOTICS: EXPLOSIVE GROWTH, HERE TO STAY

252 Edtech is growing, with the total market value worldwide set to reach $252 billion by 2020.
SOURCE: EdTechXGlobal

99 The classroom connectivity gap is now closed. 99 percent of schools nationwide are on scalable connections with a clear path to delivering enough bandwidth for digital learning in every classroom, every day.
SOURCE: EducationSuperHighway

3 Education is grossly under digitized compared with other sectors, with less than 3% of expenditure on technology (education technology vs. total global education expenditure).
SOURCE: HolonIQ

5,000 Estimated attendees at ASU GSV 2020 in San Diego.
SOURCE: Global Silicon Valley

32 $32 billion last decade global edtech funding.

87 $87 billion of Global EdTech Funding predicted through 2030; global edtech venture capital will nearly triple over the next decade.

342 In 2018, digital education investments totaled $142 billion worldwide, and are expected to rise to a total of $342 billion by 2025. Advanced technology learning and education applications will start to hit their strides by 2025 with augmented and virtual reality and artificial intelligence becoming more integrated into core education delivery and learning processes, most likely starting in the corporate and non-accredited sectors.
For above numbers 32, 87, 342, SOURCE: HolonIQ

85 According to a 2019 report, 85 percent of American students have a sole or shared device for a significant part (all or several periods) of the school day, either with a 1-to-1 initiative, BYOD, laptop carts or desktop labs.
SOURCE: The Learning Counsel 2019 Survey Assessment Tool

76 More than 76 Million Students Enrolled in U.S. Schools, Census Bureau Reports.
SOURCE: U.S. Census Bureau (2018 data)

3.456 As of 2018, the global labor pool consisted of approximately 3.456 billion workers.
SOURCE: The World Bank

A Year of Deep Change Ahead

Here comes a year of deep change brought about by finally-arrived-at critical levels of traction and saturation.

By MARK GURA

Yes, 2020 will be a year of important change. Hold on though, that doesn't necessarily mean we'll see long fantasized, brand new technologies appear; don't plan on running your hand over the shiny surface of a school version Star Trek transporter or using an app that will take you back an hour in time to better prepare a lesson just given.

And while we may see some of that, it's another variety of change we're focused on: *critical mass—change through ubiquitous adoption of tech-based practices.*

Will we see new technologies and applications emerge this year? Quite likely; developing the new is one of edtech's *strong forces*. However, it's long-running trends that finally achieve critical-mass thresholds of adoption, a condition in which new resources truly make a

THE TRANSITION HAS JUST BEGUN. Education intelligence firm HolonIQ reports that just 3% of education has been digitized, a very underwhelming number compared to other sectors. While today there are about a dozen edtech companies with a $1B+ valuation, by 2025, the worldwide edtech landscape will see more than 100 unicorns.

difference we expect to feel deeply. Importantly, these catalysts set off a ripple effect, inspiring yet more redefining activity.

An Important Phenomenon

One important phenomenon I've observed over the years is that long stretches of experimentation by early adopters, folks who, by virtue of their refinement efforts, make an emergent technology ready for mass adoption, is the mechanism by which deep, meaningful change comes about.

A quarter century ago, as a young district-level curriculum administrator, I was one of a small national group who worked on experimenting with placing robotics kits in classrooms. It was this past year, though, that the field saw a veritable explosion of student robotics adoption (see EdTech Digest *State of Student Robotics* report for 2019). Yes, it can take time for the fruits of experience-based design loops to kick in and produce the flowering of important change.

Similarly, a handful of years back we noticed (and many of us scratched our heads wondering) at the emergence of Amazon's Alexa. And of course, that wonderful fringe group of 'out there' early teacher adopters saw something in Alexa, brought the little 'smart speaker' into their classrooms and in a small way launched the field into the important next step of robotic digital learning assistants. Sure enough, recently, Saint Louis University announced its program to provide student access to Alexa across its campus, highlighting the placement of Alexa (Echo Dot) in every dorm room.

*One important phenomenon I've observed over the years is that **long stretches of experimentation by early adopters,** folks who, by virtue of their refinement efforts, make an emergent technology ready for mass adoption, is the mechanism by which deep, meaningful change comes about.*

Platform for Change

And likely, it may be that much more of the payoff of the long work in establishing a platform for change will kick in this year, as well. A few months back the group Education-SuperHighway's blog announced "Mission Accomplished: EducationSuperHighway Announces Closure of the K-12 Connectivity Gap" – "46.3 million students and 2.8 million teachers in 83,000 schools have the Internet access they need for digital learning" – "93 percent of school districts are using digital learning in at least half of their classrooms every week and 85 percent of teachers and principals support the increased use of digital learning in their schools."

As reported this year in *EdTech: Focus K-12* magazine the "new report from Cambridge International, which is based on an online survey of nearly 20,000 teachers and students (ages 12–19) from 100 countries" reveals "that use of technology in schools worldwide continues to grow, with 48 percent of students reporting they use a desktop computer in the classroom. Forty-two percent use smartphones, 33 percent use interactive whiteboards and 20 percent use tablets."

"Importantly, 90 percent of schools reported that "the numbers remain high for more traditional modes as well, such as pen and paper (90 percent) and whiteboards (73 percent)**.**"

With High Numbers

Why important? Because now that there are very high numbers for available technology and usage of it, the *ways* that technology is used in classrooms and the satisfaction that educators have with their experience and results produced with it can now be brought into sharper focus, something that must assume greater importance.

Technology is an enabler that can be applied to shoring up dated, traditional educational approaches and goals, *or* that can support the shift to newer goals and

Now that there are very high numbers for available technology and usage of it, the ways that technology is used in classrooms and the satisfaction that educators have with their experience and results produced with it, can now be brought into sharper focus...

methods of reaching them that progressive educators feel are far more relevant.

With an appropriate digital platform now in place, educators can turn their attention from establishing and tuning that platform to preparing students for the world that they will live, learn, and prosper in by implementing crucial approaches like student engagement and ownership of their education.

No Longer a Goal but an Enabler of Goals

Now that the issue of establishing a platform is receding in importance, it is time for those committed to making important, meaningful change in education to move further and fully into the posture of seeing technology itself as no longer the goal, but rather the enabler to reach those goals that get to the heart of human experience.

The time has come to harvest fruit planted decades ago, opportunities to shift to more relevant educational goals and methods are mature and hanging low on the vine. We'll be watching, reporting, and cheering from this space. ◼

"Beyond the specific study of robotics itself and teaching of STEM curriculum for which there are clear and obvious alignments to the skills and understandings required to design and program robots, there are opportunities to have instruction benefit from robotics by integrating it across the full curriculum and spectrum of grade levels," writes Mark Gura in EdTech Digest's *The State of Student Robotics 2019: An Educator's Guide.*

The 90-page guide includes an interview with inventor and student robotics competition founder Dean Kamen, a products and services listing, inspiring reads, and a profile section featuring leading minds in this area. ■

Get your free copy, visit: edtechdigest.com

A second edition is currently in the works, to participate, email: edtechdigest@gmail.com

HIGHLIGHTS

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

FACING, EMBRACING, AND ERASING NEW PUSHBACK TO EDTECH

FOUNDERS, PIONEERS, INNOVATORS, PROVOCATEURS

GLOBAL SHARINGS: BOOKS &PODCASTS

HAPPENINGS: THINGS THAT SHOOK OUR SPIRIT AND SHOOK IT HARD IN 2019

LITERACY EDUCATION FOR A POST-TEXT DOMINANT, TIKTOK INFATUATED WORLD

TOP 100 INFLUENCERS IN EDTECH

LEADING VOICES —

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

By VICTOR RIVERO

For the third time since our inaugural *STATE OF EDTECH: The Minds Behind What's Now and What's Next* report published in 2017-2018, we've again asked our readers to weigh 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?

We could get a sense of 'where things are at' by a careful study of the numbers, but with this segment of our report, some of those "*minds behind what's now and what's next*" simply let us know exactly what they are thinking.

They include Directors of Technology, district administrators, startup founders, CEOs, investors, teachers, students, education leaders, policy makers and others in and around education.

And what better way to begin to get a picture of the realities we face across the full education spectrum — from early childhood learning and K-12, to vocational and technical education, community college, traditional college and university, to corporate learning, workforce training, and skills development — than to lean in and listen!

Their voices stand alone, each one a point of view replete with its own experience and angle —but as a group, there is a certain resonance that begins to come through.

How this sounds to you, our reader, is for you to decide. Listen closely, hear them out, and keep the conversation alive with your own leading voice!

"The future of education will be collaborative work and project development. STEAM Education will be the ideal educational model to teach the skills of the 21st century."
—Ariel Torres Saavedra // CEO, Recursos Educativos y Tecnologicos SAS

"Technology plays a superficial role in education and it is mostly centered around automation of school functions. Edtech vendors are in a tough situation. If you make a highly functional product that has the potential to deepen learning, then you run the risk that the product will be too complicated and time-consuming for teachers to meaningfully integrate it into the curriculum. On the other hand, if you focus the product narrowly, then adoption will likely be more widespread, but the impact on student engagement and achievement will be muted. In order to leverage AI, we need more comprehensive student-centered edtech tools."
—John Faig // Director of Technology, St. Patrick's Episcopal Day School

"Student needs are becoming more diverse and schools are expanding on how to best meet those needs within a plethora of constraints and under the accountability umbrella. Technology is a key player in this quest for student learning and engagement, and teachers and administrators are including it in instruction now more than ever. However, technology does not stand still, so the target keeps moving. Fast-moving innovation, coupled with the hardware, software, and training needs of implementing emerging technologies such as augmented and virtual reality in the classroom, prove to still be barriers. I believe AR/VR can be a great equalizer for students. It can provide experiences that students would never before encounter giving students with limited background knowledge information with which to hang critical thinking and creativity. Immersive technology developers and manufacturers need to consider the unique needs of schools, and while the Wild West of edtech has become more focused and purposeful nowadays, I think

implementing AR/VR/MR in education is going to be the equivalent of the California Gold Rush of the mid-1800s and Oklahoma Land Rush of the late-1800s. It's all very positive and exciting!"
—Debbie Rohlmeier // Chief Engagement Officer, Institute for Learning Perspectives

"We should increase governments' awareness to vital changes in all educational institutions."
—Kirill Slavkin // CEO, Annoto

"Technology is making education enter a new learning path where technology itself is the means to incorporate not only knowledge but also skills in a learning acquisition process. Being a methodologist, in this scenario, professionals face the challenge of mastering not only contents, learning targets, and outcomes—but also: technical tools, programs, and a whole range of possibilities provided to them; an overwhelming—but fascinating—scenario."
—Claudia Alcelay // CEO, CertificacionPM.com

"The growth of edtech will continue at a fervent pace in 2020, but more importantly, adoption will increase as students find that personalized education is more supportive of the life and career they desire. With this growth will come greater access to world-class educators and broader acceptance of dedicated learning for a niche skill set. Technology's role in education is to globalize access to learning, creating new career opportunities for people in regions where the local labor market is stagnant or undesirable. Technology has the ability, and responsibility, to lift people up. Broadly, the role of technology is to expand our understanding of what it means to be educated, because the needs of students tomorrow are far different than the needs of yesterday."
—Rich Maaghul // CEO, ODEM

"Privacy, data protection and consideration for how we use personal data are still not as ingrained in schools—whether in our choices of edtech to use, or in how we support our children."
—Tony Sheppard // Head of Services and Operations, GDPR in Schools

"Today after years of evolution we still follow the old-fashioned curriculum, ignoring kids' interests, strengths and passion, instead forcing them into arbitrary tasks mainly directed to passing exams. About critical thinking, the edtech industry is focusing more on content instead of the assessments design, that actually should lead to a child thinking and learning. If we change the approach with help of technology to be more personalized and user centric instead of teacher centric, we can really help the children grow, think and perform much better in their lives. Going ahead, technology will be more personalized and learner centric, with emphasis on increasing the thinking and innovation aspect of a child, and making the learning process two-way, unlike now—and the reason industry has more noise than outcomes."
—Manish Wahie // Founder & CEO, Budbeed Learning

"I think technology is on its way to find the true role in every learning space. Right now it feels very heavily biased towards schools (naturally due to being the main setting of education), but I think it's time to break out more into industry, too. In the UK, teaching hospitals and research facilities are already exploring the unique uses of AV in classrooms and labs and VR for practicals - but the use of personalized learning and feedback could really drive development further and the use of LMSes and LRSes to store this learning data would only serve evaluation and appraisal times much more."
—Michael Porter // Senior Educational Technologies Support, Lancashire Teaching Hospitals NHS Foundation Trust

"Learning tech, a subset of edtech, continues to lurch forward slowly. The ROI remains difficult, but is improving. Math and ELA harvest the most district funds, leaving behind science, history, arts, and P.E. I think that this situation is the reverse of what it ought to be because science and history have more inherent interest for children than ELA and math do. Learning tech must focus more on supporting learning than on the latest 'shiny new thing'. VC money goes to the latter, and we can expect much of this next year

without much actual learning improvement. I am focused on improving science learning instead."
—Harry E. Keller // President, Smart Science Education Inc.

"With the ever increasing scope, capability and diversity in edtech offerings along with the wealth of experience, competency and application at all levels, I see educators that are better placed than ever to make decisions on how technology can be harnessed to best serve their teaching and development goals. Indeed, educators are taking back the lead in the conversation on what edtech innovation should be achieving for them and their students as opposed to being mere stakeholders in the decisions around which technology is used and how its is applied. Edtech promises greater outcomes, increased performance and simpler administration after all, but it should stay true to its aims by putting educators in the driving seat when deciding what's best for their learners and programs."
—Myles Thies // Director of Digital Learning Services, Eiffel Corp

"The state: Lots of low-end tech (Chromebooks) that are driving basic use and lower

expectations of Teaching and Learning. What should the role be: I feel this has very much reduced the focus on transformational and experiential use of technologies to improve student experiences. What's just ahead: Expanded use of 4th I-R Technologies like XR (eXtended Reality) 3D Printing for Manufacturing, ML (Machine Learning); Machine Learning/AI for expansion and easier instructional use of personalizing learning. XR and ML will see transformational growth in CaTE where the focus is on readying students for the workforce—and these technologies will drive skills needed for growing jobs in almost every sector."
—Mike Belcher // Director, EdTech Innovation, HP, Inc.

