

The Edutech Weekly

Author: WYCLIFF COWARD

21 SEP 2019

1

Is education ready to work in data-intensive environments?

blogs.worldbank.org

By Cristobal Cobo 09/03/19

What do initiatives such as personalized and adaptive learning, chatbots for education, automatic translators or the use of predictive learning analytics have in common? All of them are components of a 'data-driven education'. In many countries, there is a clear interest in expanding the role of digital technologies in education, which inevitably is leading towards more data-intensive educational systems. With the growing interest for adaptive intelligent tutoring systems offering natural language interaction, tools for predicting school dropout or new automated systems to boost student recruitment, it is likely that the importance of data-intensive technologies for education will increase in the years to come. Although such digital innovations can bring new benefits, it is also important to understand that they could transform the current landscape of education in unexpected directions. The loss of, unauthorized access to, or disclosure of, personal information has gained media attention recently, but lack of transparency, automated bias, or the use of data to influence user behavior, are also very important challenges that need to be weighted when exploring these trends. The changing landscape of education will require not only that students and teachers become more data literate, but also that education organizations and administrators will have to develop a (more) proactive and comprehensive strategy when planning for, implementing and increasingly interacting with data-intensive education systems. With

(advanced) intelligent systems (for instance, those capable of identifying patterns or recognizing voices, faces, images, texts or even keystrokes), there is going to be a greater need for education in algorithm literacy. This will mean not only having to expand some of the current definitions of digital literacy – including those related to the use of artificial intelligence (AI) – but also to develop new institutional capacities, supporting educators and administrators to adopt these tools in safe, ethical, and transparent ways. The growing relevance of data-intensive systems opens new challenges (and questions) that are expected to play a critical role during the coming decade. Here are some of the questions that will be important to systematically consider and answer within (and outside) educational institutions as countries adopt tools that enable more data-driven educational practices: Privacy and data protection: Who has my data? Is the data secure? What data is held where, and who has access to it? Who is tracking me? What are my rights? How to protect my privacy? Where to get related help? Ethical use of data: What are the risks of relying on automated systems? How to embrace technological solutions for education without ignoring ethical implications? In what processes and circumstances are the data-intensive systems (AI) appropriate to be used? Data Accountability: What assessment has been made of the ethical use of data? Has the data been captured with the knowledge and consent of all the parties involved? If personal data previously collected is intended to be used for a new purpose, what should be done? What are the quality control mechanisms that need to be in place and implemented to use the best possible data? Algorithmic literacy: What positive and negative impacts could the use of AI in education have on people? How to critically assess outcomes from the use of AI systems? To what extent

should current frameworks of digital literacy address a deeper understanding of the ethical and social implications of big data? Agency and responsibility: How to prepare students and educators to protect themselves from unintended uses of technology? Can end-users be more actively involved in the design or application of data-intensive tools for education? Bias awareness: How to minimize the impact of bias on certain users or groups? What datasets is/was the algorithm trained on and what are their limitations and potential biases? Transparency: How are student data collected, analyzed and used? How to overcome the 'black box problem', when an algorithm's complexity is inscrutable even to its developers? What are the best practices to keep a transparent data policy? How to keep the data clear, consistent, and understandable? Explainability: What does it mean to open AI's 'black box'? How to make related terms and conditions more user-friendly? (Here is an interesting example of simplified terms and conditions of different social media.) There is little doubt that there is a growing need for amplifying and diversifying existing conceptions of what it means to be 'literate' in a digital age. As new frameworks are elaborated to enable higher levels of transparency and accountability, people and institutions will need to understand these challenges and educate themselves on both opportunities as well as the societal impacts of these innovations. According to a recent report from UNESCO on this topic, there are at least six major challenges: Developing a comprehensive view of public policy on AI for sustainable development; Ensuring inclusion and equity for AI in education; Preparing teachers for an AI-powered education; Developing quality and inclusive data systems; Enhancing research on AI in education; and Dealing with ethics and transparency in data collection, use, and dissemination. The growing volume

of data being collected within an education system could offer richer, more sophisticated overviews of how students are learning, and provide useful insights on how to better support them with the use of technology. However, many fundamental questions remain related to the potential long term consequences of tracking and profiling today's students. The availability of good data can help lead to making good decisions. This is true in education, as it is in other sectors. But the opposite can also happen if the right actions are not taken. If we are entering into the 'datafication of education', countries will need to define rules and guidelines to ensure that present and future technology-enhanced education becomes beneficial, reducing and mitigating risks along the way. Although it is much too early to predict the potential impact of the use of AI in education, it is not early to discuss how to better prepare for the world that is coming. Here is a selection of relevant initiatives and sources that can be of help for those who would like to learn more about this topic: Artificial Intelligence (AI) and Education (Congressional Research Service, 2018) Global guidelines for Ethics in Learning Analytics (International Council for Open and Distance Education, 2019) Memorandum on Artificial Intelligence and Child Rights (UNICEF Innovation, Human Rights Center, UC Berkeley, 2019) Data Ethics Decision Aid and toolkit (Utrecht University, 2017) ETICO platform for targeting ethic issues in education (UNESCO-IIEP, undated) Review of the online learning and Artificial Intelligence education market (British Department for Education, 2018) A basic introduction to AI (University of Helsinki and Reaktor, 2018) You may be interested in the following related posts on the EduTech blog: What are developing countries doing to help keep kids safe online? On-line safety for students in developing countries Who owns the content and data produced in schools? Note: The image used at the top of this blog post comes from Christa Doodoo on Unsplash. All photos published on Unsplash can be used for free.



