

Using Technology to Improve Our Schools

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Abstract

Technology around the world continues to change each day. Some may see these improvements as a positive advancement in society, while other may disagree. Today schools are starting to use technology in the classroom and how that technology is used can promote student learning. This subject covers more than using just best practices, it covers how students learn and how to apply what they have learned for real-world circumstances. Administrators and teachers can use immediate feedback from the data they receive through their instruction and plan accordingly to make sure those students are completing meaningful assignments.

Each side can use individualized learning techniques, blended learning models, offer alternative resources outside the classroom, and use real-world skills to prepare their students. These administrators can help teachers use these ideas through PLC meetings, modeling, and professional learning opportunities. By using these skills in the classroom, teachers can help students become successful presently and in the future.

Key words: technology, learning, collaboration, feedback

Introduction

Technology, something that changes daily, can always be improved, and effects each person around the world! The focus on technology can be seen throughout history and continues to shape the future. Advancements have allowed for people to stay connected around the world and improve life in many ways. All around the world, people can reach in their pockets or look at the environment around them to see these advancements. People have even been placed on the moon because of technology! Technology has also changed the way schools, administrators, and teachers educate the students in their classrooms. These changes have allowed for schools to focus their time on reaching the demands of these students; including the way each of them learns and processes information.

Collaboration

Administrators and teachers must collaborate on how technology can help. These leaders choose which resources to use daily and how they can be used effectively. If not used correctly, technology can create a boundary between those involved in education; eliminating the relationship between the school, administrators, teachers, and each student. This can then lead to students becoming uninterested in their education and effect their future. Those involved in the school system also need to take advantage of technology to make sure the best educators are preparing students for that future. Administrators need to use technology to connect these students to real-world situations; preparing them for their future careers and lives as citizens of the world. When technology is used in schools, administrators and teachers need to make sure

the resources are used properly and in a way that makes a difference in the lives of their students; preparing them for the world outside of the classroom once they finish school.

Using Technology to Make a Difference

Administrators allow themselves to have plenty of resources when using technology to improve or maintain their schools. These resources allow for access to immediate feedback and ways to monitor teacher and student success. They can then make informed, proven decisions on what best works for their school. That same data can then be used to monitor best practices and hold everyone accountable in reaching the needs of each student (Gates, 2015). This really helps when administrators must make informed decisions about retaining and hiring teachers in their schools. They have proof on why certain teachers or candidates fit the mission and goals they schools hold most desired. If teachers are willing to work with administrators and schools, they can be placed in specific professional learning programs on how to use the data in their classroom (Lexia, 2016). This will be especially helpful when setting up our own mission and goals at the beginning of each school year. We can look at the data from previous years and make informed decisions on how best to proceed.

Best Practices Work

As administrators, technology can help model and showcase best practices using professional development with teachers. Administrators can use their meeting times for a purpose in creating an environment in which the teachers become part of the solution. We can collaborate with teachers to show the positives in using technology in the classroom and how it can make reaching every student easier. Technology can allow for teachers to focus their time

on building relationships within the classroom (Dorricott & Peck, 2004). Each student needs to feel welcome and be engaged during the entire school day (Capella University, 2017). Teachers can use the immediate feedback from assignments, quizzes, tests, etc. to place students in the correct learning environments where they can learn at their own pace.

Administrators can look at the data this technology provides to collaborate or provide feedback on how to improve and modify lessons (Holl, 2018). This in turn allows for teachers to save time on planning and create lessons that meet the interests of everyone in the classroom, including themselves (Dorricott & Peck, 2004). Educators have been able to create these lessons to explore and create, rather than “drill and kill (Stanford, 2014).” This means that students will still be able to learn at a high level, even without the teacher standing right by their side. Again, the focus is on creating that environment in which all students can learn and help close the achievement gap. By providing professional learning and modeling for teachers, administrators should be able to lead by example on how to reach each student using technology.

Using Technology, the Right Way

Individualized learning strategies also need to focus on using technology the proper way. The only way to make sure this happens is to use this resource in a way that meets the needs of each student to ensure they are successful. Schools need to find ways to track how each student learns and make sure that we use those techniques to make progress. Through immediate feedback resources, like mentioned before, administrators and teachers can have access to methods that worked well and others that may need improvement. If that does not become apparent, students can clarify questions they may have through online forums. This can be used in google classroom, blackboard, or even email. The students no longer need to raise their hand to get an answer. They can send a message to a teacher or find the answer on the internet

through the correct source (HASTAC, 2017). This then allows administrators and teachers to focus their time on helping students find sources that are the most beneficial in meeting their individual needs (Dorrictott & Peck, 2004). That is of course only possible with administrators having the funds and ability to have these resources in their schools.