"The Edtech and E-Learning industries are booming. The incredible growth in both of these tech sectors creates challenges and opportunities for higher education. While on the one hand, funding for education is being cut, the demand for flexible and relevant ways for professionals to develop advanced workplace skills is on the rise. For colleges to remain relevant in the emerging professional development landscape, they will need to think creatively about how they structure and deliver their degrees. Integrating stackable,

competency-based micro-credentials into existing online programs is one way to help learners meet the demands of a changing professional workforce. For colleges, stackable degrees that enable learners to earn competency-based micro-credentials are a way to increase enrollment and create feeders into their undergraduate and graduate programs."
—Joseph Rene Corbeil // Professor of Educational Technology, University of Texas Rio Grande Valley

"AI and VR will continue to transform education."
—Lois Langehaug // CS Teacher, CORE Charter

"The state of education is depressingly bleak. So many engaged and passionate teachers (and students) are over-worked, over-observed, under-paid, under-supported, under-valued by the very establishment that should be there to support and encourage them. If it wasn't for their passion and dedication, education (and our children's future) would be in a far worse state than it is in!"
—David Hopkins // Senior Learning Designer, CU

"What is the education state these days? Education is a tight sector that is too centrally regulated and still focused on learning in classrooms. Distance learning is underestimated and knowledge of andragogy is lacking. What is the role of technology in teaching? The role of technology is to improve the introduction of proven, new and innovative forms of examination and teaching. What exactly is ahead? E-exam, online proctoring, remove the idea that only LMS is the learning tool for managing teaching and examination. Here, for example, is Microsoft Teams with apps that are the future."
—Mats Brenner // ICT-Educator, Ersta Sköndal Bräcke University College

"I believe technology is a must-have trend for all schools. It will be used as an auxiliary tool as a book or clipboard is. It will help educators to understand better the environment and student development, as it will also be used as a tool to improve and individualize development plans."
—Marcelo Michelli // Partner, VOA educação
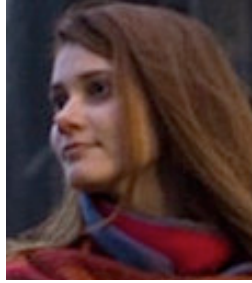
"Nowadays institutions practicing variable curricula empower educators to design lessons based on innovative pedagogical methodologies to use for their own convenience, or to take lessons beyond the classroom into a real-world context, so students will better understand the academic content taught to them. But in many places around the world we see the shortage of qualified educators and lack of accessibility to learning materials, and incorporating technology into these schools to tackle such issues remains a challenge due to the poor infrastructure. Through the technology, worldwide educators have to be able to provide learning that is completely accessible with just a mobile device, no matter where the students are and if there is little or no Internet connectivity. Personalized feedback would be another challenge."
—Rada Ryzhykava // e-education expert, BeED

"As the job market is experiencing fundamental changes, education institutions have no choice but to re-invent themselves. AI and the cloud will play a central role in redefining education as we know it."
—Karim Guessous // Founder & CEO, Tradepal, Inc.

"We need much more investment in educator training."
—James Rice // The James Rice Show Podcast

"...in many places around the world we see shortage of qualified educators and lack of accessibility to learning materials, and incorporating technology into these schools remains a challenge due to the poor infrastructure."

"Higher education needs to redefine itself and technology will play a big role. Currently, schools tend to buy multiple software platforms that do not integrate well. This leaves the student experience fragmented with frustrating UI/UX design. We see technology becoming more streamlined and intuitive to enhance the student experience. Every school now has to compete on a national level for non-traditional students and a shrinking number of high school graduates. As more learning moves online, fancy dorms and recreation centers will be seen as an investment with little return. Delivering meaningful experiences through technology will carry more weight. From apps that foster community to AR/VR software that removes distance barriers, technology will balance meaningful student experiences with the strategic objectives of the school."
—Jake Himmelspach // Principal/ Strategy Director, Peopledesign

"District technology departments are becoming increasingly more integrated with curriculum and instruction departments. With this integration, CTOs are now not just tech people – they are often former educators with classroom experience and expertise on what works (and what doesn't) in the classroom. This shift is positive for today's classrooms as it helps ensure new edtech is more consistently aligned to improving learning for both students and educators versus based on just what's shiny and new."
—Adam Geller // Founder & CEO, Edthena

"There will be continued investment and growth in the edtech industry this coming year. I expect that we'll see more startups entering the space as well as the big players continuing to grow. As technology improves, companies will also find more and more ways to help improve the educational experience. There's definitely a current trend with education being a part of a larger social justice movement and there's an opportunity for edtech to help empower educators to have a larger voice and role in the greater education movement."
—Mike Teng // Co-founder & CEO, Swing Education

"Huge changes are coming in how teachers leverage technology for teaching. Yes, technology is well entrenched in education infrastructure, and in the delivery of video or distance learning. We are also inundated with B2C programs, from practice with math facts to memorizing vocabulary. These are significant and valuable contributions to education. But we haven't yet seen widespread use of a tightly integrated blended learning approach, where we combine the best aspects of live, human teaching with the power of adaptive edtech programs. I've been lucky in my career to be involved with two game changers that do just that: DreamBox Learning, which helps K-8 math learning, and Blue Canoe Learning, which helps non-native English speakers learn clear spoken English. I expect to see many more."
—Sarah Daniels // CEO, Blue Canoe

"The abundance of information and the easy access that technology provides has forced educators to shift from the traditional model. Understanding that technology is a tool, and not by itself the driver of innovation, education is focusing to a student-centered model where the role of the educator has changed to become a facilitator and curator of information. Also, the education model is changing from teaching what to learn, to teaching how to learn. The educational spaces are also changing, from a place of receiving information to a place where they can explore their curiosity, collaborate with others, be creative, and experiment with real-world applications. This is with the goal to prepare students to become solvers of complex problems."
—Luis Garcia // VP, Emerging Technologies, Full Sail University
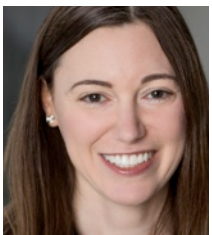
"Edtech is not only changing the way that students learn, it is changing the way that educators work. Companies are building solutions to solve for the stress and work burden that school-based employees encounter. Technology will increasingly offer alternative ways for educators to do their work and to connect with students. For example, teletherapy platforms are offering school-based clinicians new ways to manage their caseloads without schedule and commute constraints. Online tutoring platforms are allowing teachers who cannot support a full-time teaching load to continue to impact student learning. In an era where educators increasingly consider exiting the workforce due to unsustainable stress, edtech is finding ways to keep these critical, skilled professionals active where education need them most—connecting with students."
—Kate Eberle Walker // CEO, PresenceLearning
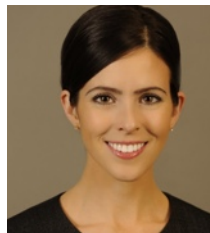
"In recent years, teacher workload has become one of the biggest problems educators face. Educators are asked to constantly make their instruction more rigorous while incorporating new teaching methods. They are also asked to take on larger class sizes while connecting with each student personally to provide mental health and SEL supports. And all of this is expected, while for the most part, teachers are confined to their classrooms. Companies are focusing on developing technologies to make it easier for teachers to work with others remotely in order to better support student learning. These technologies are helping to break down walls allowing teachers to share workload and collaborate more freely, either within their own buildings or with others around the world."
—Blair Pircon // Co-founder/CEO, The Graide Network

"Edtech companies must strengthen their focus on helping districts, schools, and teachers deliver impactful, equitable learning experiences for all students. Actionable data is key to supporting equity, and software programs able to produce more data on students' academic progress will, in turn, help teachers better understand the unique needs of individual learners, address opportunity gaps, set high expectations and support all students in meeting them. It is critical that teachers have access to multiple forms of side-by-side data that paint a complete picture of how a student is performing – not only compared to their peers but also relative to grade-level expectations – to help them accomplish these goals in an educationally meaningful way."
—Rob Waldron // CEO, Curriculum Associates

"This coming year there will be the continued growth and development of lessons around science standards and coding activities. These materials will help educators with STEM integration, as well as be more integrated with technologies to make it easier for educators to introduce them in the classroom. Specifically, coding activity resource communities will continue to grow as educators contribute content and that content matures and broadens. There will also be an expansion of free engineering activities and lessons, as well as the introduction of quality, open-source curriculum aligned to science standards. This content will take advantage of the digital platforms used in today's classrooms to enhance lessons through the use of varied media, interactive components, and, in some cases, integrated assessment."
—John Wheeler // CEO, Vernier Software & Technology

"Edtech is a staple in today's classroom, and education professionals do not need to be sold on edtech's advantages. They understand the value technology has in creating an engaging, collaborative classroom experience that improves student success in and out of school. Even with this buy-in, school systems will need to overcome organizational inertia and legacy infrastructure to see meaningful results. Tomorrow's edtech trends are here today, but not broadly used or accessible. Cloud and virtual learning solutions, VR/AR, robotics and 3D printing will all combine with traditional learning methods to reach, teach and challenge students in ways never thought possible."
—Cheryl Miller // Chief Marketing Officer, Promethean

"Education is evolving so that individuals can pursue their own personalized path. Technology is playing a larger role in helping students access online courses that lead to real college credit for free or for a fraction of the cost of traditional courses. One philanthropy, Modern States, offers 30+ core college courses online, each taught by a college professor, that lead to real college credit. The courses are free and self-paced and prepare students for the College Board's CLEP exams, accepted for credit at more than 2,900 colleges. Expansion of programs like this, as well as state-funded free community college online or on campus, will increase over the next two years, enabling students to save time and money, with flexibility that fits their schedule."
—David Vise // Executive Director, Modern States Education Alliance

"When it comes to preparing for higher education and their careers, students need to be given opportunities to integrate digital learning with hands-on, real-world experiences. One way schools are starting to do this is to offer more and more career and technical education (CTE) aligned to specific career clusters. This will provide students with the important skills needed to work in multiple jobs within a given field."
—Dan Cavalli // General Manager, Education Solutions Group, Flinn Scientific

"…students need to be given opportunities to integrate digital learning with hands-on, real-world experiences."

"There's much discussion about 'too much' classroom technology. It's time to shift the dialogue from *time* to *impact*. We need to test edtech for measurable impact on learning. The most powerful learning models integrate learning technologies into classrooms, seamlessly blending dynamic formative assessment with instruction. We must prepare all students, regardless of their zip code to be confident, competent learners to thrive in the future workforce. Additionally, teachers must be equipped with actionable insights, so they can provide individualized plans for closing learning gaps. The future of learning likely will be different but it can be personalized, effective and engaging with the right learning technologies in the classroom if we design it that way."
—Jessie Woolley-Wilson // CEO & President, DreamBox Learning

"As high school career and technical education programs continue to grow and provide students with direct pathways into 2-year institutions and careers, we're going to see increasing collaboration between industry and educators to bridge the learning gaps and ensure workforce readiness of graduates. Technology will play a key role in this evolution. First, we will see increased use of technology such as AR and VR to support the teaching and learning processes that will be directly aligned to industry certifications and skills needs. Industry and educators collaboration will also inspire the creation of more learning content that will be easily accessible to support lifelong learning: readily available information and training that will keep learners at the top of their game as their careers progress."
—Michael Carbenia // Executive Director of Career & Technical Education, zSpace

"Organizations are beginning to realize that their hiring needs should focus less on people with specific technology skills (that could be outdated or irrelevant tomorrow), and more on people with business and soft skills who can adapt to the constant evolution of technology. To that end, we will see a cultural shift among K-12 and college/university educators who will focus on empowering students to prepare for lifelong learning. Technology will be a key enabler of lifelong teaching and learning to help people reskill and upskill and remain relevant for the workforces of the future."
—Ken Fitzpatrick // Chief Executive Officer, Digital Marketing Institute (DMI)

"STEM education tools continue to open doors for students to preview future career opportunities. With technology-enriched STEM activities students get the chance to fully experience every step of the learning process – like when they fold and fly paper airplanes, analyze flight data, and apply engineering concepts to improve their planes. These types of activities have helped students become more persistent in their learning as they learn that making mistakes can lead to new discoveries. As the U.S. continues to focus on growing the number of individuals who study STEM and go into science careers, schools will need to provide more and more opportunities to let students

take the reins on their learning and use tools that drive the inquiry process."
—Shai Goitein // CEO & Founder, POWERUP Toys

"Disruption and evolution best describe the future of education in 2020. Unsustainable debt, new innovative channels for skills acquisition, a focus on certifications and badges, and changes to traditional employment models are but a few of these drivers. Gone are the days that a learner will go to university just to learn. Today's student is looking for a measurable outcome and a return on their educational investment. Technology is the catalyst. Nearly everyone holds a supercomputer and unlimited information in their hands. The exclusivity of knowledge has dramatically been commoditized. Learning institutions can no longer just consider their online campus enough. Big data, predictive science, and AI, need to play a greater role in recruitment, advising and connecting graduates to careers and jobs. Leveraging education for a lucrative and meaningful work-life, not a degree, will be the new focus ahead. Learning institutions will need to adjust to changes in generational attitudes about

education. The status quo will be left behind as schools work harder to compete for students and create processes that demonstrate impactful outcomes. Recruitment and career advising will be rewarded with new energy and attention. Institutions will make greater investments in tools to attract the right applicant. These platforms will use predictive science and AI technology to accurately connect students to educational pathways that fit them. Ultimately the institution will need to connect their graduates with careers and jobs. The reward will be alumni that will become lifelong learners and engaged with their alma matter. History shows us that disruption and evolution can be confusing but also obvious. We have always been able to summon a car and ask a stranger to drive us somewhere. But did we ever think it would evolve away from the status quo of limos and taxis? Innovative educational leaders would be wise to take this page from history."
—Eric Leftwich // Co-founder & Revenue Officer, jobZology

"Institutions will make greater investments in tools to attract the right applicant."