Reuters

Blackboard Adds Ally Accessibility Tool to D2L Brightspace

<https://thejournal.com>

By Rhea Kelly 07/11/19

Blackboard's Ally accessibility tool is now available for D2L's Brightspace learning management system. With this latest integration, Blackboard Ally is now available for several of the major LMS platforms in the U.S. education market, including Blackboard Learn (Original or Ultra experience), Blackboard Open LMS, Canvas and Moodle.

Blackboard Ally automatically check for accessibility issues in course materials, generates alternative accessible formats (including mobile-friendly HTML, audio, ePub, electronic Braille and a translated version), and supplies reporting on the state of content accessibility at the course and institution level. The tool also provides instructors with guidance on how to make their course materials more accessible.

"We're thrilled to expand the number of institutions and learners who have access to Blackboard Ally," said Nicolaas Matthijs, product director for Blackboard Ally, in a statement. "Our vision has always been to work across the different LMS solutions and make Ally available to as many students and institutions as possible. We're looking forward to expanding our community with new institutions who share our commitment to improving the quality of the educational experience for all students."

Illuminate Adds FastBridge Assessments to Portfolio

<https://thejournal.com>

By Dian Schaffhauser 07/16/19

Nearly a year after Illuminate Education was formed of the integration of five separate education companies, Illuminate has acquired another data operator in the education space. FastBridge Learning produces products and assessment platform intended to help teachers measure and monitor student progress.

The merger a year ago brought together

formative assessment and data platforms (Illuminate Education, SchoolCity and Alpine Achievement) with a formative item bank provider (Key Data Systems). By merging the offerings, explained Adam Berger, chairman of the new entity, at the time, the integrated company would be able to deliver "all data on a 'single pane of glass' - providing a holistic view of the child that efficiently and effectively informs instruction."

The addition of FastBridge has added "research-driven innovation to assessments while consistently providing exceptional attention to districts," added Christine Willig, CEO of Illuminate, in a statement.

FastBridge's Formative Assessment System for Teachers (FAST) combines curriculum-based measurement and computer-adaptive testing for reading math and social-emotional behavior.

A school district that has been working with products from both organizations reported that the combination has proven valuable for its educators. "The amount of time spent collecting data has drastically reduced which allows our teachers more time to analyze student performance, collaborate with other professionals and collectively develop a plan of support for success," said Crystal Steinmetz, director of curriculum and assessment at Garden City Public Schools.

Google Launches Comprehensive CS Resources for Educators

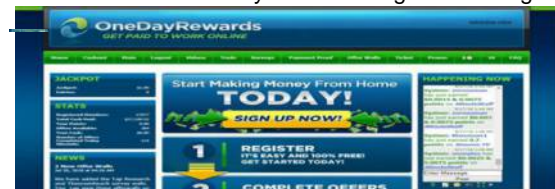
<https://thejournal.com>

By David Nagel 07.08/19

Google today launched Code with Google, a new compilation of resources for K-12 educators for exploring computer science in the classroom.

According to Google, "We believe that training, resources, and community for teachers are key to improving equity in CS education and expanding access for all students. Code with Google is our new comprehensive resource for educators. It brings together Google's free curriculum and programs that build coding skills - from beginner level to advanced to help students succeed. Teachers can integrate CS First into their classroom, guide their high school students to the free code learning app Grasshopper to learn Javascript, or share CS scholarship opportunities with students."

Google also announced it's awarded a \$1 million grant to the Computer Science Teachers Association, which will be used to "support their mission of building community and providing CS professional development to teachers in communities across the U.S. Through CSTA's national network of chapters, more teachers will have the resources they need to bring CS learning



The Teaching Profession: Why you should join a PLC

<https://ww.teachhub.com>

By Kathryn Starke

A PLC is a commonly used term in the teaching profession that refers to a professional learning community. As the name implies, a PLC is a specific group in education where teachers and administrators can learn from each other. A PLC differs in the details from one school to another. However, the overall purpose remains the same – to improve student achievement by improving the knowledge and skills of teachers. A professional learning community may exist on a volunteer basis, or it may be a requirement for every faculty member.

A PLC is most often created based on a particular subject course or grade level. It can also be implemented to find a solution to a specific educational issue or concern. Suggested ideas may include conversation around the following questions: What is our plan to increase reading levels or math proficiency? What can be done to maintain a better home to school connection? or How can we increase attendance? The makeup of the PLC may also differ based on the question at hand or who the topic most closely affects. Examples may include lower grades, resource teachers, or teachers with students receiving special education services. Each professional learning community designates a set meeting time (either once a week, biweekly, or once a month) before or after school, and location (usually in the school building) to collaborate and communicate about the proposed theme.

How to Join a PLC in the Teaching Profession

Professional learning communities are referred to by a variety of names depending on the school, district, or region where they are hosted. These groups support peer teaching and learning, and they all follow the same principles. Some PLCs invite teachers to join a community that closely matches their interests. An easy, effective way to gauge interest and preference is to conduct a survey. Asking teachers to make their own suggestions for a PLC increases engagement and helps make future planning easier. Some schools require faculty and staff members to attend at least one PLC. In this instance, the school has a designated time and place to meet and the groupings are assigned by the principal, assistant principal, or instructional coach.

