An Assessment of Digital Technology in Classrooms

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In a world eager to procure the latest technologies and the fanciest new gadgets, social scientists, parents, and teachers ask an important question: What role should these devices play in the classroom? With about half of American children using the Google education applications (Singer, 2017) and 12.6 million mobile devices in classrooms (Wingfield, 2017), we can no longer ask whether the role exists. The extent to which classrooms rely on such technology, however, depends largely on teacher, school, or district preference. Some classrooms have one computer for every student, who will spend the majority of their day on these devices (One Child, 2013), while some classrooms use digital technology to compile a portfolio of both online work and scans or photos of physical projects (C. 2015). Some classrooms opt to have a laptop for every student, as in Michigan, while other districts aim to provide free internet access to students in their communities beyond school (McLaughlin, 2016). Some teachers and administrators know more than others about the effects of digital technology on children, leading to vastly different opinions regarding its use. Some teachers overstress the potential that the technology has to offer, while others fear that the devices bring nothing but negative effects to learning.

While we must avoid branding any technology as wholly good or wholly evil, we also must consider that every technology has its appropriate setting and every setting must ensure appropriate use. In order to make an accurate judgement on the role of technology in classrooms, I explore some of the promised and real benefits of digital technology in classrooms, its limitations, and conditions necessary for maximized learning and success. Digital technology can enhance learning under very specific conditions, but without these conditions in place, only

negative side-effects of the technology itself remain. The role of digital technology in classrooms should be determined by research regarding most effective educational practice in order to promote genuine learning and high retention of information.

Potential Benefits

Increased Access to Courses

First, I examine the numerous benefits of digital technology's implementation. One of the most successful technologies has been Massive Open Online Courses, known as MOOCs (Bebel, 2015). Colleges offer these free courses to the public and even grant credit upon completion for a much smaller fee than traditional tuition (Bebel, 2015). Anecdotal evidence shows that these courses allow students to collaborate with peers across the globe due to real-time digital access to other students world-wide (Agarwal, 2013). Empirical evidence also demonstrates pilot projects in community colleges where a majority of the students that remain past the first month both finish and pass the course (Bebel, 2015). MOOCs offer unprecedented opportunities for virtually anyone with internet access to master college-level content previously restricted to those who could afford high tuition rates and 4 years of committed academia. In cases where students have no access to traditional schools or desire to attend them, MOOCs provide a sort of artificial classroom with high success rates for students to participate in the educational community. While evidence points to higher success rates in MOOC versions of classes (Agarwal, 2013), the situations for students enrolled in MOOC courses are often different from those in traditional classrooms, making it hard to determine whether increased success comes from the situation of the learner or the technology itself. Whatever the case, increased access to education by non-traditional college students is certainly a benefit of using digital technology as an educational tool.

Digital technology also brings more options to students in small schools. Where larger, wealthier high schools can offer a greater number of courses at many different levels, smaller schools often do not have the funding or the staffing to offer, say, an AP course of every kind. In these cases, digital technology offers small-town students opportunities to take more specialized courses (Using Technology, 2015). Having more access to more diverse and higher-level courses helps challenge students who feel limited by the academics offered at their home school or who want a more impressive college application. Technology also helps kids in unique situations to simply maintain their academia. Children have a much easier ability to maintain schooling while unexpectedly hospitalized when taking an online course as opposed to a traditional one, or, as in the case of one cancer-stricken boy, when using a robot video camera attend his local school so that he could maintain his education remotely (Using Technology, 2015). For students who can't access a course in a traditional manner, digital technology opens up many opportunities.

Teacher Professional Development

Another benefit of digital technology is increased potential for teacher improvement. Teachers at the Carpe Diem Charter School in Indianapolis report much more time spent coaching kids one-on-one because of less time spent in front of a class (One Child, 2013). Individual tutoring has been shown for tens of decades to be highly effective, and with computers to teach kids content electronically, teachers are free to engage in a supporting role with individual students, where authentic learning happens (One Child, 2013). Teachers can also spend less time grading, which frees them to spend more time on professional development or even more individual interaction (Agarwal, 2013). When it comes to collaboration, digital technology bridges geographical gaps to help teachers across the globe collaborate regarding most effective teaching strategies (#24, n.d.). The ability to communicate with so many teachers

instantly could help create networks of teachers dedicated to improving their practice. While not yet put into practice, researchers have also speculated about the use of digital recordings to amass a giant database of video or audio that professional analysts could use to identify the most effective teaching practices, which they could then pass on to other teachers as common knowledge (Petrilli, 2018). Teacher quality is a known crucial factor in raising scores, increasing real knowledge, and closing achievement gaps. More professional development due to technological advancements would certainly benefit under-performing students.