"When I was a teacher 12 years ago we barely used technology. Now most teachers and students have access to technology at their fingertips. Today, technology plays a huge role in facilitating both academic and social-emotional leaning, and in saving teachers' time. Technology is used to drive instruction, administer assessments and to track and view student data. This includes the growing field of social-emotional learning (SEL). Today, both teachers and administrators expect to be able to administer assessments online, and to have immediate access to results so they can meet the needs of students. They also want to easily access curriculum and interventions online to help them meet these needs. In 2020- 2021 we will see edtech companies evolve their products and platforms further in order to meet this growing demand and to provide continued value for teachers and students."
—Tara Ketner // Director of Client Success, Aperture Education

"The safety of young people is of the upmost importance, and technology plays a critical role in helping schools support safety plans. Today, schools are increasingly turning to technology to help them gather information about student safety concerns and identify risks of harm. In the coming years we will see an increasing reliance on technology that provides a holistic view of students by monitoring both offline and online safety risks such as cyber bullying and mental health concerns as well as academics. Being able to gather and track this data—in a manner that is appropriate and protects student privacy—will help schools provide early intervention and promote a whole-school approach to safeguarding young people. Having a deeper understanding of the student's wellbeing, not only affords schools the opportunity to create a safe environment for learning but also supports them, and other interested parties, in raising attainment and improving pedagogy."
—Justin Reilly // CEO, Impero Software

"Over the last five years the rate of change in education has accelerated away from a traditional 'sage on the stage' teaching style to a more collaborative learning environment utilizing a variety of edtech to enable a number of different styles of teaching and learning. Schools aspire to seamlessly integrate student devices, curriculum software, classroom management and wireless display systems to drive better student outcomes. School budgets are challenged to keep up with the rapid modernization of U.S. education while no one technology standard prevails. Schools are faced with a staggering number of choices in technology today and the pace of innovation is not slowing. With this rapid pace, schools need companies that understand their unique needs and create best-matched technologies to meet those needs."
—Jason Meyer // Group Product Manager, Projectors, Epson America

"Technology is providing new opportunities for transformational, online adult learning. New strategies to provide relevant professional learning — and thus close the gap between higher education and workforce needs — are evolving due to collaboration across universities, professional learning, and curriculum providers. As a result, in 2020-21, we will see K-12 teachers taking advantage of graduate programs that redefine the concept of job-embedded learning and provide cohesive degree pathways in high-demand areas like STEM. Using edtech tools such as online learning platforms and digital curricula, teachers will experience meaningful learning within the context of their daily work with students. They will receive continuous, relevant, personalized feedback and support over an extended period of time, and access expanded learning resources as desired."
—Judy Zimny, Ed.D. // Vice President, National Institute for STEM Education

"Technology has been in the classroom for quite a long time but it's been on the periphery. Now it's moving to the center. The curriculum itself is changing and how that curriculum reaches students is shifting from focusing on how teachers teach, to focusing on how learners learn. We are now able to personalize lessons for each individual learner and allow for greater differentiation in the classroom to suit student needs."
—Umang Jain // Co-founder, Splash Math

"There are two key trends that will advance edtech and deliver greater impact. One, clearly, is machine learning. An example of this is using machine learning and 'the wisdom of the crowd' to help students develop the cognitive flexibility and test-taking strategies to perform at a higher level on tests like the ACT – with higher on-time graduation rates and college acceptance levels the outcome. A second trend is technology's ability to integrate high-impact practices such as differentiation, individualization and personalization to deliver instruction at scale to all students in a classroom – and to each individual student in the classroom – based on district paths aligned to reading levels, personal interests and career goals. Literacy growth will be a focal point where these trends deliver important breakthroughs."
—Saki Dodelson // CEO & Founder, Beable Education

"To help students thrive in the 21st century, a richer experience of learning and skill development will emerge. Edupreneurs will apply research projects and initiatives as they scale outcomes in an experiment-lab format. Marginalized students will accelerate to catch up to the learning levels of today's highest achievers. Design will drive returns in: learning, investment, trust, information and time. Investors will continue to ignite smart capital for impact and return in education."
—Fernando Valenzuela // Partner, Global Impact Edtech Alliance

+

What are *your* thoughts on the state of education, technology's role in it, and what's just ahead? Use your leading voice and write to us: edtechdigest@gmail.com ∎

"Edupreneurs will apply research projects and initiatives as they scale outcomes in an experiment-lab format. Marginalized students will accelerate to catch up to the learning levels of today's highest achievers. Design will drive returns in: learning, investment, trust, information and time. Investors will continue to ignite smart capital for impact and return in education."

Facing, Embracing, and Erasing New *Push*back to Edtech

Sharing the fuller understanding of what edtech is—and the education-redefining possibilities and benefits it offers—to continue making a positive difference in the field.

DISCUSSION POINTS | **by Mark Gura**

One trend, seemingly jarring when first acknowledged, that I continue to see rear its head in the numerous Facebook groups for educators that I belong to, is what I see as a reemergence of distaste for—and resistance to the use of—tech in their classrooms.

In many schools, I gather, the mandated use of specific digital resources to address what administrations identify as 'high priority goals' is common for very appreciable numbers of elementary and core curriculum subject teachers.

But while those who order such uses of technology may have what they feel is good reason to do so, teachers feel disempowered;

they feel that distance is created between them and their students who they observe working away in a very isolated way, hyper-focused in their screens on basic skill sets and bodies of knowledge, not engaging in social learning, exercising voice and choice, developing self-directed learning preferences and on and on.

Mandated use of technologies that teachers comply with but don't see the value of—worse, feel they see negative results from—is showing itself and is being reflected in the body of conversation and information for teachers online.
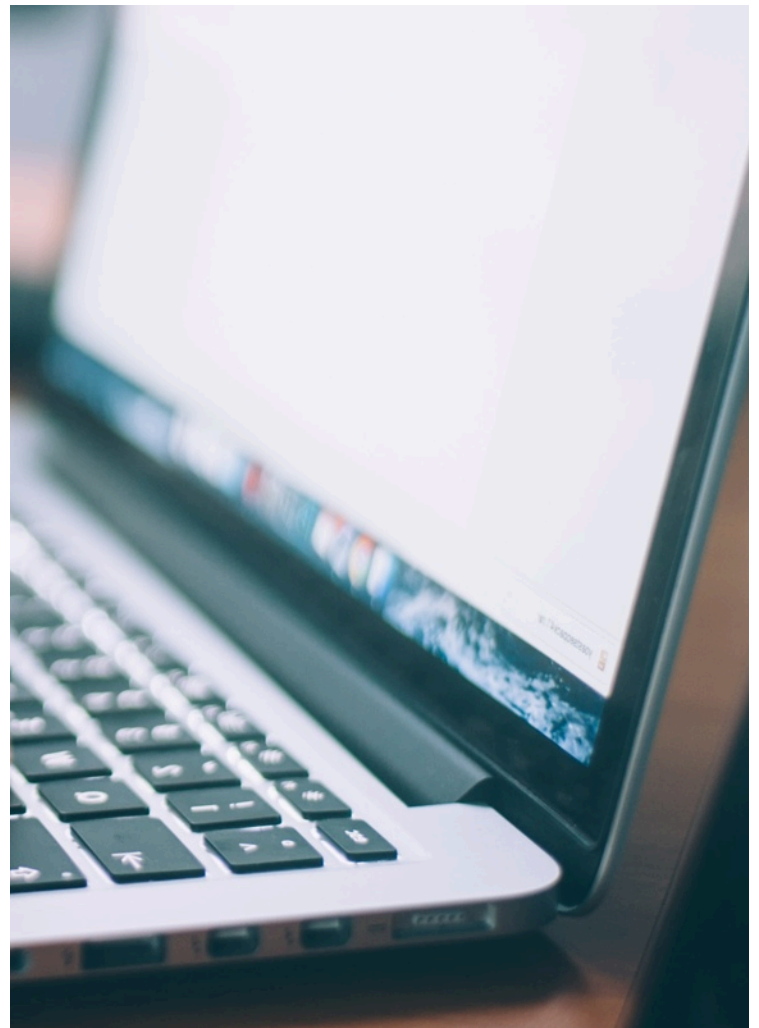
If on the one hand, use of technology provides opportunities to implement student-centered, progressive approaches to education, then use of digital resources applied to doubling down on those aspects of traditional instruction recognized by many teachers as aligned with an outed paradigm, no matter how well designed, well researched, and well-intended is potentially counterproductive.

That educators are becoming aware of this and making moves to steer their collective effort's course in what they sincerely believe is a better direction can be seen not just in Facebook exchanges, but in published articles, as well. Here are just a few tip-of-the-iceberg headline examples:

"Technology can hurt students' learning, research shows - New study finds giving pupils access to laptops in the classroom has a negative effect" *(Irish Times)*

"Unplug the Kids: Technology Isolates Children from Each Other and May Be Hampering Their Communication and Collaboration Skills" *(Phi Delta Kappan)*

"New Research: How Much Screen Time Is Bad for Kids?" *(Forbes)*

"Is technology good or bad for learning?" *(Brookings blog)*

'The Dark Side of Educational Technology"*(The Edvocate)*

"Technology won't fix America's neediest schools. It makes bad education worse." *(Washington Post)*

These are representative of an unfortunate misapprehension that in my experience has been showing a growth spurt recently! Facebook posts in the teacher groups I belong to and follow often seem to be full of this.

In my book *The EdTech Advocates Guide* (ISTE) I talk about advocates sharing a vision that represents the biggest big picture of tech. Teachers who categorically reject the idea that tech offers much good, I think, do so because they've only seen a narrow slice of the pie of what tech is and offers; at that, not one they chose or believe in, one they see negatives in.

I think the takeaway from this unfortunate left turn is that sharing the fuller understanding of what edtech is and the education-redefining possibilities and benefits it offers — is an opportunity for all those interested in making a positive difference in the field. This includes: school administrators, instructional supervisors, and especially—colleague teachers.

How do we move forward? By being sensitive to the presence of this new resurgence of pushback, by understanding its source, and by taking on the challenge of overcoming it as all part of the good work that has to be done right now—as we sort out this 800-pound gorilla bugaboo—so that we can get on with reaping great benefits for learning and reshaping instruction through all that technology offers. ■

+

What are *your* thoughts on this? Write to us: edtechdigest@gmail.com ■

Where We've Been Recently, Where We're at Right Now...

Founders, Pioneers, Innovators, Provocateurs

A few who passed on in 2019, leaving a rich legacy:

Woody Flowers: STEM Learning / Student Robotics Pioneer Distinguished Advisor to *FIRST*, participating in the design of the *FIRST* Robotics Competition - helped create MIT's renowned course "Introduction to Design" – Recipient of NASA's Public Service Medal... and a lifetime of so much more! *http://classroomrobotics.blogspot.com/ 2019/10/rip-woodie-flowers.html*
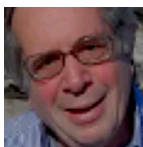
Eliot Levinson: **Forever A Founder** An inspiration to the edtech world—and the start of something new. His life achievements and passing noted in *EdTech Digest* by Editor-in-Chief Victor Rivero. *https://edtechdigest.com/2019/09/08/eliot-levinson-forever-a-founder/*

Clayton Christensen: **"Disruptive Innovation"** - The Kim B. Clark Professor of Business Administration at the Harvard Business School, he was best known for his theory of "disruptive innovation", first introduced in his 1997 book The Innovator's Dilemma, which has been called the most influential business idea of the early 21st century. Christensen was described by mentee and colleague, Michael Horn, as The Gentle Giant Of Innovation...

. . .

(The following people are alive and well)

Provocateurs (the best kind)

Marc Prensky – **Has established the Better Their World Student Project Database,** resource in which students may share and submit real-world-Impact Student Empowerment Projects. The database is accessible at http://btwdatabase.org/ The site offers provocative, related ideas like, "We don't need to incrementally fix our old academic education. We need to transition from the academic education to something new — an 'Empowerment to Better Their World' Education."

Ayana Klein, Education entrepreneur and advocate, a student at Washington University St Louis. With the help of her younger brother, Ayana engineered a cardboard-based modeling set to make use of the most ubiquitous and recyclable material in the world, the corrugated box! In less than two years, this has become a full line of products and curriculum. 3DuxDesign is now used in over 350 schools, makerspaces, and museums across the States and abroad. 3Dux has also established the 3Dux university global initiative, an international learning through design program *"connecting communities by design."* (*Source: https://edtechdigest.com/ 2019/07/12/ba-boom-edtech/*)

Global Sharings:
Books & Podcasts
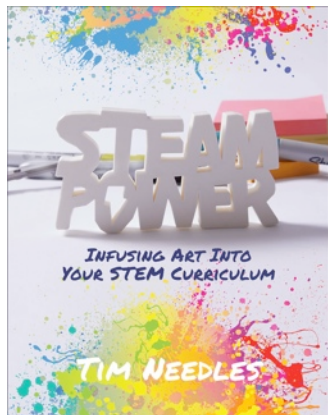
Book: **STEAM Power Infusing Art Into Your STEM Curriculum** by Tim Needles Expected publication date: 02/2020 *https://id.iste.org/resources/product?id=4744&format=Book&name=STEAM+Power*

The work of Tim Needles—an artist and educator from Port Jefferson, New York, has been featured on NPR and in The New York Times. He's taught art and media in Smithtown, New York, for 20 years. Focusing on creativity, innovation and collaboration, this book offers creative ideas for blending the Arts and STEM learning (STEAM). It covers the fundamentals of STEAM, with project ideas and best practices, while providing insight from educators in the field. Published by ISTE. Expected publication date: 02/2020.
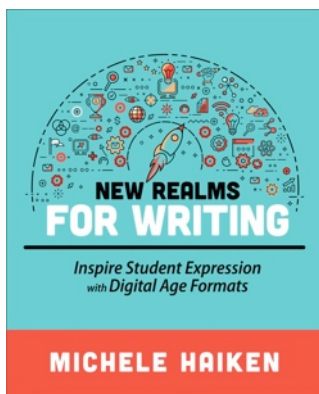
Book: New Realms for Writing – Michele Haiken (teacher, professor of Education courses, and author), has transformed the middle school writing lessons she engages her middle school students in, into opportunities for

creative thinking and expression and to learn and use digital formats for their work. Her recent book, New Realms for Writing features a variety of her teacher-created resources and samples of student work illustrating how teachers can design inquiry units for their content area that are authentic and engage students while developing digital age skills.

*Look for an in-depth review and interview with both of the authors above, soon in EdTech Digest.

Don Wettrick's StartEdUp Podcast - A solid early step on the new path to fostering the learning of innovation, StartEdUp is a global network of the most renowned innovators, educators and entrepreneurs. "We define and employ the tactics of *real innovation* and leave the buzzwords in the dust." *http://www.startedupinnovation.com/podcast*

The 180 Podcast – The organization, Turnaround for Children, has announced a new podcast, *The 180*. "Featuring leading voices in American education, health and child development, *The 180* explores how to transform 21st century education – how to turn it around – using 21st century science. The science explaining how children actually learn and develop is incredibly optimistic about what is possible for each

and every child. If applied, it could unleash talent and potential in classrooms everywhere." The initial episode titled [Todd Rose]: Talent is Everywhere revealed great potential in this podcast series.