It is certainly possible that a school does not have a professional learning community to belong to. If this happens to be the case and there is not a PLC to join, a teacher should take the initiative and create his or her PLC that may be of interest to their colleagues. Teachers know what they want and need in terms of support and professional development. Some of the most effective PLCs have been structured and implemented by classroom teachers. Even reading and math specialists have started their own professional learning communities within their own schools. Choosing a book or articles to address the most challenging aspects of teaching reading or math at the elementary or secondary level can increase active participation. A final option is to join or develop a PLC online, connecting with teachers beyond your grade level, school, or even district. Web-based educational platforms like Teachers Connect have brought the concept of a professional learning community online so that teachers can feel comfortable asking and answering questions they may not feel comfortable asking in front of colleagues. This option provides flexibility for an educator's

schedule, since they can participate any time of day, seven days a week, 365 days a year. They have specific communities that anyone can join, including literacy, self-care, or mindfulness. Teachers do not have to be invited to Teachers Connect; they can simply join the group of educators to engage in conversation, then select a group that is most relevant to their interests or needs. Finally, professional book clubs are also a popular PLC option, both online and offline.

The Advantages of a PLC

Professional learning communities were originally designed to support teachers to continue expanding upon their expertise. Teachers are lifelong learners, so the PLC is an educational extension for the professionals outside of the classroom to grow as an educator every day in the classroom. It is important to remember that in a PLC setting, everyone is learning, so each person's voice is valuable. In this setting, everyone is on the same team and there is no hierarchy among the staff. The principal, a classroom teacher, and instructional assistant are all on an equal playing field in the small group. Everyone brings his or her own skill set, knowledge, and expertise to the conversation.

One of the most advantageous professional learning communities seen in schools at the elementary or secondary level is a cross-grade level or crosscurricular PLC. The cross-grade level PLC gives teachers the opportunity to find out what their students learned in the previous year and what they will be learning the following year. Teachers often become so laser-focused on the "Right now" that they forget where the children came from or what will happen in a student's educational career beyond this one school year. This type of meeting gives teachers a perspective on the academic continuum from one grade to the next as well as background information on a child's personal story. Crosscurricular PLCs really help teachers with planning,

specifically learning how to coordinate science and math lessons or integrate history and English units. Teaching reading across the content is another great example of a cross-curricular PLC. Whether online or in-person, the common components are evident in a PLC. When a teacher can grow and learn through discussion, questioning, research, strategy, action, and reflection, they are taking advantage of a professional learning community. In education, we learn the most by sharing and teaching others, which is clearly defined by a PLC.



Reuters

Reducing Dropout Rates Through CTE and Interactive Technology

<https://thejournal.com>

By Joe Parlies. 08/38/19

While research from the Association for Career & Technical Education reveals that students concentrating in CTE programs have a graduation rate of 93 percent compared to an average 80 percent, simply having a CTE program as part of a school's curriculum is only a start in reducing dropout rates.

To reduce dropout and improve graduation rates, students need -- and deserve -- CTE programs that are engaging and inspire them to return to the classroom for hands-on training and learning. The learning program must also enable them to learn job-specific skills and provide direct pathways to future careers or training programs.

Solutions that can help meet this need

and enhance the CTE learning experience are virtual and augmented reality. When CTE programs embrace these as part of the teaching and learning process, students are not only more engaged and motivated, but are also directly exposed to training that will set them on the path

to job and career success. As a further benefit, interactive technologies can also help students earn industry certifications prior to high school graduation that are critical for job placement and advancement.

Delivering Learning Outcomes With and AR

Whether through "virtual reality," in which students are fully immersed in the content through a head-mounted display or special glasses, or "augmented reality," in which users supplement their environment with digital content, interactive experiences as part of CTE programs can deliver immediate benefits.

Students are provided hands-on virtual learning experiences that align to course curricula and prepare them for various industry certifications commonly associated with these career pathways.

VR and AR supplement programs that require skills like dissection, mechanics, circuitry and more. While not meant to be a substitute for working with real materials, a virtual environment gives students hands-on practice with a skill or technique until they feel confident and comfortable performing it. These skills are immediately transferable to ongoing learning and career training.

Embracing Failing as a Part of Learning

Failing a test or class, or even making a mistake, can be discouraging for students. When frustration mounts and students struggle, students are at an increased risk of disengaging or dropping out.

Using AR and VR in CTE programs offers new avenues to success in learning. Through new technologies, students can "fail forward." In other words, if a mistake is made the student can quickly and easily try again in a fun, gamified environment. In fact, making mistakes is encouraged, helping students realize that failing is simply part of the learning path. As a result, students are gaining critical training and knowledge, along with soft skills that help them manage setbacks.

Particularly for students at the highest risk of dropping out, this kind of failure safety net can be a game-changer.

The First Steps of a Career Path Prior to Graduation

Interactive learning in CTE programs also delivers equity in learning. This is particularly important in underprivileged schools, or districts whose students may

not typically be able to access the most advances ;earning and training programs as part of their high school education.

Personalized learning experiences in CTE programs expand the opportunities available to students by eliminating consumables, reducing training space and allowing students to practice through virtual and augmented scenarios in a safe environment.

With CTE programs focused on career development, an interactive learning experience enables students not only to have new ways to learn critical skills in a hands-on manner but also to earn certification in a range of industries.

For example, when learning automotive mechanics, students can practice assembly and disassembly within a virtual shop where safety is guaranteed and practice can be repeated. These experiences prepare them for the Automotive Service Excellence (ASE) Certification.