Digital technology has certainly made education available to more students in more diverse situations. Many educators and administrators celebrate the ability to include more students and to spend time on more important matters than lecturing. However, the observant reader will notice that none of these opportunities reports increased learning, scores, or other academic achievements due to the integration of technology into schools. The biggest benefit technology seems to offer here is that more people can get to the education that already exists. Digital education is certainly better than no education. However, whether it can improve our current education by supplementing or replacing it remains to be seen.

Weak Arguments for Digital Technology in Schools

As we can see, digital technology certainly offers great opportunities. Since opportunities do not necessarily translate to results, we need research to determine whether the widely offered digital courses, programs, and technologies genuinely increase learning. As we look at some of the following arguments in favor of digital technology, we will see that they tend to lack scientific evidence, relying instead on hopes or anecdotal evidence to demonstrate worth.

Student Engagement

One celebrated feature of digital technology is increased engagement with material. While this may seem objectively positive, it fails to account for what children are engaged *with* and whether engagement itself is enough of a benefit. Bowen (Big Issues, 2015) explains that kids have access to more fast-paced interaction and immediacy, but have no space for critical thinking and slow, contemplative thought when computers are introduced. In this case, engagement does not equal improvement. Carr (2008) also writes that the introduction of online reading has significantly hurt our ability to process informational text. Designed to entice readers with ads and hyperlinks, online texts diminish our critical reading skills by engaging us with too much at a time (Carr, 2008). In this case, engagement offers only itself as a benefit, as it holds attention without calculating what deserves it.

One of the most celebrated features of the Carpe Diem Charter School in Indianapolis was student engagement (One Child, 2013). Founder Rick Ogston established Carpe Diem as a school to emphasize strong academics with few electives, with most learning online and computer-based (One Child, 2013). Many students reported significantly higher interest in their work at Carpe Diem than traditional schools, while staff reported very few disciplinary problems due to boredom or frustration (One Child, 2013). While interest and lack of disciplinary issues are fantastic to see in schools, it does not guarantee learning, and this enthusiasm was not matched with test scores or assessments of learning to enforce it. When the charter for the first Carpe Diem campus went up for review in 2017, there was a 5 to 1 vote not to renew it (McCoy, 2017). While several factors affected the decision (McCoy, 2017), the school's academic issues demonstrate that reliance upon mere enthusiasm or the promised technologies of the future is not effective. Educators must search for methods that improve education by screening effect on

learning first, and behavior or child interest as extra bonuses. When teachers celebrate an increase in engagement, they also must consider whether the engagement brings more genuine learning. Many media formats such as commercials or entertainment are engaging, but they lack any semblance of education. They're designed that way. Unless evidence shows that technology helps children engage with *meaningful* content that substantially increases retention of useful knowledge, engagement falls short as a justification. So far, we lack such evidence.

Access to Greater Resources

Another argument teachers in favor of more digital technology use is that students gain access to more information and resources than before, increasing their ability to learn beyond print books. Nielsen (Big Issues, 2015), a director of digital engagement, argues that to limit the use of technology robs children of opportunities to access materials they never could without it. The issue with this argument, however, is the assumption that more is better. As Bowen (Big Issues, 2015), president of Goucher College, discusses, information's usefulness varies depending on its accuracy, credibility, or relevance to the reason for finding it. Simply introducing more information does not make students smarter, and therefore the technology introducing it does not necessarily promote good learning. Teachers can help to maximize the amount of helpful resources and minimize unimportant or bad information, as I will discuss later, but the technology in itself cannot discriminate between information useful to a particular student at a particular time and often gives students access to the writing of anyone with an opinion and a personal website. If the technology introduces more irrelevant, wrong, or poorly written information, students would actually benefit from access to less.