General Interest Podcasts that are beginning to take deep dives into the realm of Education... Example: Eric Weinstein's *The Portal* podcast episode #008, a conversation with Andrew Yang—which has a deep discussion of School/Education among the various themes they touch on.

Happenings:
Things that grabbed our spirit and shook it hard in 2019

The impact of social media continues to be felt harder and harder...

The all-defining characteristic of our time, Connectedness, continues get masses of us (students, teachers, parents, and more) on the same "in the know" page and marching to the same digital drum machine. This reality was nicely celebrated by NPR's recent article '**School moments go viral in 2019**' giving numerous examples, two of note from EdTech Digest's perspective are ...

▪ "**Teen's history-based TikTok clips go viral** - Brooke Pavek of Jacksonville, Fla., has developed a following of nearly 100,000 on TikTok by posting 15-second videos on historical subjects from Joan of Arc to Isaac Newton. Pavek, who is

particularly interested in European history and has also posted history-themed content on YouTube and Instagram, has received recognition from the History Channel and Time magazine for her TikTok clips."
https://www.npr.org/2020/01/04/787810829/laugh-cry-and-gasp-along-with-the-best-viral-classroom-moments-of-2019

And:

▪ "**Physics explosion! (27 million views on Twitter)**

He jumps on a pogo stick and zooms on a skateboard. He makes ice cream out of liquid nitrogen. He lies down on a freaking bed of nails. This compilation shows that there's seemingly nothing that David Wright won't do to get his students at Tidewater Community College in Virginia excited about physics."

Equity and Inclusiveness in Education Assert Themselves

▪ "**Rosen bill to push STEM careers for girls, minorities becomes law...**

...The bipartisan Building Blocks of STEM Act was signed into law on Dec. 24 after approval by the House and Senate... 'This bill is particularly for young girls but also for young girls and underrepresented minorities to realize all the things you can do by understanding computer science, STEM or technology, and where it can take you,' Rosen said." (Source: *Las Vegas Review Journal*)
https://www.reviewjournal.com/news/politics-and-government/rosen-bill-to-push-stem-careers-for-girls-minorities-becomes-law-1924544/

▪ **Improving Education shows itself as a prominent part of public consciousness and conversation. One prime example:**

"The 'Public Education Forum 2020: Equity and Justice for All' forum—organized by the Schott Foundation and 11 other public education and civil rights groups, viewed by millions and offered by numerous major news outlets.

"2020 presidential hopefuls weigh in on public education ahead of December debate - Seven candidates traveled to Pittsburgh to share their perspective plans." (Source: ABC News)

https://abcnews.go.com/Politics/2020-presidential-hopefuls-weigh-public-education-ahead-december/story?id=67733604

■ **"Teacher Activism Persists in U.S. Frustrated about wages, working conditions, and other education issues, teachers are continuing to walk out of their classrooms.**

Labor strife spiked last year as teachers in Arizona, Colorado, Kentucky, North Carolina, Oklahoma, Washington state, and West Virginia took to the streets to protest.

Now, just as Denver teachers returned to their classrooms after a nine-day strike, teachers in West Virginia once again went on strike as did their counterparts in Oakland, Calif." *https://www.edweek.org/ew/articles/2019/02/27/teacher-activism-persists-in-us.html*

■ Distinguished school reform activist publishes latest book **SLAYING GOLIATH - The Passionate Resistance to Privatization and the Fight to Save America's Schools.** See *New York Times* review, "Diane Ravitch Declares the Education Reform Movement Dead."

https://www.nytimes.com/2020/01/21/books/review/slaying-goliath-diane-ravitch.html

■ **Teacher Shortage is 'Real and Growing, and Worse Than We Thought'** reported in NEA Today (National Education Association)...Probably the most critical resource denied to many students is an experienced, full-certified teacher – a deficit that is "much more acute problem in high-poverty schools," said EPI Economist Emma García. "These shortages threaten students' ability to learn and reduce teachers' effectiveness, and high teacher turnover consumes economic resources that could be better deployed elsewhere." *http://neatoday.org/2019/04/03/how-bad-is-the-teacher-shortage/*

...True, but I'd like to see a comparison of the attrition levels of those who teach in traditional schools to those who teach in school where progressive approaches and practices supported by transforming applications of technology; my guess is that this sort of satisfaction for teachers and their students can make a tremendous difference in recruitment and retention of talented teachers. —*Mark Gura, Editor-at-Large, EdTech Digest* ■

+

What issues are important to you in education? What role can technology play in working as an enhancement or even a solution? What resources do you find helpful in your work? Who has inspired or provoked you into an improved approach? Write to us: edtechdigest@gmail.com ■

Literacy Education for a Post Text-Dominant, TikTok Infatuated World

Excerpted from ISTE Network Literacy Journal
https://docs.google.com/document/d/1-YQXVcSNJ9vEGhMs7SpZqoOqIGViLkzEnfsz1wKf59I/edit

by MARK GURA

"...As society and technology change, so does literacy. The world demands that a literate person possess and intentionally apply a wide range of skills, competencies, and dispositions. These literacies are interconnected, dynamic, and malleable ..."

—*National Council of Teachers of English position statement titled "Definition of Literacy in a Digital Age*

As I cruise through my world I realize that if we aren't already fully living a "Post Text-dominant Literacy", then we are racing toward one.

What's 'Post Text-dominant Literacy'?

Simply stated, the state of people expressing and communication through language that no longer reflects absolute faith in the supremacy and omnipotence of text as the most effective and impactful manifestation of communication; a belief that was universally held a mere decade ago.

We've moved on; and hopefully Education will embrace and accommodate this new understanding and find a new status and role for text in its universe.

What? It's true, look around; the communication that's surrounding us consists of digital audio (the recent explosion of podcasting is a good example), digital video (YouTube rules!), digital images (Facebook, is a clear example of not only the power of images, but of their superior appeal and function for communication)... There's more, of course, but just these three items that account for billions of exchanges between people daily are enough to paint a picture of how today's humans are literate in a post text-dominant way.

This is not to say that text has disappeared or is going to disappear. On the contrary it is probably produced in greater volume than ever before. What I'm ranting about is text's change in role; in status. Even old-guard exponents of high value text, like the *New York Times* understand this. The *Times* does still put out a hard-copy, text-prominent

paper, but its business survives and grows and its manner of expression broadens and becomes richer in the paper's online version, which mirrors the observations about Podcasting, YouTube, and Facebook, above. Where does all of this leave Literacy Instruction in our schools? In need for some change, I'd say!

For one thing, if the world around our students is going to deeply and increasingly engage in literacy that makes use of other means than text, while there is no reason to stop teaching reading and writing in text, there is very good reason to teach the more recently and increasingly popular digital means of communication and expression. Schools should embrace the teaching and learning of digital media and its uses.

These media formats and applications are already in place in many classrooms, although most strongly in the guise of students' passive consumption of content. In other words in the world of schools, a world in which hard copy texts are still present to a high degree, publishers as well as a number of hands-on educator users supplement and enrich hard copy materials with digital audio, video, and graphic media items. A good thing, but when viewed against the backdrop of the reality of the current state of the universe of Literacy; realistically, a

*One important phenomenon I've observed over the years is that **long stretches of experimentation by early adopters,** folks who, by virtue of their refinement efforts, make an emergent technology ready for mass adoption, is the mechanism by which deep, meaningful change comes about.*

token effort. What's very largely absent in the majority of classrooms is the creation of these items as the day in /day out work of learners. What's actually done currently is that in all but the more advanced classrooms, on occasion students' usual, routine work is set aside in favor of such work that is considered as a special project...

How Kids Are Literate These Days

Recent youth technology use has been marked by much fascination and buzz around the things like the hyper-popular app TikTok, which was the most downloaded app worldwide in the year of its release, 2018. This trajectory of popularity continues.

TikTok's appeal is its usefulness in what youth perceive as the legitimizing dimension of personal recognition through participation in digital media. Of course, it is inevitable, though, that individuals will emerge who put this remarkable resource to other, higher purposes.

TikTok's popularity is a good example of how our world continues to gravitate toward other-than-text communication media. In a nutshell, TikTok enables its community of users to create, upload, and

appreciate short video messages, as well as follow, message, comment, do all of the standard social media things, around them.

For one thing, the app is very easy to use with intuitive features that make formerly challenging content generation, enhancement and editing chores easy to perform. The quality of product one can create is very impressive as is the app's ease of navigation. One can launch, shoot video, edit and upload in a smooth continuum of quick and easy-to-accomplish moves.

What Would Shakespeare Do?

And, if you think about it, this is the crux of the issue with the shift in literacy medium selection and preference. Now that doing all of this is so easy and inexpensive (or free in the case of so many resources), I often wonder what Shakespeare, himself, would opt for if he were living and working among us today. While often considered as a sort of gold standard for the worth of text-based literacy, his work was about entertaining the masses through storytelling and I think resources like YouTube and TikTok would win him over quickly.

Will TikTok and its copiers eliminate the use of text? Of course not.

In fact to register for, to navigate, and to participate in the Twitter-style short message exchanges around social videos that are so appealing to users, text is part of the mix, an important part, but simply no longer the dominant medium.

I think this leaves literacy educators with much to ponder and no doubt with many opportunities to take advantage of, as

well as new responsibilities to address. I think that smart, responsible educators will accept this shift as they figure out its dimensions and their significance. Further, wise ones will likely do so in conversation with their students. ■

EDTECH'S TOP INFLUENCERS —
The minds behind what's now and next.

By VICTOR RIVERO

TOP 100 INFLUENCERS IN EDTECH
EDTECH DIGEST

If there are any areas of human endeavor that indicate the future, technology and education are at the top of the list. They are the areas to look at to see where all the rest will go. Separately considered, their contrast is great; as one advances, the other lags. Yet together, we use them to propel ourselves into the future of our choosing.

Speaking of the future, global edtech venture capital will nearly triple over the next decade, according to education intelligence firm HolonIQ. In 2010, $500M in investments finished 14x higher at $7B in 2019, more than half from China, a third from the US, then Europe and India and the rest of the world, the firm reported.

Tools for learning, methods for moving forward, systems for sustaining the processes that produce what we need to march onward in our ceaseless motions toward betterment; this is part of what edtech can deliver. But who will deliver it?

From a special education teacher in a kindergarten, a middle school math teacher, or a large-district assistant superintendent, to a library media specialist, a professor on a college campus, a coding bootcamp instructor, the president of a university, or the founder of a startup—behind the word "edtech" stand dedicated people with a passion for improving the lives of learners everywhere.

Such people are part of a larger mission, something greater than themselves. They are the minds behind what is now and what is next, and they are shaping the future of education.

This is our third assay into the state of edtech, and it would not be complete without a fresh look at some of these people. We present here an all-new class of individuals—our Top 100 for 2020. Though millions of educators worldwide are actively using technology, with 15k+ companies in edtech, and many of them in attendance at the scores of conferences addressing the future of learning—these people in particular have come to our attention as among those that are pushing the boundaries of the possible, inspiring the rest of us. Here they are—*and why*. Enjoy!

Dan Carroll ━━━
Chief Product Officer Clever
When this Teach for America alum and science teacher moved into a tech role for a Denver prep school, "I wanted to be an innovator, but I got stuck being a human API." Now he's helping 55% of US K-12 schools with a single sign-in for all their digital resources.
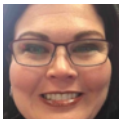
Angela Baker ━━━
Tech Services Manager Georgia Dept of Education
This great communicator has trained over 10,000 educators and supervised scores of contractors to evaluate and curate digital content; her work ethic, know-how and can-do efforts are inspiring.

John Watson ━━━
Founder Evergreen Education Group
For 20 years, he's been a leader in the K-12 digital learning market, for the last couple he's led a new gathering, disrupting the traditional education conference format "to help educators reach the next level" of work in online, blended, and digital environments.

Angela Awonaike ━━━
Response to Intervention Specialist DC Office of the State Supt of Education
She's been a special education teacher, a data coach and testing coordinator, and for the last few years her work has focused on training teachers with a system that helps students at academic or behavioral risk.

Jaime Martinez ━━━
Founder & CEO Schola
A LearnLaunch BOOST alum, this ASU grad (Master's, Elem Ed. & Teaching) and dedicated entrepreneur is guiding parents and students through a process to discover, connect, enroll, and succeed at the right school for them.

Rachel Carlson ━━━
CEO & Co-Founder Guild Education
Created academic and career planning app with Student Blueprint; stepped it up partnering with Fortune 1000 companies and nonprofit universities to offer education benefits to their employees; she's redesigning tuition reimbursement programs and in the process, workforce education.

Troy Wheeler ━━━
President Ed-Fi Alliance
After serving as CIO at Idaho State Department of Education, this Boise State engineering and management grad presides over the Austin-based nonprofit enabling interoperability among secure education data systems, improving student achievement—and teacher satisfaction.

Monica Brady-Myerov ━━━
Founder & CEO Listenwise
Pushing boundaries as a radio reporter and producer, in 2013 she went full entrepreneur and created a platform to curate public radio stories and develop rich lesson plans, class activities, and assessments for teachers and students.

Dean Kamen ━━━
Inventor Co-Founder FIRST
The engineer, inventor, and businessman known for his invention of the Segway is co-founder of the nonprofit *FIRST* (long form: *For Inspiration and Recognition of Science and Technology*) the world's most popular student robotics competition, although "It was never about the robots," he admits.

Nadja Shaw ━━━
Director of Learning and Development Strategy Trilogy Education (2U)
Fiercely committed to closing the digital skills gap, the former 1st-grade teacher and Teach for America coach and director earned her Master's at Teachers College; she now designs and implements instruction for 3,500 employees.

Bhavneet Chahal
Co-Founder GoSkills
For the past 7 years, has led the online learning platform for skills seekers looking to reach their personal and professional goals; aptly personifies the type of energetic go-getter that her platform strives to develop.

Greg Davies
CEO Full Measure Education
One of Blackboard's first five hires, he left to build Presidium then sold it to Blackboard for $53M; now, he's using innovative technology to put every student on a personal education plan and keep him or her on it.

Dorann Avey
Digital Learning Director Nebraska Dept of Education
Dedicated professional learner and team leader promoting current and emerging tech with student-centered approach, often found either leading workshops to help educators or taking them in herself to remain on the leading edge of it all.