In the area of healthcare, students can embrace self-study experiences hands-on laboratory dissertations, and EGG certification preparation. A recent example is the St. Lucie (FL) Public Schools' use of zSpace and how it enabled its students to earn industry certification towards certified medical administrative assistant, certified nursing assistant, certified first responder and certified echocardiogram technician, all prior to high school graduation.

For agriculture science, students can use AR and VR for hands-on laboratory dissertations for large and small animals and comparative anatomy learning that wouldn't otherwise be available in a high school classroom setting.

Committing a Program Success

Knowing the CTE is the most highly effective strategy for preventing dropout and promoting students onto successful post-secondary school lives, there are a number of different ways educators can approach the integration of VR and AR to ensure it enhances their programs.

First, always focus on engaging students in authentic learning experiences that directly correlate to skills and experiences that benefit them in their future careers. For example, look for interactive experiences that enable project-based learning and other forms of active learning and as a result, meet student needs, academic needs and employer needs.

Next, engage the local business community. How are jobs changing, and what are the skills that students need to be successful? Are there emerging technologies that students can experience through VR and AR to better prepare them for career paths? Continued on page 7.



An edutech app for the deaf by the deaf

<https://gulfnews.com/world/asia/india/>

By Niji N.G. 09/17/19

In the buzzing world of tech start-ups it is not unusual for three youngsters to come together to set up a new venture. But what if all the youngsters are deaf and two of them are women? It is usually the stuff of feel-good movies, not the actual life, until you hear the story of Digital Arts Academy for the Deaf (Daad).

Founded by Remya Raj, Sulu A. Naushad and Abey James, Daad is developing a web-based application for providing computer courses in the Indian Sign Language (ISL). It was short-listed in the 10 best start-ups at last month's She Loves Tech, a global event promoting women in technology in Kochi. "Our product is developed entirely by the deaf," 25-year-old Nausha, co-founder and Finalne Director of Daad, tells GN Focus through the start-up's interpreter, all of Daad's employees are deaf.

"We clearly understand the practical needs of the deaf, which the developers from the hearing community may not realise," She explains. "Our nuanced understanding will reflect in the product,"

Daad's aim is to use the insight the founders have gained from their experience to offer courses that will instill confidence in the deaf and broaden their career choices. Its product offering will include online certificate courses on popular job-oriented computer topics. The videos and tutorials communicate in the ISL - awareness courses for both the deaf and the hearing communities. There are also plans to integrate an artificial intelligence-based tool that automatically translates spoken languages to the ISL.

How it all started

It wasn't until Remya entered the workforce as an IT project manager that she fully realised the barriers a deaf professional faces and how ill-prepared both the workplace and hearing communities are in terms of accommodating the deaf.

"If society and the corporate world accommodate the ISL a bit more generously, deaf people's lives will be more easier," says Remya, 36, CEO of Daad.

She quitted her job and started thinking about setting up a business that would change deep-rooted prejudices about the deaf.

She roped in her family friend, Sulu, while Remy's husband, Satish, a software developer at Technopark Thiruvananthapuram, who is also deaf, put her in touch with Abey, a computer science graduate.

A firm belief in their ability and equality connects them. The hardships they face in their lives are not because of their lack of spoken words, they assert. It is because of society's inability in general to understand the languages in which they communicate.

"People hear with their ears," says Abey, 26, Managing Director and Head of Technology. "The deaf hear with their eyes. That is the only difference. The deaf do not have any disability."

They wanted to prove that the deaf can fully contribute to society and decided an edutech app would be the beset route to fulfill their goal.

They applied to Kerala Startup Mission in 2015, after reading the news report about the facility. It took them three years to cross all the procedural hurdles and clinch a berth. In December 2018, they entered its Incubation Programme at Technopark Thiruvananthapuram, with an initial grant of Rs1000,000.

"We always look at the team first and the fire they have," Says Arun G., Assistant Manager at the Incubation Center. "Only then do we look at the idea. The team at Daad are

passionate about their cause."

What's in store

The trio have broken many stereotypes through their lives and Daad. They've faced a number of difficulties in leading a fully active life, from the general public' insensitive attitude to its complete lack of awareness and empathy. They have overcome all these and reached a stage where they are a step away from realising their dream. Perhaps what they now need is a deaf investor, or at least an investor who is not deaf to their passion.



Reuters

Arist Sees the Future of Global eLearning in Text Messages

<https://learningsolutionsmag.com>

By Michael Loffe 09/18/19

Two years ago, I found myself banging my head against a wall trying to figure out how to deliver digital learning content to students in Yemen.

The problem? Most students in Yemen, an impoverished country which has been engulfed in war for over four years, don't have reliable access to the internet. They also face an educational system in complete disrepair and many are desperate to learn. The lack of technology and internet access are enormous barriers to residents' ability to access MOOCs and other eLearning, even when content is free and available in Arabic. It's not only Yemen; technology barriers to global eLearning are common.

After a series of conversations with Mohammed Al-Adlani, a student leader in Yemen whom I befriended through my work with TILE.org, an entrepreneurship education organization I had founded, I began to realize that text messages could be the solution. Over two-thirds of the country had access to cell phones, and delivering course content over text message could be a viable solution.

Compelled by the power and reach of text messages, a close friend and I spent the next few months brainstorming what text message learning could look like. After lots of trial and error (and tons of guidance from professors at Babson College and USC), we ended up building the first text message course in March 2018, which taught Community-Oriented Entrepreneurship over 30 days entirely using text

messaging. The course was designed to be free, accessible, and easy to translate into different languages, with teens as a target audience.