Over-emphasis of cases with uncontrolled variables

Additionally, districts all over the country are pointing to isolated successes with uncontrolled variables as justification for purchasing and integrating more technology. When technology has a hand in success, we must note that it may not entirely cause the success, but simply contribute to it. Mooresville, North Carolina found educators thrilled with the increase from 67% of black students graduating to 95% in their district in the five years after the implementation of more digital technology, as well as higher test scores and improved classroom performance for a majority of kids (One Child, 2013). Principal Carrie Tulbert**,** however, expressed an admitted uncertainty surrounding whether the improvement resulted from the technology itself or the community support of it (One Child, 2013). Studies show that family, community, and school support are critical factors in high-performing, high-technology schools (Sweet, 2004), exactly what Tulbert theorized as contributing to the success. We cannot be sure in this case which factor has the greatest effect. What we do know, however, is that not every district shows such improvement from implementing technology, and therefore we cannot jump to the conclusion that the technology itself brings miraculous solutions. Could there be alternate solutions to stagnant scores and achievement gaps? Existing evidence suggests there are. Before we proclaim digital technology's benefits, we need to better assess whether the method of implementation had a greater effect, and whether that same method might better apply to other educational tools

Computer grading capabilities

With teachers perpetually in need of more time, the ability to delegate time-consuming grading to a machine seems appealing as well. Teachers like those at Carpe Diem love the ability to work with kids rather than grade (One Child, 2013). However, computer programs can only

grade questions with an objectively correct answer, such as multiple choice, true-or-false, or fill-in-the-blank. Research shows, however, that these methods, especially multiple choice, do not help kids learn. Psychological studies show that when tests expose students to wrong answers, as in false choices on a multiple-choice test, students may integrate these false answers into their memory of the correct answer (Roediger, 2005). The test medium directly sabotages students' long-term retention of a fact by suggesting alternate information, *even when the student is explicitly told the information is false* (Roediger, 2005). Showing inaccurate options increases familiarity with wrong answers, which will not benefit a child, especially in subjects where students must recall previous information to proceed with a new concept. Additionally, students prepare for multiple-choice tests differently than essay questions (Roediger, 2005), which means that testing kids on computers fails to assess them as they would perform on another type of test resquiring teacher attention, scoring some kids as more or less proficient than holistic assessments would, depending on their learning strengths. Additionally, when students were tasked with the same 90 multiple choice questions in a biology course, but some students were also assigned short-answer or diagram questions, the students with various question formats scored much better on the same 90 questions as their peers (Pomeroy, 2014). The mere presence of more complex question types increased students' retention of information, perhaps because they had to engage with the material in multiple ways, or perhaps because they had to know it more thoroughly than students who knew they would only answer multiple choice questions. While computers may save time on grading, they detract from the quality of assessment, indicating that this time-saving delegation does not provide a net gain as an assessment tool. In order to truly assess what students know and test them in ways that will not compromise their future understanding, teachers need to spend the time grading short-answer or essay questions.

Saving time for more important matters is a great idea for educators, but it turns out that grading cannot be put into the "less important" category.

Homework gap misconceptions

Another issue many educators think technology will solve is the homework gap. The homework gap refers to a growing concern of teachers and administrators for low-income and minority students without internet access. One study found that 3% of teachers in low-income schools felt students had adequate access to digital technology, compared to 52% of teachers in affluent schools (Darling-Hammond, 2014). Because of this, many cities are implementing strategies to provide internet access and even digital devices to students outside of school so that students can complete their online homework (Lynch, 2017). Many educators believe that more access to educational technology outside of schools can quickly ameliorate the achievement gap, specifically the homework gap between students with and without internet access at home. This argument, however, is not founded in legitimate data. Current findings indicate that minority and low-income students actually consume more media measured by time per day than their white middle-class peers (Riley, 2018). Research indicates that kids need more than possession of technology, but adequate training, which programs offering free internet or digital devices fail to address (Krueger, 2015). In fact, lack of discernment is the cause of disparity between kids of different incomes and their respective screen-times. The Federal Communication Commission's Broadband Task Force found that 70% of teachers assign homework requiring access to the internet (McLaughlin, 2016). Focusing on increasing student access to this homework is one potential solution to the growing concern over homework gaps, but this does nothing to address Krueger's (2015) concern about training required in addition to provision.

There also exists a different way of addressing the issue for teachers or administration who will still worry about unequal access. If these same concerned teachers stopped assigning homework requiring digital access, there would be no gap in the first place. I believe that a more productive solution would involve discerning whether the issue is access to the online homework or the fact that so many teachers assign homework students cannot complete in the first place. If teachers want more students to complete homework, they can easily assign homework that more students can complete. Additionally, further evidence discussed later will show that using technology in a homework setting is less effective that work done under the careful supervision of a trained adult, suggesting that a switch to traditional paper-and-pencil methods would be the more effective problem-solving method in this case.