Ray Martinez
Co-Founder & CEO EVERFI
Leads financial education efforts of the learning platform, partnering with more than 900 institutions delivering personal finance, entrepreneurship, and investment education to K-12 students nationwide.

Rachelle Dene Poth
Spanish & STEAM Teacher
Oakmont, PA
She's an attorney, teacher, and prolific presenter at ISTE, iNACOL and more including EdTech Digest's 'Probing Edge' panel at FETC in Miami; she's also president of the ISTE Teacher Education Network.

Nigel Nisbet
VP Content Creation MIND Research Institute
Formerly of the British rock band Electrasy ('94-'02), subsequently released 4 solo albums, the latest in 2018, but what's really music to his rocker-turned-math-teacher ears are the results that ST Math attains with learners, everywhere Jiji the penguin takes the stage.

Vu Van
Co-Founder ELSA ("English Language Speech Assistant")
Leading a team of scientists and linguistic experts, bills her company as "world's smartest AI assistant for pronunciation training and accent reduction" serving 1.5 language learners worldwide; their flagship product ELSA Speak is a personal virtual pronunciation coach.

Scott Pulsipher
President WGU
Advocating high quality competency-based education models to support the profiles of today's students (working adults and other 'nontraditional' types); serves 110K students from all 50 states; known for his integrity and ability to help at all levels.
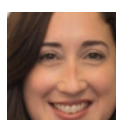
Melissa Dodd
CTO San Francisco USD
She's led talented teams of tech integrators delivering on empowering student learning from Boston to San Francisco; 2017 Withrow CTO Award winner presents nationally on the role of technology in education.

Scott Kinney
President K-12 Education Discovery Education
Has spent 25 years supporting the success of all learners through a variety of roles in both public education and the business world, and is helping to bring DE services to 5 million educators and 51M students in 90+ countries.

Dewayne J. McClary
Director EdTech & Library Program
DCPS
He was a Middle School Social Studies Teacher in South Carolina, an instructional technology coordinator in Arlington, VA. For the past 5 years, he's headed up the District of Columbia's efforts to innovate and update with his dynamic leadership style.

Caroline Vander Ark
President & COO Getting Smart
Manages day-to-day operations of the renowned learning design firm which she's been at for nearly 10 years; SXSWedu advisory board member, also a prolific writer and speaker on innovations in teaching and learning.

Joe Sanfelippo
Superintendent Fall Creek School District WI
Provocative popular presenter, he's mastering the art of storytelling and leveraging social media to help teachers, administrators and other education leaders change the narrative of their learning environments.

Sabrina Manville
Co-Founder Edmit
She's worked for Coursera, Pearson, SNHU, and now she's helping families make great financial decisions so they can be better off after college with a proprietary software that calculates tuition estimates personalized to each student.

Nate Davis
CEO K12, Inc
Seasoned corporate exec, presided over the merger of XM Satellite Radio with Sirius Satellite Radio; now he's broadcasting the benefits and potential of inspired teaching and personalized learning through tuition-free online public school.

Marcy Daniel
Chief Product Officer PowerSchool
After 5 years with Hatch Early Learning where she built and led a team that commercialized and launched 5 major instructional technology products resulting in $19M in sales, she continues powering it up as Chief Product Officer for this unified platform serving 45M students in 70+ countries.

Michael Flood
VP Strategy Kajeet
Representing corporate members of the Consortium for School Networking (CoSN), his focus is on technology's transformative role in education, especially mobile learning; in a former life, was a strategist for Sprint (K-12 vertical), serving 116K schools and 55M students.

Eden Dahlstrom
VP Professional Learning EDUCAUSE
Leads one of the foremost nonprofits helping higher education optimize the impact of IT; strategist, visionary, leader and speaker, has contributed significantly to the field and is a familiar face developing tools and resources for over 2,300 member organizations and 100,000 members.

Sean Gallagher
Exec Dir Center for the Future of Higher Education & Talent Strategy Northeastern University
He's building the leading university-based research org at the intersection of the world of work and postsecondary education to eliminate the gap between work and learning; previously spent nearly a decade at Eduventures.

Marlo Gaddis
CTO Wake County Public School System
Self-described learner and leader with a passion for instructional design, technology, and schools, she presides over a paradigm shift for the largest K-12 public school district in North Carolina, responsible for 159K students across 183 schools.

Susan S. Wells
Founder TechTerra Education
A champion of STEM literacy to help children better understand their world, was previously principal of Durham Public Schools (NC), where she oversaw their 1:1 iPad deployment and learned the value of mobile learning.

George Perreault
Chief Academic Officer ClassLink
For nearly 40 years, worked for one of the nation's largest school districts - Orange County Public Schools (FL) - as an assistant principal, senior assistance principal, director of instructional technology & library media; now enjoys removing access barriers to digital curriculum for students and teachers everywhere.

Mercedes Bent
Partner Lightspeed Venture Partners
Lives and breathes startups, and with her focus on the future of work and edtech, watch out for interesting developments in VR/AR. An early employee at General Assembly, launched several product lines and grew her division from $0 to $30M+ in two years.

David Whelan
Co-Founder Immersive VR Education
This tech entrepreneur and former editor-in-chief of Virtual Reality Reviewer is a multi-award winning VR director and producer, and an EdTech Digest EdTech Trendsetter Award Winner.

Sandra Whelan
Co-Founder Immersive VR Education
Listed on the London and Irish Stock Exchange, her Ireland-based virtual/augmented reality company dedicated to transforming how training and educational content is delivered and consumed globally is shaping the future of learning.

Vinay Mahadik
Co-Founder & CEO Securly
This information security veteran was a senior R&D manager at McAfee; now provides an end-to-end student safety and device management solution for schools; holds 5 patents in the field; deeply dedicated to online safety for kids.

Kim Keith Berglund
Executive Director Disney Junior
Founding Member of Children's Media Association and curriculum board member for Age of Learning, this veteran of digital media for children is expert in presenting math, social studies and STEM education in their most engaging forms.

Liu Ye
CEO KnowBox
Heading up the Alibaba and Baidu backed online education platform, and fresh off a $150M funding round, with 40M+ users his homework-test-games learning hub serving 70% of China's primary schools is just getting started.

Dorothy Stanley
Standards Architect Aruba
An HPE Fellow and head of strategy, she chairs the IEEE 802.11 Working Group, a very technical way of saying a small, dedicated group of techies overseeing standards for wireless networks, which has everything to do with campus connectivity across the US and beyond.

Peter H. Diamandis
Founder Xprize **Co-author** *The Future is Faster Than You Think*
Besides starting 20+ companies in longevity, space, venture capital and education, the pioneer in the fields of innovation, incentive competitions and commercial space is now challenging all students of the world (including education leaders) to predict their future by creating it themselves.

Dror Ben-Naim
Founder Smart Sparrow
Led a research group in the field of Intelligent Tutoring Systems and Educational Data Mining (his PhD), developed an adaptive e-learning platform teachers love; the sparrow is symbolic of freedom, "we really think that education emancipates the mind," he shares.

Earlene Patton
Distance Learning Administrator Alabama Dept of Education
For excellence in integrating digital curricula and content and supporting teachers and students, she's been recognized for her work with her state's ultra resource-full Learning Exchange Program.

Jethro Jones
Middle School Principal Fairbanks
Alaska is still the Last Frontier and this 2017 NASSP Digital Principal of the Year can be heard pushing boundaries at transformativeprincipal.org where he hosts an inspiring future-leaning podcast with a wide variety of guests.

Lisa Spencer
Director of Instructional Technology Prince Georges County Schools
After over a decade as a classroom teacher, started as an instructional technology coordinator at the turn of the millennium and has been providing exceptional direction, training and support to 19K employees serving 130K students in a US-top-25-largest district ever since.

Paul Freedman
CEO/Co-Founder Entangled Group
Principal Consultant at Entangled Solutions, longtime advocate for the transformative power of a college education, has founded, managed, and invested in a number of successful education ventures.

Kristy Sailors
Director of Instructional Technology Eanes ISD, Austin
Supporting teacher integration of tech to engage students, she's designed courses, written policies, created PD and is an IMS advisory board member and Project Tomorrow Speak Up committee member.

Jamie Harper
VP Education Microsoft
Serving higher ed, K-12, libraries & museums, his team works with stakeholders on everything from cloud computing to Minecraft and Surface devices; previously served on MS leadership team, South Africa; he's been with Microsoft for 20+ years.

Jean Tower
Director Media & Digital Learning Needham Public Schools
Helping instructional leaders focus on how they can incorporate tech leadership into their practice, she asks the right questions and has a refreshing no-nonsense action-plan approach to getting things done.

Peter Robinson
Technology Director Auburn School Department
Keeping focused on the true goal of improving the overall classroom experience for students, this Maine guest columnist for EdTech Digest has gone far in solving efficient, affordable device management.

Laylah Bulman
Executive Director FL Scholastic Esports League
Works for LEGO Education as enterprise sales director, but a force behind the scenes with Florida Scholastic Esports League; passionate about creating "hands-on, minds-on" programs in pre-K-12 STEM learning environments.

Cynthia Haynie ━━━
CTO Campus Management Corp
Leader and strategist in higher ed, has also worked at the Department of Defense and NASA's famed Jet Propulsion Laboratory; humbly credits senior leadership around her when asked about keys to her own success.

Sonny Magana ━━━
Author *Disruptive Classroom Technologies*
Rock guitarist turning up the volume on his discussion of continuous growth and professional learning for educators using technology to make an even bigger impact in their teaching and learning.

Jasna Aliefendic ━━━
Coordinator of Technology Integration & Staff Development Garland ISD
For 12+ years, she's led educators as a very capable coordinator at this 56k-student, 72-campus large tech-driven district in Texas, among the 75 largest in the US.

Jason Bailey ━━━
Director Innovation & Design SETDA
Former Indiana English teacher, was senior strategist for e-learning within the state department of education developing their e-learning conference series before he took on his current challenge.

Kimberly Smith ━━━
Executive Director League of Innovative Schools
Head of strategy and growth for this national network of forward-thinking education leaders working to improve student outcomes through smart use of learning tech and innovative practices; partners with entrepreneurs, researchers, and thinkers, serves 3.3M students.

Anna Iarotska ━━━
Co-founder & CEO Robo Wunderkind
From Kickstarter to a worldwide phenomenon, her robotics platform inspires children to become creative with technology, building and coding their own robots and gadgets; meanwhile, she's a great role model in STEM education.

Sara Trettin ━━━
Policy Advisor US Department of Education
Leads their open education work, digital engagement efforts, and co-created Future Ready Librarians Framework to raise the profile of tech-using librarians in schools.

Kirby Salerno ━━━
Founding Partner BroadReach EdTech Advisors
He's worked at Amazon Education, Flocabulary, Money Experience, Listenwise; has been active as a venture partner with LearnLaunch, and is helping startups that are addressing some of the most vexing societal challenges to scale up.

Eileen Belastock ━━━
Director Academic Technology Mount Greylock Regional School District
A board director for edtech orgs MassCUE and METAA, regularly writes and presents on digital equity, student data privacy, and the importance of learning for students and teachers.

Kris Hagel ━━━
Executive Director Digital Learning Peninsula School District WA
Administrator, implementer, deliverer of innovative tech solutions for students; expert in budget, policy, strategy—and importantly, end user experience.

Jeremy Keeshin ━━━━
CEO & Co-Founder CodeHS
Leading expert in computer science education and edtech; visited 150+ schools nationwide. His platform is used by hundreds of thousands of students and is the largest of its kind for coding in high schools.

Caroline Fay ━━━━
Co-Founder Skillist
Jobseeker's advocate, develops strategic partnerships with community colleges and nonprofits for skill-based job application platform; continues as Year Up mentor; earned M.Ed. creating individualized course focused on post-secondary success and career development.

Bob Berry ━━━━
VP Business Dev Troxell-CDI
One of the longest-serving employees at this school AV products distributor turned school tech ecosystem company (est. 1946); he's vibrant, youthful, and has deep knowledge of everything trending, including the not-yet-trending.

Jeanette Haren ━━━━
VP Product Management PowerSchool
Two decades of developing professional growth systems for K-12 school districts; founder, Truenorthlogic (acquired), now leads talent and performance assessment efforts for this edtech ecosystem giant supporting 45M students in 80+ countries.

Jake Schwartz ━━━━
CEO & Co-Founder General Assembly
Ardent Phish-head, also follows: the future of work, upskilling, the economy, jobs of tomorrow; 15-campus and online firm leads the field teaching entrepreneurs and business pros practical tech skills with 10-12 week immersive web development and product management courses.

Betty Vandenbosch ━━━━
Chancellor Purdue University
Global Educator, author, and leader of 29,000 online degree seekers; advocates access for adult students, has spearheaded competency-based education, and has spoken at ASU-GSV on 'radical scaled online learning models.'

Ed Hidalgo ━━━━
Chief Innovation & Engagement Officer Cajon Valley Union School District
Led development of Qualcomm Thinkabit_Lab makerspace, pioneer in world of work and career development initiatives; now applying corporate experience with workforce development in changing school culture to prep students for their future jobs.

Candice Dodson ━━━━
Executive Director SETDA
Spent 26 years at the district level, then 8+ years as Indiana Department of Education Director of e-Learning, now she's stepped up her efforts to help other state level edtech leaders through the foremost association for state education technology directors.

Michael Hansen ━━━━
CEO Cengage
German-born exec leading merger with McGraw-Hill; Glassdoor 2019 Employees' Choice Award for top CEO; his 5,000-employee Boston-based edtech company serves all levels of education on the forefront of a massive print-to-digital transformation.
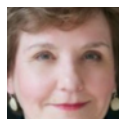
Jean Hammond ━━━━
General Partner LearnLaunch Accelerator
Active as an angel investor (early stage tech startups), she's been a leading voice in conversations about reskilling the workforce, high schoolers and experiential learning, and what startups can bring to education.
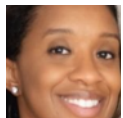
Christine Stokes-Beverley ━━━
Senior Instructional Technology Coordinator Arlington Public Schools

Special education math teacher, member of her school's edtech team; facilitates professional learning sessions, and serves as a CoSN Advisory Board Member; she also works with parents to navigate parenting in the digital age.