To test the concept, we piloted the course in May 2018 with around 100 students from UCLA, Babson, Lincoln High School in Portland, and a handful of other locations globally.

The feedback from students—gauged by a follow-up online survey, in-course response tracking, and one-on-one interviews—was instant and passionate. Completion rates were very high—about 92 percent—and over 90 percent of students loved the experience of learning with text messages.

Students reported that they felt more productive, more engaged with the educational content, and more knowledgeable overall, with one student even reporting a sense of withdrawal after the course ended.

Effective, engaging, and flexible

Inspired by the positive feedback for the first text message course, and after seeing research confirming the efficacy of text message learning, we realized that text message courses could be as effective as they were accessible. We considered the possibilities for teaching topics as diverse as harassment prevention and architectural history. Here's why:

• Texts are (by nature) short, meaning writers are forced to use only the most important and relevant content

• Texts meet us in our most native, intimate, and frictionless environment—our messaging apps, where we regularly communicate with our close friends and loved ones

• Most text message courses are delivered every morning over the course of a month, embedding learning into daily routines and nudging learning and action on a regular basis

Arist pilots a new eLearning model

We've taken what we learned and, over the past year, our team has been building Arist. This text message learning platform lets companies, in-

stitutions, and individuals seamlessly create, launch, and assess text message courses for all types of learning and training use cases.

Arist text-messaging courses are compatible with SMS, Facebook Messenger, and WhatsApp. This flexibility and accessibility makes them ideal for students who have an enormous desire to learn but face unstable internet or lack access to technology. For example, over half of the planet still lacks access to the internet speeds necessary for watching a MOOC.

Furthermore, Arist is now being used or piloted to improve learning and training outcomes at a number of leading universities, including Babson College, and over a dozen Fortune 500 companies, and we're excited to make text message learning a reality for hundreds of course creators, training directors, and professors over the coming year.

We are also excited to be launching versions of Arist's flagship Financial Literacy and Entrepreneurship courses in Arabic over the next few months, finally making text message learning a reality in Yemen.

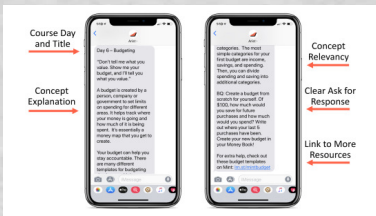
Making learning accessible globally

The best part? For each text message course taken on Arist, we donate one to students in need through our network of nonprofit partners. Our aim is to ensure that underserved regions like Yemen gain access to high-quality educational resources.

One example is Dream in Mexico, an initiative led by Harvard professor Maria Luisa Parra. This fall, Dream in Mexico will launch a series of text-message courses for undocumented immigrants who have been deported and no longer have access to educational resources.

At Arist, which supports a 501(c)3 organization and a foundation, we believe that text message learning will have an enormous effect on eLearning over the next decade. Explore our vision, try out a text-

message course, and learn more about using the Arist platform. Here's to learning!



Reuters

Continued from page 4.

To ensure educators are maximizing the learning opportunities of interactive technologies, align professional development efforts to help teachers understand the principles of quality CTE teaching and learning. Teachers and staff need to have the skills to integrate the technological components into the classroom.

Finally, always evaluate! Are the programs and technologies meeting the needs of the students, post-secondary educators and employers? Are they generating the results that are needed to ensure future success?

when you think historically about CTE programs, what schools are looking to do is to build a talent pipeline that can easily and successfully transition into careers and training programs. When interactive technologies are a part of the curriculum, students are engaged, stay engaged, and are exploring a specific career goal they can start working towards. VR,AR and MR experiences go a long way in preventing dropouts and developing career-oriented high school graduates.

TCEA 2019: How One K-12 Principal Put Google Classroom to Work

The benefits of this program aren't limited to the classroom. Streamline administrative tasks with easier document sharing and collaboration.

By Amy Burroughs 02/05/19

edtechmagazine.com

Google Classroom has changed the game for teachers. Now, district are discovering that it can be equally transformative for administrators giving principals, teachers and staff a better way to manage the nuts-and-bolts tasks that keep schools running smoothly.

Denise Neeb and Candace Tickle of the Lubbock Independent School District shared their success with Google Classroom at the annual Texas Computer Education Association Convention &

Exposition in San Antonio. Neeb, the principal of Williams Elementary School and Tickle, a digital learning specialist and Google Certified Trainer, presented "The Whole Ball of Wax: A Place for Everything," on Monday.

Google Classroom Proves a Robust Organizer for K-12 Resources

Neeb's journey to Google Classroom started with a modest seed planted at last year's TCEA convention. She attended a session and heard someone mention that they had put he platform to work outside the classroom -- in the administrative suite.

"That could work on my campus," she thought.

Plenty of Williams Elementary teachers already already used Google Classroom to manage their teaching duties, but to Neeb, making the leap to using it in her role as principal was an aha! moment. When the time was right to launch a new initiative, she tapped Tickle for help.

Together, they brainstormed a list of possible ways they could deploy this tool at Williams. Neeb had three primary goals: organize her own creative ideas, so she could more effectively share them with her team; organize the many resources that teachers and staff use daily to carry out their duties; and support her staff by giving them a central, consistent and user - friendly way to access and share information.

As it turns out, Google Classroom has helped Neeb achieve all of her goals.