While there are many potential benefits to digital technology's use in classrooms and many reasons for educators' and administrators' enthusiasm, little evidence shows that digital technology solves the specific problems it set out to fix. It does bring some benefits to the educational environment, like more time spent with children and greater child engagement, but it does not necessarily promote better learning, the reason it was introduced. We must not confuse the intent of the technology with its side effects if we want to accurately assess the effect that it has made thus far.

Arguments Against Digital Technology

Decreased attention

While technology has assumed and real benefits, it comes with many drawbacks. Perhaps the biggest is decreased focus and attention, important skills for young students to develop. Digital technology provides a platform that caters to short attention spans, so it is not surprising when researchers find shorter attention spans associated with heavy use of screens (Mikelic,

2016). Research even indicates that with every hour of television a child watches per day, they experience a 10% increase in likelihood of attentional problems. When the average child spends over 8 hours looking at screens every day (Riley, 2018), this indicates a major problem. This issue of attentional deficit likely comes from the previously discussed issue of engagement. For children to spend 8 hours or more looking at a screen, this screen must be catching their attention well. In this case, the engaging quality of screen-time is not just an ambiguous quality, but directly negative, since its ability to draw children in for hours on end leaves them unable to focus on deeper content that kids may find less engaging, but that ultimately benefits them.

Student Distraction

Technology also presents the opportunity for major student distraction. Researchers found that students at West Point Academy who were allowed to use laptops during class scored much worse than their pencil-and-paper peers at the end of their introductory economics course (Dynarski, 2017). More surprising, however, were the findings that students around them performed worse as well (Dynarski, 2017). One study of a similar nature found not only impaired performance in those seated around laptop users, but worse scores than those using the technology themselves (Greenfield, 2015). Students using the laptops in class saw a score 11% lower than peers without technology, while those seated around technology users scored 17% worse (Greenfield, 2015). These findings indicate not only a lack of promised improvement, but significant degradation of student performance. If we let students use digital technology indiscriminately, we risk letting them unwittingly sabotage not only their own learning, but also the learning of others, and more than their own. Teachers aware of this phenomenon therefore have an ethical responsibility to advocate for student learning by insisting that distracting devices stay out of sight during times of instruction.

Personal Risks for Students

Overconsumption of digital technology also results in serious social and physical health problems. In a study designed to link obesity to a variety of different student habits, researchers found a significant link between obesity and screen time in both children at high- and low-risk statuses for obesity (Wijga, 2010). More than physical activity, diet, and presence of maternal obesity, screen-time consistently correlated with childhood obesity, and it was estimated that a reduction of screen time to less than one hour a day would result in a two percentage point reduction in obesity among children in both high and low risk groups (Wijga, 2010). Additionally, early intervention is recommended because of the high correlation between screens and obesity in early childhood (Mikelic, 2016). Besides obesity, researchers found strong correlations between users of digital technology and other social or health problems, such as heightened aggression in the short-term (Mikelic, 2016). Jasmi (2017) also reports increased aggression among digital technology users, along with risky sexual behavior, depression, substance abuse, and disordered eating. While health and social effects may not be the most critical assessment of learning tools, they are important aspects of personhood that will affect children who use them. If another method without so many social and health issues successfully boosts education and minimizes disparity between students, we should choose to forsake damaging technology for equally effective but healthier means of educating students.

Low Benefit Investment

In some cases, technology simply leads to worse performance. In the Ann Arbor District in Michigan, administration poured millions of dollars into purchasing computers for students, with an emphasis on Scarlett Middle School (Barlow, 2005). State testing, however, still ranked them lowest in the state (Barlow, 2005). The technology simply did not help. Barlow (2005)

argues that teaching writing, motivated by the recent SAT update that further emphasizes writing, heavily justified their switch to become a higher-tech school, reflecting the real demands of the world today. While many would argue that digital technology represents current world interests, it clearly did not aid students in mastering their very real state requirements. Carr (2008) also reports a decrease in the quality of work due to a general societal increase in online reading. He discusses how the nature of hyperlinks, ads, and interactivity causes people to read in a distracted manner. They genuinely read very little, but instead scan pages looking for the next attention-grabbing piece, and then proceeding to take this approach to print sources (Carr, 2008). This degrades our desire to read in-depth, as well as our ability to learn and retain significant information. Put simply, screens make us poorer readers, and offer very little in terms of academic excellence.