Brian Seymour ━━━
Director Instructional Technology Pickerington Local School District
An EdTech Leadership Award Winner (EdTech Digest), he's been with his Ohio district for 18 years, 10 of those as a Science Teacher; he's now one of the most professionally active Tech Directors in the country, and has brought his learning home to PLSD.
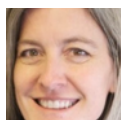
Michelle Bourgeois ━━━
CTO St. Vrain Valley Schools
Leads a 1:1 program for Colorado's 8th largest school district; a thoughtful leader with an eye on the cultural shifts taking place beyond schools that impact schools; a keen focus on learning, connecting, and improvement.

Raahsan King ━━━
Founder & CEO Students of Strength
The Harvard grad's online academic coaching service offers personalized tutoring and mentorship, as well as college advising – to students of all socioeconomic backgrounds in grades 7-12.

Antti Korhonen ━━━
Co-Founder & CEO xEdu
Humble head of one of Europe's leading business accelerators for edtech startups, also founded EDUIMPACT Venture Capital, the first Nordic VC fund focusing on education.

Ed Dieterle ━━━
Executive Dir Center for External Research & Strategic Research Alliances ETS
Former science teacher and university instructor works seamlessly with edtech companies, foundations, NGOs, universities and agencies to increase product impact for the world's largest educational measurement nonprofit.

Katie Onstad ━━━
Co-Founder Education Framework
Self-described "leader with a conscience" is solving student privacy issues with automated technology solutions; created the first online student data privacy workflow manager for schools.

Jess Borjorn ━━━
Assistant Superintendent Curriculum & Instruction Roseville High School
With 3+ decades getting results for students and the adults who support them, he's a passionate collaborative-style leader facing down digital transformation across his classrooms.

Erin Mote ━━━
Executive Director InnovateEDU
Brooklyn-based educator founded and grew a charter school for 6 years, now she's heading up a nonprofit whose mission is to eliminate the achievement gap using next-gen learning models and tools.

Zach Vander Veen ━━━
VP Instruction Abre
Former Director of Instructional Tech for Ohio's Hamilton City School District, and Social Studies teacher; "the sheer number of hoops educators need to jump through are really quite astounding," he told EdTech Digest this past year. "Good technology should make lives easier." He's working on it.

Jeffrey Averick
Founder & Executive VP Certica
Leads business integration and content teams; developed K-12 compliance application for this company, a team of ed and tech experts helping educators positively impact student improvement with actionable - and accessible - measurement and insights.

Danial Jameel
Founder/CEO Ready Education
For past 8 years, helping higher ed institutions redefine communication and improve student experience with latest mobile app and cloud tech, developed by his team of data and social scientists designing tools to amplify student engagement.

Xavier Anguera
Co-Founder & CTO ELSA
Senior speech scientist, published 100+ peer-reviewed research papers; holds multiple patents in the areas of multimedia, machine learning, deep learning, and artificial intelligence.

Hadi Partovi
Founder & CEO Code.org
Angel investor in Facebook, DropBox, airbnb, Uber, and more, this Harvard grad (Computer Science) is a technologist at heart; enjoys building disruptive, innovative technology products and services with worldwide impact.

Andy Rahden
CEO Shmoop
Was VP Creative/Design/ Engineering for Pluralsight, mechanical engineer at Baker Hughes; now building a team to confront the challenge of moving education forward (and including a little fun and humor); "What we're trying to do is enhance people's ability, the learner's ability - to progress in their knowledge," he says.

Maria Anguiano
SVP Strategy ASU
First-gen college grad and former Minerva Project CFO, now broadening her influence - and access - for the full spectrum of students; interdisciplinary mindset has served her well and made her a strong collaborative leader on the forefront of higher ed transformation.

Jeremy Shorr
Director Innovation & Early Childhood STEM Teaching Institute for Excellence in STEM
Ohio-based consultant passionate about STEM; Certified Educational Technology Leader (CoSN), innovator on the forefront of bringing STEM (design, curriculum, instructional support) to school districts.

Amanda Bickerstaff
CEO Pivot Professional Learning
With 15+ years experience scaling startups, developing professional online learning, driving revenue, and partnerships, she's a passionate exec for improving student results and teacher support.

Ananth Kasturiraman
Co-Founder Skillist
Spent career at intersection of business and social impact; worked for UC Riverside, KIPP Foundation, Bain & Co. Believes that while talent is distributed equally, opportunity is not, and thus — his company.

Alexandra Diracles
Founder & CEO Vidcode
Photographer-turned-coder helping schools and libraries connect coding and creativity through her platform for teens (and teens at heart) who want to learn to code through an interactive 'computational media' approach.

Angie Eilers
CEO & Founder UR Turn, SBC
Focused on low-income students enrolling in and completing a post-secondary degree using this AI supplement to school counseling to shine a light on an obscure education pathway, "like Google Maps for the education highway" to help students and families chart a path for success.

Brian Moynihan
Global Education Solutions Manager Lenovo
Leads VR Classroom initiative for world's largest PC provider, but you might not know this well-rounded techie earned a Master's in Comparative Religion and graduated cum laude from a Miami University advanced interdisciplinary science & humanities program.

Kai Frazier
Founder & CEO KAI XR
Advancing digital transformation of museums, directs educational VR and AR experiences for multi-generational audiences and is an advocate for tech startups and founders everywhere; meanwhile, continues her rich work with the National Museum of African American History and Culture.

Abhimanyu Saxena
Co-Founder Scaler Academy
Bengaluru software architect reverse-engineered a curriculum based on current skills demanded by top companies; smart thinking, and the skills-to-work company recently raised $20M.

Vanessa Castañeda Gill
CEO Social Cipher
Firm believer in the power of play, has made it her mission to bring art and science together in developing story-driven video games that provide autistic youth a safe, accessible, and empowering space to apply social skills.

Kyle Liao
Director of Community Growth Educate LLC
An instructional coach for this New York City based education management company, he's served K-8 schools around the NYC area, working with principals and teachers, and now—with a thorough understanding of effective pedagogy—apps and tech.

Alex Inman
Founder & President Educational Collaborators
Heading up a group of 100+ experts helping schools and districts with design, assessment, and implementation of 21st-century initiatives, he's been at it for 20+ years; from G-suite to audits, he knows everything tech and has helped thousands of schools.

John Katzman
Education Entrepreneur
Irreverent Princeton grad co-founder of The Princeton Review (1981), 2U (2008), Noodle companies (2010), he's also helped with Tutor.com and two dozen other edtech ventures; tells it like it is, sense of humor included.

Jodi Goldstein
Executive Director Harvard Innovation Labs
With 20+ years experience in the startup world (exec, co-founder, investor), now focused on strategic initiatives in expanding the labs' reach and impact; the University of Vermont grad (BS International Business) and Harvard MBA stays edgy as a snowboarder, cyclist, and private pilot.

Harsh Patel
CEO Galvanize
A former Teach for America Math & Science teacher, code school veteran, and for the past year leader of this 21st century school for entrepreneurs, engineers, and data scientists. His company was recently acquired by K12 for $165M.
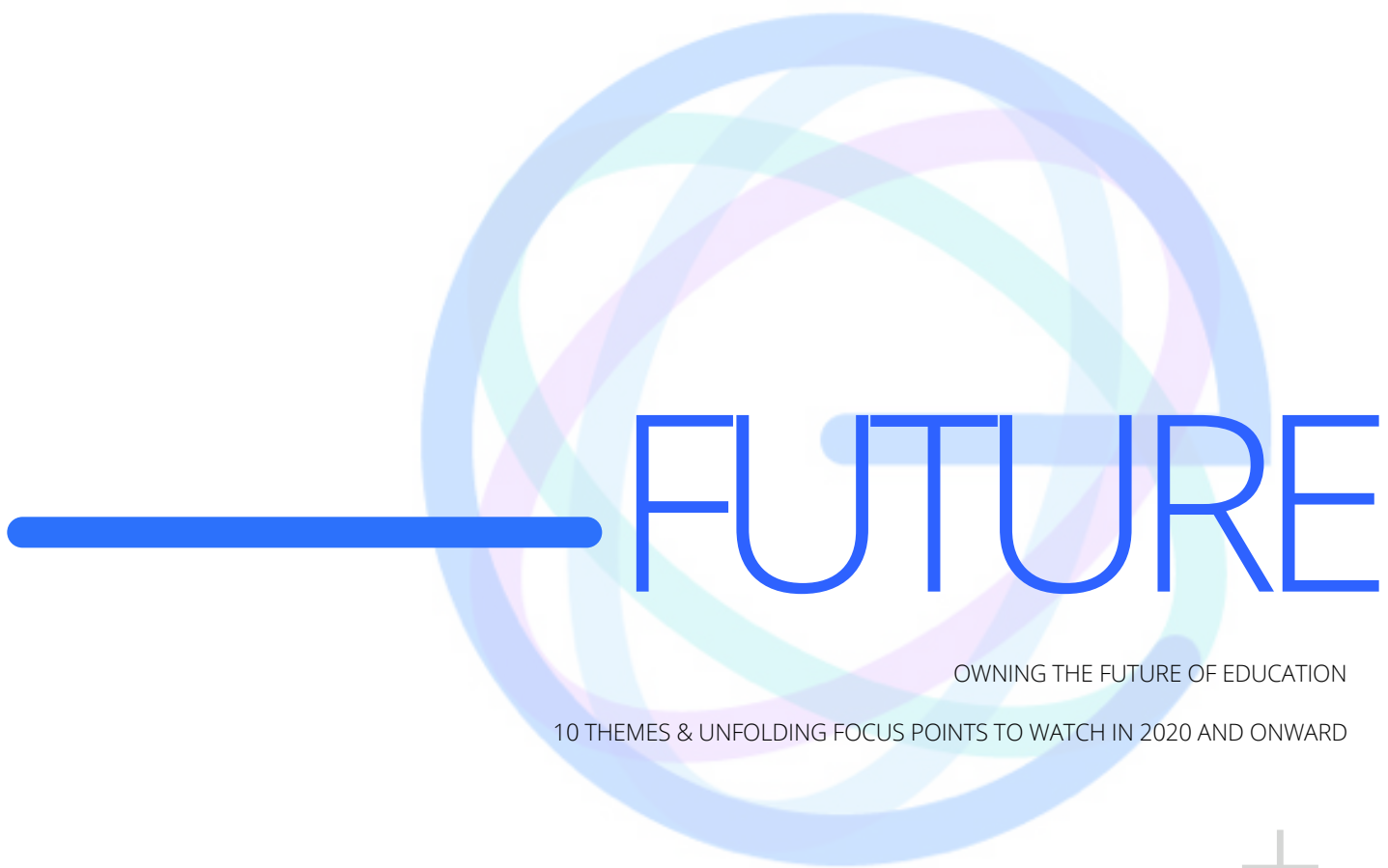
FUTURE

OWNING THE FUTURE OF EDUCATION

10 THEMES & UNFOLDING FOCUS POINTS TO WATCH IN 2020 AND ONWARD

+

NEW YEAR'S RESOLUTIONS

EDTECH1000: COMPANIES TRANSFORMING EDUCATION

10 COMPANIES TO WATCH & WHY

THE EDTECH AWARDS: LEADERS, INNOVATORS, AND TRENDSETTERS

Owning the Future of Education

Shifting from guessing and accepting—to: predicating, influencing, choosing, and preparing.

FAST FORWARD | **by Mark Gura**

The connectedness of our world, a networked environment enhanced through applications of social media, data collection, and A.I.—enables a profound potential shift in our relationship to the future. We are moving from our inherited passive posture, to the realized possibility of an active role. This is proving itself true in several ways:

Prediction

Some of what's coming down the road of interest and importance can be perceived by viewing the reporting of interests and preferences of large numbers of people. With refinements of capability in increasingly common and accurate digital polls and surveys and increased reporting of the digested results of these, those who follow news aggregation services can keep themselves in-the-know about what's

about to happen. And this unfolds with a clearer picture of 'before', as well. Using available A.I. driven tools, even simple ones like Google Alerts, to scour reported news and information, individuals can engage in enabled prediction like never before. As an example, the trends reported and behaviors and events predicted in this report reflect all of this, which is to say their hunch factor takes a back seat to crowdsourced knowing and thinking.

Influence

The same connectedness that makes seeing what's coming at us enables us to favor and influence the manifestation of those things we have high interest and faith in. Let's shine a light on just a few ways in which this is true: for one, educational resource developers are sensitive to evidence of interest from potential purchasers; further, policy

FUTURE

makers will act in ways that reflect their concern for and interest in approval from their constituencies; and colleagues will invest effort, good will, and professional reputation in items they know masses of their peers are committing to. Our digitally connected professional environment and culture has evolved to value information to support all of this, as methods to accomplish that have become a priority among developers. And to whatever extent educators develop confidence that they are safe to do so, it is important for them to understand that an upside of data collection is that allowing this tracking will result in influencing their future.

Additionally, through the enabling power of the now mature 'Read/Write Web', there are opportunities for educators to exert direct influence. For instance, by providing reviews of resources on sites that elicit and publish them from teachers, by leaving reflective comments adding to such reviews posted by others , and by clicking on "Find this review helpful?" type opportunities. These and similar are actions that educators stepping up to their potential role as good digital citizen professionals understand as potentially influencing the future of the

*"...when working in a connected environment, by reading, implementing, and replicating what's been posted, by downloading materials, and sharing about these actions, **one is participating in owning and shaping the field's future."***

field. Offering teaching ideas and recounting experiences, either on personal blogs or submitting them to online periodicals, likewise offers the opportunity of impact. And sharing or selling fully detailed lesson plans to peers amounts to using digitally supported long tail publishing to nudge the field to further develop in directions one believes in.

Selection/Choice

Similarly, when working in a connected environment, by reading, implementing, and replicating what's been posted, by downloading materials, and sharing about these actions, one is participating in owning and shaping the field's future. It's high time that educators wrap their minds around this simple truth and through their crowdsourced, mass participation further the impact they can have on how things shape up for them and their students. ◼

—

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

10 Themes & Unfolding Focus Points to Watch in 2020 and Onward

1

Student engagement: going for it! Revitalized, technology-supported commitment to engagement as the prime driver for learning.

Educators have always spoken of Student Engagement as a key element in the complex alchemy of teaching and learning. It appears that the field is about to make it a much higher priority, though. *Education Week*'s piece, "Special Report: 10 Big Ideas in Education"" (January 2019), chose to put "Kids are right. School is boring" in the list's number one spot. This may come for some as a jaw-dropping shift in understanding about success factors that impact the institution of School.