Today, Williams Elementary uses Google Classroom as an ultrapractical tool to manage all sorts of useful information: agendas, lesson plans, staff handbooks, a variety of forms, emergency call lists, new teacher information and more.

"Everything is housed here," Need said. "I know almost everyone at my campus is accessing this resource every day, including me."

The old method was a mix of paper and cloud-based documents but it didn't work very well, Need and Tickle said. Teachers often had to make copies or track down physical documents, and even the electronic versions resided in a variety of places, with scattered ownership and no coordinated approach to access and sharing. Materials are now much more streamlined, Need said, and that saves valuable time.

" Teachers know there is one place to look -- a hub or a landing spot," said Tickle. "They know they don't have to go anywhere else to find their information."

Teachers Save Time and Increase Collaboration on Google Platform

Because districts can devise limitless ways to use the platform, users could achieve any number of benefits. When Neeb and Tickle asked session attendees to come up with suggestions, they readily saw opportunities to use Google Classroom for staff shout-outs, as well as a weekly notice to prevent important information from being buried in email and as a seprate group for principal collaboration.

For teachers, the shared platform is both a timesaver and a reassurance that they know where to find important information.

"It reduces their fear of missing something," Need says.

For her school, the resources have become a "golden" asset on campus. Teachers ask her to put frequently accessed materials on the platform.

From a leadership perspective, the project has another big benefit, Need says: It allows her to mold technology use for teachers and demonstrate her own willingness to learn something new, embrace the learning curve and "fail forward."

She admits that in the beginning, although she was familiar with Google Classroom, she hadn't used it extensively. Asking for help from her resident experts went a long way, she said.

"I felt it gave me a sense of credibility with my staff because I'm asking them to use something, and I'm using it also," Neeb said. As a principal who asks her teachers to innovate and to try new things in their classrooms, even when it feels risky, she wants to set the example. " I'm modelling that for them."

Chrome Extension Supports G Suite Training for K - 12 Educators

For administrators who want to put Google Classroom to work on their own campuses, Neb and Tickle recommend taking advantage of online resources for help and identifying a go-to teacher, technologist or someone else who can help the project move forward.

Users can also download a Chrome extension (Continued on page 9)

In eLearning Video, Attention To Detail Makes The Difference

<https://learningsolutionsmag.com>

By Bill Brandon 09/06/19

If you are going to make eLearning these days, chances are good that you are thinking about using video and calling it “micro-learning.” And the chances are also good that you are thinking about using a smartphone to make that video. You have identified a story that will engage the viewers and you have organized a script that structures that story. But it takes more than a good script and an iPhone to get the quality you want and need to engage your audience.

The problem with many smartphone videos is that creators often don't take advantage of the technology packed into their devices. Fortunately, iPhones and Androids also have apps with the expertise that you may need built in. In this article, I will give some recommendations for equipment and apps.

Your most important challenge may be one that you have not even thought about: audio. In video, audio can seem like a small thing, but it makes a huge difference to the quality of the finished product. Because every smartphone records audio along with the video, it may seem that the audio is “taken care of.” But you probably know from experience that smartphone audio can be terrible. Or you may have struggled with getting an external microphone (mic) to capture audio that is clear and good quality. You might have tried placing a lavalier microphone on an interview subject or actor, only to pick up interference from stray electrical noise or WiFi signals. In this article, I will offer some tips to eliminate these issues.

The eLearning Guild, Learning Solutions, and I have no financial relationship to the companies named here, and there has been no payment, equipment, or software provided in exchange for including them. Their inclusion does not constitute an endorsement by me, by The eLearning Guild, or by Learning Solutions.

Better audio for your eLearning videos

The basic secret to good audio is to think “balanced audio”, as in using a balanced microphone (mic) and balanced cables. Read the linked article above for an explanation about this technology. If you are recording the audio directly to your iPhone or Android (the simplest approach and the only one I am discussing here), you will also need a pre-amp and interface (one device, not two) between the mic and the smartphone.

Microphones (mic)

For your work with video, you want a balanced mic to eliminate noise in your audio. A balanced mic most likely has an XLR connector. (Exception: some balanced mics use a different connector read the product notes!) For most eLearning videos, a lavalier mic is what you will find most useful. If you are doing interviews in a studio setting, you will probably want to set up with two lavalier mics. You can also use handheld mics if you are doing walk-around interviews or recording a phone interview.

Cables

Balanced cables (if needed when the mic and the iPhone or Android are far apart) are critical for great audio without noise or interference. Balanced cables can be 20 feet or more in length, with two shielded conductors. If your mic has a cable that is long enough, you may not need to buy an additional cable. Get a cable with connector types that match what you need for your mic and pre-amp and interface (read the product info and study the pictures!). Do not buy an RCA cable these are not balanced. You may need var-

ious adapters to make connections. Be patient and study your devices and what they require. You can buy cables in any brick-and-mortar tech gear store or online.

Pre-amp and interface

There are many of these devices available. Do a search for “audio preamp and interface for smartphone video”. Popular choices come from Tascam, Zoom, IK Multimedia, and Saramonic. Good gear is not cheap; at full retail prices, the best all-around portable interfaces start at about \$150 and may run as much as \$200. Look for sales and refurbished gear to save money. Good gear will provide the features that you will use the most for basic work “plug and play” plus they support monitoring the audio during recording, provide gain controls, and some will charge your smartphone (if you add an optional DC power supply). Add one or more to your bag of audio gear as required to support your scenario.