Active Learning Matters

Technology also allows for ways to keep students actively learning and engaged in each lesson. The students take on the role of becoming self-determined in reaching each of their learning goals (Capella University, 2017). Research has shown that students will then become motivated to find the answers to problems they face both in the classroom and outside of school (Dorrictott & Peck, 2004). This motivation can then lead to improving communication and writing skills. Students will be placed at the center of each conversation and need to communicate by themselves or in a group to find solutions (McCarthy, 2018). They can do this by dialogue and transferring the information to text, or through reading resources and applying their new knowledge to current situations in the content. McCarthy goes on to say that “students raise their game when they have to share their results with an interested audience.” Simply meaning that students, and teachers, will pay close attention to detail before placing their ideas answers online.

Administrators and teachers can then use these resources to plan collaboratively for audio and visual learners as well. Students and teachers can use resources like USA Test Prep and Edpuzzle videos to gain an understanding of the content in different ways than just direct instruction (Holl, 2018). Students can access the resources and use them as often as needed before moving on to new material. Cases can also be made for the student who works best by themselves. They can use those same resources to give immediate feedback with the answers

they provide by completing the activities. Administrators and teachers can then collaboratively plan for the continued use of these resources in all their classes.

By focusing on individualized learning techniques, schools can then turn their focus to blended learning models making sure that each student is always learning. These blended learning models focus on the interactions of teachers and students through face-to-face interaction and online programs or assignments. Students learn differently and our strategies to reach them need to reflect that. The best way of ensuring that the needs of every student is being met is through analyzing the data mentioned before. Classrooms can then group students into levels as high, mid, or low-level learners (Capella University, 2017). Giving students a pre-test before starting a section of material can be one way of collecting data on what students already know, and what they need to focus on. Administrators, teachers, and students can then use that information to place students into specific groups and plan accordingly. This then allows for the teacher to use blended learning groups within the same classroom (McCarthy, 2018). Administrators will walk into classrooms throughout Horry County and see students working in groups to complete different tasks. Teachers can then be seen working with one group at a time, focusing on what each student in that needs to be successful. This can only be done when administrators and teachers have created an environment that allows for this to take place.

Case Studies Supporting Technology

As technology continues to change, so does the methods that work best in the school setting. Some practices work better than others, but the idea remains the same, finding ways to best reach every student in the classroom. Decisions must be made by administrators on a yearly basis as to what technology to use in their building. Each administrator needs to take the time to use the research and professional development provided to make sure the decision they make

will have a positive outcome with their staff and students. Teachers and students have realized that introducing and demanding the use of technology needs to come with support from administration. Listed below are some ways that administrators around the country are using technology to successfully reach each teacher and student in their school.

One example of a school system that uses technology to benefit their staff and students is Albemarle County in Charlottesville, Virginia. The school district itself includes nearly 13,000 students and 29 schools around the area. This study shows how the teachers in this county work under the direction of their superintendent, Pam Moran, and administrators to find ways to share information with both their students and the community. The source they use the most is twitter, a social-media source to post videos, ideas, and student work so the efforts they use can be accessed by other teachers and parents (Office of Education Technology, 2015).

Each post to twitter uses a common hashtag for anyone who wants to use and see how their classroom operates. The staff in this county can use both professional development and their continued education using technology. They have steadily been using this model for nearly four years now, and their district has seen higher teacher retention and student achievement levels than ever before (Office of Education Technology, 2015). The administrators and teachers use this source to collaborate and improve their curriculum and instruction, making sure that the needs of each student are met.

Clark County, covering the large city of Las Vegas, Nevada also found ways to help their staff and students use technology. This large district in Nevada has close to 300,000 students and 17,000 teachers. They have been using an online professional learning model that helps their schools connect the common core state standards to the district's curriculum and instruction plans. The school district has been using this model, BLAST (Bringing Learning and Standards

Together), since 2012 and has seen drastic improvements in technology use by their teachers, as well as student achievement levels. This model allows administrators and teachers to work collaboratively by school or grade level in meeting the needs of their professional learning. BLAST can be used as a face-to-face learning system or online through Edmodo, where educators share what they have learned and provide examples for other schools to follow across the district (Office of Education Technology, 2015).

Within the first nine months of using this system, the county saw high levels of daily use through planning and collaboration. The district was ranked in the top ten in the nation for collaboration in 2012, and still uses the system today. Teachers in the county report that it is a great way to share in the successes of student work and a great way to continue their growth through professional development (Office of Education Technology, 2015). This system also allows for the administrators and teachers to stay within the context of their district goals in meeting the needs of each student.

Another school system that used technology to meet the needs of their staff and students is in White Oak County in White Oak, Texas. Compared to the other school districts included in these case studies, White Oak County is much smaller; including 1,300 students and some smaller classroom settings. This district started on a smaller scale in 2005, providing some of their “eager” primary grade level teachers with technology in the hopes that their goals of using technology would flourish across the district. The idea took off and many of the teachers around the district chose to implement technology in each of their classrooms (Office of Education Technology, 2015).