■ As if specifically designed to address this challenge, EdTech Digest's article "SPOTLIGHT: A Series to Inspire Engaging Teachers" highlighted one powerful approach to moving in this direction. The approach of the planned series (with one episode finished and made available free to teachers everywhere) is to shine a light on inspiring and engaging practices in teaching.

■ By the way, another tough nut that teachers have been trying to crack seemingly forever is *parent* engagement, and moving forward, through greater availability of more capable resources, along with raising this success factor's priority (quite possibly the technology makes it seem more likely to bring success) is showing up. One example is the Middle Web article, "Boosting Parent and Family Engagement" (December 2019), stating, "With some front-end planning and strategic use of technology, teachers and administrators can mitigate many of the challenges by reaching out to parents in a number of 'smart' ways..."

2

Giant steps in transforming professional development.

The classic, traditional model of live, face-to-face, workshop-driven professional development continues to recede in dominance as new possibilities and models appear and gain traction, a great many of them established through the development of more sophisticated communications technologies.

The ways the above is so, are so numerous that they beg an in-depth article. For now, let's examine a few bread crumbs that mark the path:

▪ Facebook for Education announced itself recently. And while numbers of educators have been creating Facebook groups and inviting colleagues to join them there for professional sharing of ideas and more for some time, statements like the following illustrate how the platform itself has become self-aware about this important purpose: **"**Our Story - Our mission at Facebook is to give people the power to build community and bring the world closer together. We believe education is the backbone to this mission. ...Facebook Education was created to bring the world closer together by growing the knowledge economy, through access and equity in educational opportunities for all learners. ...This page and its connected groups will allow educators to come together to share ideas, explore new ones, and collaborate to tackle challenges." *([https://](https://www.facebook.com/pg/education/about/?ref=page_internal)* *[www.facebook.com/pg/education/about/?](https://www.facebook.com/pg/education/about/?ref=page_internal)* *[ref=page_internal](https://www.facebook.com/pg/education/about/?ref=page_internal))*

▪ Other resources, too, are making educator professional development an important part of their overtly stated mission. Here's a quote from ZOOM's guide titled **"**ZOOM for K-12 Schools & Districts" - "K-12 Education Use Cases Professional development teams virtually observe a teacher's classroom for annual critique and feedback."

▪ Synchronous professional development webinars, generally provided a-synchronously as well via recordings, after the events; real-time stream of inspiration tweeting of events, publications, media items and resources along with following those entities that promised to consistently provide value and interest, and more are literally redefining PD, an aspect of the field of education perennially

held as a crucial success and satisfaction factor and likewise very rarely deemed to be sufficient and, until now, adequate to the deep need for it. We see tremendous growth in this area in the emergence of better resources, more sophisticated practices in using them and their integration into professional lives, and in the levels of adoption.

3

Education makes some solid moves toward fostering student creativity (and it's about time!)

[http://blogs.edweek.org/edweek/curriculum/2018/09/](http://blogs.edweek.org/edweek/curriculum/2018/09/pisa_to_add_creative-thinking_test_ACT.html) *[pisa_to_add_creative-thinking_test_ACT.html](http://blogs.edweek.org/edweek/curriculum/2018/09/pisa_to_add_creative-thinking_test_ACT.html)*

▪ The article, **"**A Test to Assess Creativity? It's in the Works" appeared in *Education Week* in late 2018 stating "When teenagers all over the world take the PISA exam in 2021, they could face a new kind of test: one that aims to measure their creativity. And the maker of a major U.S. college-admissions exam—ACT—will build it. .." It is said the Organization for Economic Co-operation and Development, the Paris-based agency that administers the PISA exam, chose ACT to design a "creative thinking assessment" for worldwide use in 2021.

▪ More recently (December 2019), the LEGO Foundation's blog ran the article, "Teaching creative thinking in schools - PISA 2021 will offer some clues" stating, "In three years' time, education systems will be much better placed to understand, and tackle, the challenge of developing creativity skills in schools."

Clearly, as this area of human intellectual development has never been made a high priority part of the core business of schools, there may be much pressure to forestall the inevitable inclusion of what educational theorists and workplace spokespersons continue to identify as a key, critical area of learning in the 21st Century. And whether PISA opts to include Creativity in the alarmingly close administration of its assessment in 2021, this is an idea that not only won't go away, but that has a slowly (painfully) emerging and broadening presence in education. We've seen a number of hopeful indicators of movement …

▪ Smart Brief's (December 2019) article, A peek into 2020, "**Who's learning through creation, who's not—and why? –**

▪ The 2020 Driving K-12 Innovation Report by CoSN identifies "learners as creators" as the number one accelerator for innovation in schools…"

▪ In *EdTech Digest*'s ISTE Conference 2019 round-up article, "Ba-Boom! EdTech!" Apple's resource, Everyone Can Create, was highlighted. Apple continues with this important work!

Much More from Robotics

Just a few months back, *EdTech Digest* offered eager readers its first special report, "The State of Student Robotics 2019". In opening this 90-page free e-book, the piece states, "The popularity and complexity of Student Robotics has grown so quickly and massively over the past few years that it's time to take stock and reflect." The field of resources and body of practice has continued to expand. Small

wonder that a 2020 update and expansion of the report is already underway. Yes, 2019 did turn out to be the "Year of Student Robotics."

When done well, this is an area of learning that involves kids in solving problems, including real-world problems. It's one of the original eSports, with competitions like those produced for kids around the world by the organization FIRST (see *EdTech Digest*'s coverage of FIRST this past year – 1) A World Built Better Together and 2) What Was Dean Kamen Thinking?)

Since these articles and the report though, Editor-at-Large Mark Gura has turned his attention to a more recent-to-appear application of robotics in the lives of today's students, which he discussed in *EdTech Digest*'s first panel discussion at the recent FETC (Future of Education Technology Conference) in Miami Beach.

4

Teaching robots / digital teaching and learning assistants.

Few educators are as yet aware of this unfolding development, one that promises to truly disrupt Education, let alone understand it with an eye toward figuring out how to integrate it into their professional lives and practices.
A number of worthwhile reflections on this, still to hit the radar screen, phenomenon have appeared relatively recently, a couple of examples are:

■ First, Education Elements' piece *"Robots Are Not Taking Over Teachers' Jobs"* and second, Voice of America's contradicting article, *"South Korean Students Learn English from Robot Teacher."*

Stay tuned! So much more to do before this one becomes clearer!
https://www.edelements.com/blog/robots-are-not-taking-over-teachers-jobs
https://www.voanews.com/east-asia/south-korean-students-learn-english-robot-teacher

5

Student social action / citizenship as a real-world learning platform.

The traditional model of Education calls for students to participate in activities that are away from the real world, activities that have them considering facts and skills in a purely instructional context and divorced from actual application in the real world.

Today's kids however crave direct participation in their world, one in which they are surrounded by digital/social media. A logical next level of learning activity, then involves Social Activism, something that today's kids find ultra-engaging. Teachers can capitalize on students experience in this area, using it to engage and guide students in traditional areas of learning like Writing.

Here is an item of note picked up along this path:
■ **"Student-led initiatives tie civic action, advocacy to social studies lessons -** Curricula that

encourage students to get involved with causes they support can further their understanding of activist movements and events.

Teaching students both critical thinking skills and how to be engaged in their communities is an important step in bringing subjects like civics and social studies to life...real-world experience not only inspires learning, it deepens connections and encourages retention." (Source: Education Dive)
https://www.educationdive.com/news/student-led-initiatives-tie-civic-action-advocacy-to-social-studies-lesson/569219/

6

Facing new pushback against edtech (and taking smart steps to avoid it).

So much progress has been made in the development of edtech resources and practices and the transformation of traditional classrooms of yesterday to today's and tomorrow's "Digital Learning Environments." Why, then, are so many teachers reacting against edtech and its integration across the curriculum? The sentiment is out there; teachers see tech as isolating, representing a further barrier between student and teacher, as posing threats to learning and challenging the development of critical, independent thinking.

Alas, it is likely also the case that those teachers who feel resistant to tech adoption gravitate toward published

articles, especially their headlines, and use these to justify their position of resistance.

By understanding these considerations and mis-apprehensions, those concerned with pushing the Digital Shift further and more successfully would be wise to familiarize themselves with the phenomenon and address it by sharing their understandings of the transformational benefits of technology adoption.

Some items we've seen recently:

- **"Isolation: A Pitfall of Online Learning"** (PBS Education)

- **"Technology in the classroom can be a distraction"** (Source "Technology in the Classroom in 2019: 6 Pros & Cons" TopHat) *https://tophat.com/blog/6-pros-cons-technology-classroom/*

- **Why Students Can't Write — And Why Tech Is Part of the Problem (Source: EdSurge)** *https://www.edsurge.com/news/2019-04-02-why-students-can-t-write-and-why-tech-is-part-of-the-problem? utm_source=Sailthru&utm_medium=email&utm_campaign=Issue:%202019-04-03%20K-12%20Education%20Dive %20Newsletter%20%5Bissue: 20192%5D&utm_term=Education%20Dive:%20K12*

- **OPINION: 'Programs that give every student a computer instead of time with a teacher are misguided' (Source: Hechinger Report)** *https://hechingerreport.org/opinion-programs-that-give-every-student-a-computer-instead-of-time-with-a-teacher-are-misguided/*

7

Fully recognizing and addressing the human needs of learners.

While Bloom's Taxonomy, a hierarchically depicted cataloging of the common varieties of learning classically addressed in school, is something that virtually all educators are familiar with, what most never learn in their teacher education programs is that it represents only a portion of the work of its originator, Benjamin Bloom. Among other things, he addressed, in addition to the commonly known, Cognitive Domain, is the Affective Domain, in which the realm of feelings is considered as a crucial part of learning. It's highly noteworthy that including the Affective and related realms, has been a trend picking up speed for a number of years now. Here are a few examples of things noted that point increased interest and effort in this area in 2020 and beyond.

- "**Mindfulness instruction makes a big impact on learning**" and "**What is nature deficit disorder?**" (*eSchool News* – November 2019)

- **"How Tech is Taking Social Emotional Learning out of its Silo"** (*EdSurge* – July 2019) *https://www.edsurge.com/news/2019-07-06-how-tech-is-taking-social-emotional-learning-out-of-its-silo*

- **"Trauma-Informed Teaching Strategies**" (*Educational Leadership* – October 2019) *http://www.ascd.org/publications/ educational_leadership/oct19/vol77/num02/ Trauma-Informed_Teaching_Strategies.aspx*

8

Evolving literacy.

In 2018, *The Atlantic* ran a major article, *"Why American Students Haven't Gotten Better at Reading in 20 Years,"* detailing conflicting views of traditional approaches to Literacy instruction as background to reading scores being essentially flat since 1998.

A strong trend in 2019 and into 2020 is improvement of student literacy skills through non-traditional approaches and the focused application of technology to provide new learning opportunities. Here are some examples of what's shaping up and presenting itself in literacy instruction.

▪ **"How the Latest Technologies Help Improve Literacy Skills" (Source: Pro Literacy blog 2019)**
https://proliteracy.org/Blogs/Article/399/How-the-Latest-Technologies-Help-Improve-Literacy-Skills

▪ **"4 ways podcasts help improve student literacy" (Source: eSchool News)**
https://www.eschoolnews.com/2020/01/03/4-ways-podcasts-help-improve-student-literacy/

▪ **"Digital game-based learning enhances literacy" (Source: New Jersey Education Association, 2019)**
https://www.njea.org/digital-game-based-learning-enhances-literacy/

▪ **"10 Ways to Use Technology to Build Vocabulary" (Source: Reading Rockets, 2019)**
https://www.readingrockets.org/article/10-ways-use-technology-build-vocabulary

9

Preparing real kids for real futures.

Pointing out that our schools continue to prepare students today in order to enter a world of work that increasingly no longer exists has already become an expected staple discussion point among forward thinking educators.

What to do about this and how to do it, though, are rarely offered as follow up to those statements about the dangerous irrelevance of current instructional programs. This understanding and some solid thinking to flesh it out continues to emerge though.

Good thing, because readiness to hear it also seems to be showing up. A few examples:

▪ **"How Educators Can Prepare Students for the Workforce" (on-demand webinar)** (Source: *Industry Dive* – 2019)
https://resources.industrydive.com/education-in-an-era-of-human-agility?utm_source=EDK12&utm_medium=NL1-0113&utm_campaign=KellyServices&FirstName=&LastName=&EmailAddress=markgura@verizon.net&Company=&utm_term=20577&utm_content=ad-TOP&client=Kelly%20Services&location=TOP&newsletter_schedule_id=20577&opportunity_id=INHOUSE

▪ **"How to Integrate Entrepreneurship into the Classroom"** (Source: *Tech&Learning* – 2019)
https://www.techlearning.com/how-to/how-to-integrate-entrepreneurship-into-the-classroom?utm_source=Selligent&utm_medium=email&utm_c

ampaign=10585&utm_content=Tech%26Learning+11%2F27%2F19+&utm_term=1272672&m_i=woFO%2Brsf03XkGEKroAsotbu5_b3Zo9e%2BF0mvgorrHNTOC1JPR69_aHLFzZ6%2Bv7lXJhTmYR6B1H7PTOlwpwPoBAdDNQpC6YwwwK&M_BT=810043649812

▪ **"Preparing Students Today for the Careers of Tomorrow"** (Source: Laurel Springs School – 2019)
https://laurelsprings.com/preparing-students-today-for-the-careers-of-tomorrow/

▪ **"Preparing students for jobs that don't exist"** (Source: ISTE blog – 2019)
https://www.iste.org/explore/ISTE-blog/Preparing-students-for-jobs-that-don%27t-exist

10

A few fingers-crossed predictions.

2019 brought evidence of serious movement in improving education. There are definitely moves afoot to provide improved learning opportunities in far more human-friendly ways. Here are a few good news items that indicate things are moving in the right direction with increasing velocity:

▪ **Elimination of Traditional Standardized Testing** (or at least a lessening of it to a more healthful level)
"Georgia and Nebraska are adopting a new "through-year" assessment approach -- aimed at phasing out traditional end-of-year tests -- as part of the Every Student Succeeds Act's Innovative Assessment Demonstration Authority. The model,

which includes computerized exams throughout the year that offer achievement data to teachers..."