Consider buying the pre-amp and interface first, then a mic that is compatible with it (read the instructions!), and only then buy cable if you need it to connect the mic and the pre-amp and interface. Match the choices to your likely scenarios (studio, walk-around interviews, etc.). You should also look for devices that combine mics, mic input options, and interface functions to save on packing space and setup needs.

Edit audio on your iPhone

Here are some app suggestions to consider:

Hokusai Audio Editor: basic audio editing for iOS. Filter out noise, insert or append new files, add simple effects.

Ferrite Recording Studio: iOS. Combine two audio files so that it sounds like a conversation is going on. Add background music. Snip and edit out segments of a recording and join the remaining parts, or insert new files in the middle of a recording.

TwistedWave Audio Editor: iOS audio processing app with features in

addition to those in the other apps, such as fade, amplify, and normalize.

Edit audio on your Android device

Mstudio: Advanced audio editing app for Android, but simple to use without searching through menus and submenus.

WaveEditor: professional audio editing for Android. Record, master, and edit audio files on the go. Zoom, pan, and select. Export to AIFF, FLAC, MP3, OGG, PCM, and WAV.

MP3 Cutter and Ringtone Maker: Android; simple audio file editor, cut or trim audio or music files.

Edit audio on your desktop

Audacity: Mac, Windows, and Linux. Free, but you will need to spend about a half hour learning to use it.

There's an app for better video

Just because you are shooting video for eLearning does not mean you have to shoot boring video. Even interviews can be engaging. I have one suggestion for an app:

FILMIC Pro: iPhone or Android. Said to be the world's best video camera app, with a choice of three shooting modes that provide precision control over the critical settings: focus, ISO, shutter speed. Choice of PAL or NTSC or default 24 fps. Slow motion, fast motion, your choice of resolutions and aspect ratios. Color grading support.

There are others. Look around your app store for alternatives that fit your likely scenarios. Read the reviews. Talk to people that you see at DevLearn who are shooting video.

Putting these ideas to work

Are you already using video but want to improve what you are doing? Maybe you are a beginner who wants to learn more about the topic. On October 22, prior to The eLearning Guild's DevLearn 2019 Conference & Expo, Jonathan Halls will present a day-long, hands-on "BYOD Video Bootcamp for Learning Professionals". He will illuminate what makes good instructional video, based on professional TV production techniques. Participants will learn how to:

Make training video engaging by leveraging video's strengths

Create short video, which is simpler/cheaper to produce

Implement an efficient, effective planning process for video

Adopt and execute the steps in the production process, from storyboard to post-production

Develop a professional production workflow

Jonathan will discuss editing software and using DSLRs and cell phones as video cameras. Note: Jonathan will mainly be talking about using DSLRs to shoot video. Participants must bring a laptop with Camtasia installed (the free version is sufficient), and a set of headphones.

Registration for DevLearn is required in order to attend this video boot camp workshop. Register for DevLearn by Friday, September 6, 2019 and receive a \$100 discount!



Reuters

Continued from page 7.

for G- Suite Training, that will deliver videos and step - by- step help for users.

Beyond that, they suggested, simply accept the growing pains, ask for help and solicit ideas on how to use Google Classroom in your particular district. That was Neeb's approach, and she said she's thrilled with the results.

"I just jumped in and embraced it," She said.

Apple Management Tool Adds Ad Hoc Classroom

By Dian Schaffhauser 07/23/19

<https://thejournal.com>

A company that produces Apple software has just updates its classroom edition, jamf School from jamf, intended for IT or educators, handles mobile device management for education, with three apps, one for teachers, another for parents and a their for students.

Jamf Teacher has added an ad hoc classroom function that will allow students in "close proximity" to the teacher to get a notification inviting them to join, without need for the IT organization to intervene

in setting up the managed classroom.

The content filtering feature now allows IT administrators to manage iOS' built-in web content filter and gives greater control over student access to apps. Also, Jamf Teacher and Jamf Parent give those users the ability to block categories of apps, such as "games" or "social media," to help students stay focused on their work.

"these features will have an immediate impact on our educators' ability to deepen their instruction," said Kevin Wilson, director of information and technology at Duneland School Corporation in Indiana, "Giving teachers the ability to create a classroom on the fly without involving IT or our student information system will allow them to bring lessons to students flexibly and easily."

The company said that later this summer, its "Pro" edition, which previously hasn't included parents or teacher apps, will begin offering a workflow feature that enables teachers to request apps for use in their classrooms through Jamf Self Service, to expedite access. The Pro version will also add access to Jamf Parent, allowing IT to let families guide their children's usage of apps and features on school-issued devices.



Are You Putting Edtech at the Head of the Class?

<https://edtechdigest.com>

By Cheryl Miller 09/11/19

Study shows classroom technology a top priority for students to compete in a tech-driven world

Today's educators are at an impasse. The industry puts a high premium on student engagement and innovative, technology-based learning methods, but as a recent study found, there are still many barriers to edtech utilization in the classroom and they are only getting harder to overcome. As the modern world is increasingly technology driven, expectations are growing for teachers to help their students better utilize new technologies to stay competitive.

The truth of the matter is that student achievement and results are, in large part, driven by proper utilization of edtech in the classroom. Without a clear strategy in place, students will often be unengaged with lesson plans and ill-prepared for the modern world in the future.

But the same study showed that administrators often prioritize student achievement and results over delivering educational benefits through technology, even though these two ideas are not mutually exclusive.