Perhaps the most critical limitation of digital technology is the cost to implement it -- both in terms of money and opportunities -- despite sheer lack of evidence suggesting it has any real effect on student scores. Maine spends $12 million per year providing each student with a tablet, so far without any evidence that student performance has improved as a result. In Arizona, the Kyrene School District spent $33 million on digital technologies between 2005 and 2011 (Richtel, 2011). While teachers and administrators remain hopeful that the investment was not all in vain, some admit that they might be forced to acknowledge defeat, as scores in other Arizona districts steadily increase while Kyrene's scores stagnate (Richtel, 2011). These technological upgrades, ineffective at increasing scores, come with major sacrifices. As the Kyrene School district increases spending on the digital technology, they offer fewer art and physical education courses and increase class size (Richtel, 2011). The Carpe Diem schools introduced earlier simply chose not to offer those types of courses and received no increased learning as a result

(One Child, 2013). Some districts even go so far as to fire teachers who wish not to adopt new technologies into their classroom (One Child, 2013). While sacrifices might be worth making for technologies proven to drastically improve student scores, spending millions of dollars only to eliminate electives and fire quality teachers for hesitation seems a hasty decision in favor of technologies whose successes are few, with too many uncontrolled variables to prove.

Several of the drawbacks of digital technology involve learning deficits, while others harm students personally through health or social difficulties. While these issues may not concern teachers or administrators who want to see enthusiasm and more time for teacher improvement, we have an obligation to ensure that the tools we use to improve learning do not cause new damage to children as a result. If digital technology mainly causes harm, we have an obligation to explore other methods of learning. If we choose to use technology despite its drawbacks, we then have the obligation to minimize its harms by implementing researched strategies for successful technological implementation. Fortunately, we have identified particular strategies that lead to more academically successful transitions into high-technology schools.

Conditions for Successful Implementation

Technology has clearly defined opportunities and limitations. Upon closer examination, we can increase opportunities when a few specific conditions are in place. Most unconditional benefits of technology are theoretical or difficult to quantify. Measurable technological benefits appear, however, when digital technology is not used indiscriminately or as a one-stop solution to closing achievement gaps or raising state standards. When we start to view technology as a realistic tool that requires training and mediation, digital technology yields more of its promises to users.

Adult guidance

The main factor in determining whether digital technology can enhance learning is the guidance of a trained adult. Whether from a parent, teacher, or other figure with adequate training regarding the benefits and risks of the technology, kids need guidance in order to see any real benefit to their work. When Greenfield (2015) researched the effects of digital technology on reading comprehension, she examined 4 groups of students. Two groups were given online readings, one with teacher help and one without (Greenfield, 2015). Another two groups were given paper readings, again, one group with teacher guidance and another without (Greenfield, 2015). When the kids were subsequently assessed on their comprehension of the material, the group with teacher-guided online readings scored the highest overall (Greenfield, 2015). This study shows immense promise for classrooms hoping to use technology to increase learning. Jasmi (2017), also found that kids who use technology without the discrimination of a careful adult tend to engage in aggressive or risky sexual behavior, as well as experiment with addictive substances, while kids limited to constructive uses of their technology tend to display more prosocial behaviors. This again demonstrates the potential for technology to create positive effects, provided that the negative ones are controlled. Jasmi (2017) asserts that strong parental or teacher involvement is a key factor in monitoring and moderating usage of technology. With effective adult monitoring of children's digital activities, we can help technology live up to its full promise as a revolutionary educational tool.

Need for more training

Unfortunately, many teachers feel unqualified to act as a strong leader of technological use in their classroom. One nation-wide survey of K-12 teachers conducted by Samsung Electronics found that 91% of them believed that proper training was necessary for technological success, yet 37% felt unsure of how to use it correctly (Survey, 2015). With only 63% of

teachers feeling prepared to use technology well, but 91% believing in its importance, we face a major task in teacher professional development in order to equip the remaining teachers with the skills to effectively integrate technology into their classrooms. The number of teachers who feel they need more training rises from 37% to 63% when teachers over the age of 43 are surveyed (Survey, 2015). While we could wait for aging teachers to retire and slowly phase out of the teaching pool, this would leave a large chunk of teachers feeling, and probably being, unqualified to implement the technology advocated for and purchased by administrators. This leaves us with two options: allow unqualified teachers to administer digital lessons or require them not to. The former situation risks children's exposure to all the negative consequences of technology while the latter risks leaving children behind, not gaining any potential benefits they could have received with a more qualified teacher. Since neither situation is ideal, we must ensure that these left-out teachers are trained so the number of students receiving technology's maximum benefits increases and children left behind or exposed only to harms of irresponsible technology use decreases.