The Marietta district, one of nine in Georgia that, will begin using a computer-based assessment that adapts to students' responses. The new system will collect achievement data throughout the year reflecting students' growth as well as their proficiency levels. Source: Education Dive (October 2019)
https://www.educationdive.com/news/is-this-the-end-of-end-of-year-testing/565850/

▪ **Re-Humanizing the School Experience Time to Play: More State Laws Require Recess**
"Unstructured playtime is making a comeback in schools as frustrated teachers, parents, and advocacy groups demand legislative action... Against a backdrop of teacher strikes aimed at systems that feel unresponsive to teachers and students, an effort to pass laws mandating recess for elementary-age children has picked up steam...The Research Says the benefits of a break in the school day extend beyond the value of the time outside... physical activity improved students' fitness and brain function, enhancing their accuracy and reaction time in cognitive tasks.
'We've seen some amazing changes in our students...Their creative writing has improved. Their fine motor skills have improved, their [body mass index] has improved. Attention in the classroom has improved."
Source: Edutopia (March, 2019)
https://www.edutopia.org/article/time-play-more-state-laws-require-recess

▪ **AI will positively transform teaching and learning**

▪ **"The Machines Are Learning, and So Are the Students**

Artificial intelligence is starting to take over repetitive tasks in classrooms, like grading, and is optimizing coursework and revolutionizing the preparation for college entrance exams...real progress has been made. Slowly, algorithms are making their way into classrooms, taking over repetitive tasks like grading, optimizing coursework to fit individual student needs and revolutionizing the preparation for College Board exams like the SAT. A plethora of online courses and tutorials also have freed teachers from lecturing and allowed them to spend class time working on problem solving with students instead..."
Source: New York Times (December 2019)
https://www.nytimes.com/2019/12/18/education/artificial-intelligence-tutors-teachers.html ▪

"Artificial intelligence is starting to take over repetitive tasks in classrooms, like grading, and is optimizing coursework and revolutionizing the preparation for college entrance exams...real progress has been made."

New Year's Resolutions

✔ **Engage all students in learning robotics.**
Support providing all kids a student robotics experience, ideally in their regular, daytime instructional program; even better, robotics integrated across the curriculum.

Make understanding the shift to an automated world a prominent part of the curriculum. Students are maturing in an increasingly robot-saturated world and should spend time reflecting on changes in their lives they will continue to experience.

✔ **Let's have greater clarity on the purpose and projected usefulness of coding activities.**
As impressive as the quick, broad adoption of Coding in our classrooms has been, the narrative about why there is so much enthusiasm for it and its value to students is not fully clear. A broader discussion about why this skill set is of value to students, how educators should understand its place in their future lives, how it impacts and contributes to their success as learners, and more will afford much greater and empowering clarity around this area of instruction. Hopefully, we'll see much done on this in 2020.

✔ **STEAM for all: revitalize The Arts by re-contextualizing them, leveraging technology to implement in all classrooms.**
The tools and understandings are available; Visual Art, Music, Drama/Literature, and more can be introduced into the lives of today's kids who are hungry for them. A wide variety of digital resources can support this through online

tutoring, and enabling student production of arts products (graphics, recordings, etc.). Above, all the body of insight, shared experience, and resources now available can make the integration of this learning across the curriculum easy and structured in ways to enhance the various subjects in which The Arts can be integrated.

✔ **Foster student creativity and innovation in our classrooms.**
Acknowledged now as key ways of thinking and applying knowledge in the unfolding 21st century, instructional programs that target these bodies of skills and understandings are still either not offered in any significant way in schools, or are ancillary and tangential. Sufficient bodies of guiding material exist for districts and state departments of education to begin guiding schools in the adoption of practices that address this, as yet, largely unmet need.

✔ **Have a fresh look at actually preparing today's kids for tomorrow's world of work and professional life.**
All schools should be able to justify what's being taught with reasons that square with actual needs over tradition. At a minimum, a broad-based discussion throughout the field that fosters taking a fresh look, reflecting on purpose and relevance, and on planning to adjust programs to bring them in line with relevance would make a great platform from which to move forward. *EdTech Digest* is enthusiastic about platforming the conversation and providing background materials to support educators to engage and profit themselves and their students by engaging in it. ∎

Final Words, Coming Attractions—and an invitation to peek at What's Over the Horizon

At the recent FETC (Future of Education Technology Conference) in Miami Beach, *EdTech Digest* presented its own panel, *Welcome to the Probing Edge: Looking at Education's Future, Today!* Moderated by Victor Rivero, Editor-in-Chief of *EdTech Digest*, the panel consisted of:

Rachelle Dean Poth: Author, educator, and President, ISTE Teacher Education Network; Don Wettrick: Former teacher, President at The STARTedUP Foundation; and Mark Gura: Author/Journalist, and Professor of EdTech Leadership at Touro College and New York Institute of Technology, and Co-chair, ISTE Literacy Network.

Don spoke on the future of curriculum and how technology provides a platform for it, Innovation, Entrepreneurship, Open Resource Learning and more. Rachelle, on the future of teacher preparation in support of the way Teaching, itself, is evolving. And Mark talked about how instruction must accommodate the rapid emergence of Robotics in the world our students are preparing to live the bulk of their lives in.

Rather than conjuring up a 'won't that be cool!" vision of a possible future for Education, the parameter set, one that resonated with the audience, was identifying changes that are already appearing in the world of teachers and students; those that are actionable in the sense that through informing themselves about them, today's educators can, through

the application of the 'Connecting Technologies', to a significant degree influence the future they will live, in the not-too-far future—and choose the one they want to live. This is a radical shift in understanding and relationship to the future, one that is presenting itself to us right now. Further exploration of this shift in perception will drive an appreciable amount of what's planned for *EdTech Digest* in 2020. There'll be more on Student Robotics, Digital Teaching and Learning Assistants, STEM/STEAM, Digital Content, and Fostering Student Creativity and Innovation. Stay tuned and (word to the wise) don't get too comfortable in your understanding of Education, how it's defined, the goals it takes aim at, and how it will be accomplished. We're looking forward to an appropriately exhilarating and transformational wild ride over the next year. You're invited to join us! ■

> "Our vision ... is a world where **every student graduates confident and prepared**. Having our platform recognized by EdTech Digest is a testament to the work and commitment that the Course Hero team demonstrates every day to help make that vision a reality."
>
> *—Andrew Grauer, Co-founder and CEO, Course Hero*

Course Hero, an online learning platform curating over 25 million course-specific study resources, won EdTech Digest's Cool Tool Award for Best Product/Service. Learn more about The EdTech Awards.

EDTECH1000
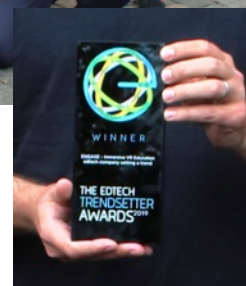## COMPANIES TRANSFORMING EDUCATION

STATE OF EDTECH

A Group Effort

These companies are making a big difference in shaping the future of learning.

By VICTOR RIVERO

TRENDSETTERS: Founded in 2014, VR Education Holdings is a VR/AR software firm dedicated to changing how educational content and corporate training are provided and consumed. Winner of **The EdTech Trendsetter Award** as part of The EdTech Awards 2019 presented by EdTech Digest, the UK-based company's ENGAGE platform is making ripples worldwide.

Intent on transforming learning, these dedicated companies and organizations form The EDTECH1000 List. The leading-edge, trendsetting innovators here represent every type of outfit, from small startups to large, established firms across K-12, higher education, workforce learning and upskilling sectors. The individuals that make up these stellar teams all share in common a determination to make a difference for learners and leaders everywhere, and continue to shape the future of learning. While today there are but a handful of billion-dollar companies, by 2025, some estimates show that there may be over 100 unicorns in this space. For those listening closely to students, teachers, parents, employers, employees and learners of every variety—the lesson

is: that, if you can identify a need and create a solution that goes above and beyond to truly help answer that call, and really contribute to authentically advancing the goals of learning, then you will rightfully take your place among the most successful edtech companies in the world. The ones that ultimately last are those transformative companies that are most determined to put learners first. Worldwide, there are more than just a thousand, some are winners of The EdTech Awards including the Cool Tool, Leadership, and Trendsetter awards—but all of them are driving forward into the future and get up in the morning with a purpose to help better the current state of education. Here is but a small tip of the hat to those brave teams!

EDTECH1000
COMPANIES TRANSFORMING EDUCATION

360 Alumni
3A EDucation
3Doodler
3M
500 Startups
A.D.A.M.
Aakash Educational
Services Pvt. Ltd.
ABC-CLIO
ABPathfinder
Abl
Academic Progress
Accelerate Learning
Accel Partners
Accuplacer
Achieve3000
AchieveTheCore
ACT
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
Benq
BenchPrep
BeRobot
BETT
BiblioNasium
Big Word Club
BigBlueButton Inc.
BirdBrain Technologies
Blackbaud
Blackboard
BloomBoard
Bloomz
Bloxels EDU
BNC
BocaVox
Book Creator
BookNook
Bookopolis
BookPagez
BoomWriter
Boulder Learning
Boundless
Boxlight Mimio
Brain Hive

more next page >>

COMPANIES TO WATCH

1

2U. Currently pushing 'Edtech with a human touch' — they continue to power world-class online education and now, in-person boot camps. They are going beyond traditional learning management systems in using technology, people, and data to help top universities transform in the digital era—but their shift in emphasis toward the working adult space is something to keep an eye on.

2

Cengage. Serving higher education, K-12, professional, library and workforce training markets worldwide, the Boston-based company undergoing a merger with educational publisher giant McGraw-Hill Education is part of a reshaping and digital shifting of the college textbook landscape promising improved affordability, extended choice, and high-quality products for faculty, institutions, and students.

3

Coursera. An edtech unicorn, the company offers courses, certificates, and degrees online from universities and companies; they collaborate with nearly 200 of them, and from a 2019 Coursera Learner Outcomes Survey, "87% of people learning for professional development report career benefits like getting a promotion, a raise, or starting a new career."

4

Guild Education. Redefining the future of work and adult education with tuition reimbursement, online programs and degrees for working adults —the female-founded, venture-funded, mission-led firm has the more than 30 million working adults without a high school diploma in its sites, plus the 70% of the US population that doesn't have a college degree. Employee tuition benefits is their pathway.

COMPANIES TO WATCH

EDTECH1000
COMPANIES TRANSFORMING EDUCATION

Brainly
BrainRush
Breaking the Barrier
Brett E Shelton
Bridge Int'n'l Academies
Bridge U
BrightBytes
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
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
CoSN
Course Base
Course Hero
Coursera
Creation Crate
CreatieLIVE
Creya Learning &
Research
Cricksoft
CSG PR
CSI Literacy
Cudoo
Cuppla Technology
Curiosityville
Curious World
Curriculet
Curriculum Associates
Curriculum Crafter

more >>

5

KnowBox. The Chinese K-12 online collaborative learning platform serving primary and secondary education teachers and students closed over $150 million in funding and is another edtech unicorn. The company is looking to artificial intelligence (AI) as they move forward, and its teaching tools and AI-enabled adaptive learning services for students is of particular interest.

6

PowerSchool. Having completed its acquisition of Schoology, the company is "Creating the most comprehensive unified classroom solution to empower teachers with personalized learning functionality, improving education outcomes for all students." All 45 million, to be exact. The company is now in 80+ countries, and employs nearly 2,000 people.

7

Unacademy. Billing themselves as "India's Largest Learning Platform" the Bangalore-based edtech company with a new $110 million in funding from among others, Facebook, started as a YouTube channel before launching its own platform and app. With 1 million videos and over 10 million downloads, they'll now be looking to move into test prep as well as bringing on leading educators.

8

Skyward. A software company specializing in K-12 school management, they've been around since 1980 and while they've kept current, their values have remained the same in serving over 1900 school districts and 7 million students with their solutions. EdTech Digest named Skyward 'Company of the Year' for 2019.

COMPANIES TO WATCH

EDTECH1000
COMPANIES TRANSFORMING EDUCATION

9

BuzzMath. This impressive little Canadian company (Scolab Inc is the company; their flagship product is Buzzmath), offers a beautifully-done e-learning resource for math students in elementary and middle schools. They offer more than 10,000 interactive activities and are setting a great example of how to really engage learners through smart, beautiful content.

10

Flinn Scientific. In 1977, Lawrence Flinn Jr. quit his job and started a business that focused on science teachers and their needs. The science classroom supply company has seen continued growth and has evolved to offer a half dozen high quality digital resources as well, including FlinnPREP and FlinnSTEM.

Curriki
CyberFlow Analytics
CYPHER LEARNING
CZI
D2L
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
edWeb
eDynamic Learning
Elesapiens
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

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
FSR
Fuel Education
Fulcrum Labs
Full Measure Education
FundersClub
Funds For Learning
FutureLearn
Gadget Software
Galvanize Labs

more >>

Gather Education
GCI Education
General Assembly
Generation YES
GetSmarter
Getting Smart
Globaloria
GoConqr
GoEnnounce
GoGuardian
Gojimo
GoNoodle
Google for Education
GoReact
GPA Learn
Gradeable
GradeHub
Grammarly
GrandKeyEd
Gridstore
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
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
Kurzweil
L Wolfe Communications
Lab4u
Labster
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 Evolution
Learning Games Studios, Inc.
Learning Upgrade LLC
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
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 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 >>

EDTECH1000
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
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
Scholastico
School Improvement Network
School Specialty
Schoold
SchoolMessenger
SchoolMint
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
Smithsonian

more >>

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
Voxy
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
Zaniac
Zaption
Zinc Learning Labs
Zoom
Zoozil Media, Inc.
zSpace

To be part of the
**EDTECH1000: Companies
Transforming Education**
write to:
edtechdigest@gmail.com

Discovery
EDUCATION ™

We ignite student curiosity and inspire educators
to reimagine learning with award-winning digital content
and powerful professional development.

www.discoveryeducation.com

aruba

a Hewlett Packard
Enterprise company

Empowering students, faculty and staff with a mobile-first learning environment.

www.arubanetworks.com

National Coalition for Technology
in Education & Training

Promoting the effective use of technology
to improve education and training in America.

www.nctet.org

BE A PART OF THE LARGEST AWARDS PROGRAM FOR EDTECH

THE EDTECH AWARDS

THE EDTECH
COOL TOOL
AWARDS

THE EDTECH
LEADERSHIP
AWARDS

THE EDTECH
TRENDSETTER
AWARDS

K-12 + Higher Education + Workforce

ENTER THE FUTURE OF LEARNING:
www.edtechdigest.com/enter-awards