Some examples of ways these teachers included technology in their classrooms include the use of blogs, online portfolios, podcasts, videos, and Moodle. They used these systems to

instruct students in a small group or one-on-one environment, while other students may have been completing another task. These teachers have even used apps on mobile devices to connect their curriculum with their students. This then allowed the classroom environment to work globally with students around the world using real-world applications (Office of Education Technology, 2015). In turn, this allows teachers across the world to collaborate on the styles this district used to meet the needs of each teacher and staff member in their district.

Preparing Students for the World

Technology is something that continues to play a role in education and one that administrators need to focus on when looking at the resources they have at their school. They can start by first looking at the funds and availability their school has in obtaining technology for each of their teachers and students. Once they obtain ways to gain access to this technology, administrators allow for students to have 24/7 access to the world around them (Holl, 2018). Schools can focus on using programs like Google Classroom, Blackboard, or USA Test Prep to add resources for students to use outside of the classroom. This in turn, can help students sharpen their skills on content that may be harder for them to understand. The more practice students have, the stronger their knowledge becomes in the content (US Department of Education, 2010).

Real-World Resources

Using these resources for real-world issues can be as simple as sending an email or having the knowledge to use the proper resources when determining ways to solve problems. This connects students to the cultures around the world in ways we haven't had access to before (Dorricott & Peck, 2004). In addition, this real-world practice can administrators, teachers, and

students embrace changes in technology instead of having a fear of what technology will develop into (Capella University, 2017). Administrators will need to stay focused on these changes and allow opportunities for teachers and students to grow using technology. This can be accomplished through professional learning and then modeling for students when in the classroom meeting their goals. Our objective shouldn't change, preparing students for life after graduation, no matter where they may be located.

Conclusion

The way schools use the technology they are given can make a difference in the lives of each of their students; focusing on preparing them for the real world in their future careers. Working in the field of education requires focusing on making sure each student has an equal opportunity to learn. Administrators have many daily, weekly, and yearly objectives that need to be met, but the goal is always the same. Collaborating with teachers to make sure every student is going to be successful in the classroom, and life outside the school. By collaborating with teachers and students, administrators can focus on what the best learning practices are for each classroom. Practices that focus on individualized learning and blending learning can help teachers prepare their lessons to meet the needs of every student, each day.

The resources provided in each classroom need to be used in a way that allows for everyone involved to learn and act accordingly. Each resource needs to be examined and discussed to ensure that it is being used for a purpose in mind. In doing all of this, schools can use technology in a way that connects students to real-world situations and scenarios to help prepare them for life after school; both as professionals and life long learners. After all, educators create citizens and professionals that will lead the next generation; creating an environment that focuses on each person and meeting their individual needs. Only the future

will tell what these students will create. Some may become leaders in this country, change the way disease affects the world, or even change the face of education as we know it!

References

- Capella University: *5 Reasons to Incorporate Technology into the Classroom*. (2017). Retrieved from <https://www.capella.edu/blogs/cublog/benefits-of-technology-in-the-classroom/>
- Dorricott, Denise & Peck, Kyle. (2004). *Educational Leadership: Why Use Technology?* 51 (7). Retrieved from <http://www.ascd.org/publications/educational-leadership/apr94/vol51/num07/Why-Use-Technology%C2%A2.aspx>
- Gates, Bill & Melinda. (2015). Bill & Melinda Gates Foundation: *3 High-Impact Ways Leadership Teams Use Data to Improve their Schools*. Retrieved from <http://k12education.gatesfoundation.org/blog/3-high-impact-ways-leadership-teams-use-data-improve-schools/>
- HASTAC: *The Benefits of Technology in the Classroom*. (2018). Retrieved from <https://www.hastac.org/blogs/melissaanolann/2018/11/30/benefits-technology-classroom>
- Holl, Robert. (2018). Southeast Education Network: *Technology in the Classroom: One Person's Point of View*. Retrieved from <https://www.seenmagazine.us/Articles/Article-Detail/ArticleId/7255/Technology-in-the-Classroom-1>
- Lexia: *3 Creative Ways School and District Leaders Can Maximize Data and Improve Student Achievement*. (2016). Retrieved from <https://www.lexialearning.com/resources/white-papers/3-creative-ways-school-and-district-leaders-can-maximize-data-and-improve>
- McCarthy, John. (2018). Edutopia: *Tech Integration in Blended Learning*. Retrieved from <https://www.edutopia.org/article/tech-integration-blended-learning>

Office of Education Technology. Case Studies. (2015) Retrieved from <https://tech.ed.gov/case-studies/>

Stanford. Research Stories: *Technology Can Close Achievement Gaps, Improve Learning*.

(2014). Retrieved from <https://ed.stanford.edu/news/technology-can-close-achievement-gaps-and-improve-learning-outcomes>

US Department of Education: *Use of Technology in Teaching and Learning*. (2010). Retrieved

from <https://www.ed.gov/oii-news/use-technology-teaching-and-learning>