Teachers and administrators do agree however: edtech is critical to contemporary learning. With this as their foundation, it is time for the two to come together and develop strategies that put edtech at the front of the classroom to achieve their goal of meaningful classroom results and student engagement.

Why tech has taken a back seat

Edtech's benefits are widely known. School systems use education technology every day to reinforce student-teacher engagement, enhance collaboration, make learning interac-

tive and cater to individual student needs and learning styles. Even with these benefits however, its role in the classroom is too often limited.

More than half of teachers reported a lack of appropriate or working technology which prevents them from tackling common teaching issues. Furthermore, a vast majority of administrators felt budgetary restrictions would have the largest impact on students' education this school year including challenges deploying connected devices and new hardware in their districts.

So, without proper access to functioning solutions or the budget for new ones, it's no wonder teachers and administrators have their eyes set on other priorities.

Keys to keeping up

Although it is often assumed educators are forced to play catch-up with their students when it comes to using technology after all, today's K-12 students are all digital natives teachers now say they know more about tech than their students, and they're not afraid to use it. In fact, today's educators are confident they have the skills necessary to help students responsibly use technology while also driving results and classroom achievement.

All too frequently, however, districts implement technology without a vision for measuring success. It is hard enough to craft the perfect budget, organize professional development classes and get students involved, that establishing a well-defined end-goal can feel tedious. That is, unless you establish key performance indicators at the start.

It's important for administration to continually evaluate the success technology has in the classroom. Those surveyed felt they could identify successes with classroom technology by measuring student engagement, academic results and teacher feedback and then adjust their approach accordingly. An example of a district that continually measures the

success of its classroom technology is Sarasota County Schools in Florida.

From the beginning, the administrative team established an evaluation committee made up of teachers, administrators, and support staff to uncover how each new solution enhanced and complemented teachers and students' daily activities. The result has been a well assimilated edtech implementation with positive feedback from both teachers and students on classroom engagement.

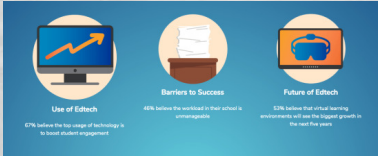
1:1 can't act alone

Another recent report showed more than 50 percent of teachers use 1:1 computing in their classrooms, allowing students to access the internet, digital textbooks and digital course materials as needed. While it's one of the most prevalent trends in K-12 education, many teachers think if used improperly, it can hinder students' interpersonal collaboration by promoting individual working environments. But it doesn't have to.

Teachers have found that student-centered edtech can help drive active teamwork in the classroom. For example, District 7 in Spartanburg, South Carolina uses interactive displays that integrates with 1:1 technology to allow teachers to share students' work with the rest of the classroom. By displaying it on an interactive display, teachers can marry two beneficial technologies and allow students to not only have more personal access to technology, but better engage with one another creating a dynamic classroom experience.

In all, there are certainly some roadblocks to increased utilization of technology in the classroom. However, by establishing a strategy from the start, ensuring teachers are equipped and making sure the solutions in place work together to create a dynamic learning environment, districts can make smarter edtech decisions and work together to achieve their end goal of enhancing the student learning experience and overall achievement.

Cheryl Miller has over 20 years of experience in the tech industry. She is Chief Marketing Officer at Prometheus and was previously at Microsoft serving as GM of the One Commercial Partner Team, leading the worldwide go-to-market efforts. Prior to this role, she held positions at F5 Networks, Symantec and VA Linux. Connect with her through LinkedIn. Write to: Cheryl.Miller@prometheanworld.com.



Reuters

Ozobot Classroom Aims to Make STEAM Learning Measurable.

<https://thejournal.com>

By Bavid Nagel 07/22/19

Ozobot is launching what it's calling the first "STEAM learning management system," Ozobot Classroom.

Ozobot is the maker of robotics kit for classroom settings. The kits are designed to teach coding and offer numerous lessons (more than 150 as of this writing) and educator resources.

Ozobot Classroom will support its existing kits and will, in fact, be free with the purchase of any kit with 12 or more robots. (It will also be free for those who have already purchased kits.) It includes an educator dashboard with student profiles, the ability to track student data, status updates for the robots (such as battery level), guides and lessons. Student data tracking allows educators to see which students are in need of additional help. Digital badges allow educators to recognize students' achievements.



Ozobot also launched a lesson sharing tool with rewards for teachers who submit

their lessons.

Ozobot Classroom is expected to be available for the fall semester. It debuted at the ISTE 2019 conference last month. Further information can be found on Ozobot's site.

Buena Vista U Online Master's Adds Teacher Tech Integration Track

<https://thejournal.com>

By Dian Schaffhauser 07/18/19

Iowa's Buena Vista University is launching a new track within one of its online master's degrees that uses Discovery Education's streaming service and teacher professional learning community. The new "teacher technology integration" track is a concentration for the school's online Master of Education in Teacher Leadership, designed to help educators pick up skills and strategies for running digital classrooms.

The university said in a statement that it was "excited" to launch the new venture. "Discovery Education's deep expertise in creating engaging classroom experiences perfectly supports Buena Vista University's powerful, online education programs and will benefit not only participating teachers, but the students they serve as well," said Lucas DeWitt, program director of the master's program.

This isn't the first time Discovery has teamed up with universities as part of graduate-level education. The company said it has participated in similar arrangements for the last decade, helping to design courses to help teachers learn how to work with digital resources.