Similarities with achievement gap strategies

Perhaps not coincidentally, another set of conditions required for positive effects of digital technology in students match those proven to close achievement gaps. Muir's (2003) findings indicate that challenging academics and curricula, rigorous goals and standards, qualified teachers, and active encouragement and support from families and communities are among the top qualifications helping to close the achievement gaps that plague American schools. These closely reflect Sweet's (2004) findings about successful strategies among high-technology, high-performance schools: Challenging academics, effective leadership of teachers and administrators, expectation of student improvement, and high community and parent

involvement. It seems incredibly intuitive that both students in lower-performing groups and students with potentially disruptive or ineffective technology would benefit from the same types of conditions aimed at optimizing their learning experience. The data about fixing the achievement gap contains nothing regarding provision of technology; Students in minority groups, and therefore greater struggles in our country for equal education, need exactly the same kind of educational environment as students who have potentially harmful technology. The key to improving their status in the educational world is not to give them technology, but to give them, as all students, proper guidance and training to ensure optimal performance, no matter the teaching method.

While digital technology has its merits, we must award it no more than due credit. The presence of quality teachers or supportive communities is often intimately connected with successful incorporation of digital technology into classrooms, and we must remember their role when assessing any sort of educational model. Digital technology should always be implemented along with conditions that ensure enhanced learning in order to combat the negative effects of it while helping to maximize the benefits.

Conclusion

Digital technology has promised a lot, delivered a little, and sparked a great deal of discussion and debate. Many anticipated benefits of thoroughly integrating digital technology into classrooms are strictly theoretical. These help us find potential uses for technology and take steps towards its best use, but to implement it with certainty based merely on hope is not enough. Our hopes can provide inspiration, but empirical evidence must determine implementation or adaptation. When we advocate for technology, we must also ensure that our arguments are founded in good science. Reliance on assumed demographical use of technology or stop-gap

solutions that create further problems cannot justify expensive and widespread implementation. Additionally, while many educators or administrators praise effects of technology, they fail to examine whether the effects are worth praising. Before investing in new equipment, teachers and administrators must determine exactly what effects benefit classrooms. They must not use technology to solve educational problems without examining whether the technology will directly solve those problems without causing new problems. Since digital technology has so many potential health and social risks for children who use it regularly, it must be implemented in ways that target specific problems or enhance specific lessons, not as a holistic system of educational reform. Data shows that technology implemented carelessly leads to academic stagnancy, while technology used to accomplish the specific goals dictated by competent adults leads to academic growth and retention. It is now too late to ask whether digital technology should be used in schools; it is the American reality that tablets, laptops, and other high-tech devices have securely staked their claim in the classroom. A more productive discussion is how and when these technologies should be used. The answer will vary depending on the needs and resources of each specific community, but research findings should guide the basic structure of implementation. Teachers and administrators must ensure the presence of necessary conditions for digital technology's success when integrating new technologies. Otherwise, the risks associated with frequent use of technology are too great for how limited or absent the benefits will be. If kids experienced the heavy social and health risks without the promised educational benefits of digital technology, we would allow great damage to the potential of future generations. With digital technology in the hands of more students every year, we must ensure that we teach these students to use it discriminately and intelligently. When we put digital technology in its proper place as a tool with benefits and limitations, we begin to use it in such a

way that our children can learn at greater rates than ever before. Promoting future generations of critical thinkers and visionary problem-solvers requires us to teach them critical technology skills, starting with modeling a healthy relationship with technology in classrooms. If they can learn to use their new technologies in responsible ways, they have the potential to revolutionize learning in the years to come. Equipped with a new education and superior learning, these students will grow up to shape the world in important ways. If we care to see the world shaped positively, we owe it to ourselves and to our students to use digital technology responsibly and teach them valuable skills about learning that they will take with them into the rest of their lives.

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