7.4: The More Digital Technology, the Better

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With the increasing dominance that cell phones, tablets, music devices, apps, FitBits, Xboxes—you get the picture—play in everyday life, the notion that humans are cyborgs, has emerged. Technology has become fully integrated and relied upon in everyday life, whether it’s Amazon’s Echo turning on hallway lights, or the iPad blaring on the back seat of the minivan. Without a doubt, technology makes our lives easier, better, and even more enjoyable: It can be our secretary, butler, doctor, private tutor, and companion all in one. And the tech boom isn’t just for the home or the office; it can support student learning, too. Educators, parents, and tech enthusiasts are eager to strategize how technology might help support student learning—including the writing classroom.

Beliefs about technologies have changed the way we think about and understand the entire enterprise of writing education. Marc Prensky, the researcher who coined the terms *digital native*—to describe those born with unfettered access to technology (born between 1982–1991)—and *digital immigrant*—to describe those not born with this unfettered access to technology (born before 1982)— tells us that today’s students are digital learners, who, because of the ease and access of technology in their everyday lives, expect, if not demand, to use technology in the classroom. Prensky, and the digital education scholars who agree with him, would have us believe that educators, who primarily tend to be digital immigrants in his definition, are “struggling to teach a population that speaks an entirely new language.” Yet, is this really the case? Furthermore, what if emphasizing the technologies that students find familiar and engaging in the writing classroom actually hinders learning?

While many young people today may be digital natives, they are also digitally naïve. Many don’t know how to change their Facebook privacy settings, check their school email accounts, or even how to adjust the margins in a Word document. Consequently, parents and writing educators (the digital immigrants) are tasked with teaching their children and students how to safely and productively integrate what we would now consider very basic technologies into their
writing processes. So, while integrating cellphone activities and applications into a course can be quite useful to engage students, students’ ability to understand and use digital devices and information streams effectively and ethically—what we call digital literacy—may hinge on less sexy (but much needed) instruction. We also might need to consider the premise that iPads and other tablets in writing classes aren’t all they’re cracked up to be. Or at the very least, we need to recognize that students are often missing foundational digital literacy skills desperately needed for their success beyond the classroom.

One of the foundational digital literacy skills students need is concentration. Several studies have shown that children who are exposed to a lot of technology have rewired brains. They’re better at scanning for information and retrieving information, but they are less able to concentrate deeply. Students are becoming habituated to change and less able to sustain attention toward a task. Yes, increased reaction times and visual–spatial abilities are linked to technology use and media exposure, but being able to turn a page or write a word really fast is minimally connected to making one a stronger critical thinker or a more capable reader or writer. Consequently, when writing educators make recent technologies and media rich projects ubiquitous to their classrooms—when they privilege audio essays, vlogs, digital storytelling, and Snapchat collages—they should recognize that technology in the classroom is not necessarily making students better writers and thinkers. Teachers who use technology in the classroom should first “decide what we want students to do” and then “find the best technology to encourage that behavior,” explains University of Colorado Boulder professor Doug Duncan. Educators, administrators, and policy makers cannot simply throw iPads through the door and hope for the best.

When technology isn’t mindfully incorporated into the classroom, it can become a distraction that significantly impacts learning. In 2015, Anya Kamenetz of National Public Radio reported on a study about texting and technology use in the classroom that was conducted by several science and engineering faculty at the University of Colorado Boulder. The researchers determined that on their campus “more than 75 percent of undergrads reported texting while in class, and that in-class texting was linked to an average drop of half a letter grade in the course.” Additionally, Princeton researcher Pam A. Mueller and University of California at Los Angeles researcher Daniel M. Oppenheimer together determined that classroom cultures that have open-access technology policies are linked to decreased grades and “shallower processing” of course content. While the research more expansively takes on education as a whole, the findings are worth noting. The habits that are formed in the biology classroom will impact the habits exhibited in the writing classroom. All students—not just writing students—need to be taught how to be effective users of a range of composing technologies. Writing teachers “need to inhabit an ecology that supports their efforts over time,” say Richard J. Selfe and Cynthia L. Selfe, writing and technology experts. In order to create these ecologies, technological initiatives must include funding and support to ensure that teachers’ objectives for integrating technology into the classroom are generating the results they hoped for.

Technology alone isn’t a magic bullet. A 2015 study conducted by independent researchers from the Organization for Economic Co-operation and Development compared the computer use and evaluative reports regarding academic gains of children in over 70 different countries. Their findings? There are “no appreciable improvements” in reading, mathematics or science in the countries that had invested heavily in information technology.” Furthermore, initiatives that have focused almost solely on providing technologies to impoverished areas have not resulted in appreciable gains in learning. Non-profits like One Laptop Per Child (OLPC) fall short of the promise. OLPC itself laments that, “The great excitement, energy, and enthusiasm that brought us together is gone. OLPC is dead. In its place, is the reality that technology is a force in education, and we all need to be vigilant about when, where, and how it’s used.” Audrey Watters
with Hack Education cited the real issue at hand in 2012: “That last (missing) piece—training for teachers—has long been something that gets overlooked when it comes to ed-tech initiatives no matter the location, Peru or the U.S. It is almost as if we believe we can simply parachute technology into a classroom and expect everyone to just pick it up, understand it, use it, hack it, and prosper.” Laptops won’t help if we continue to ignore substantive, longitudinal teacher support.

We agree that technology has the potential to enable neurologically and physically diverse student populations to engage in learning and writing in new and exciting ways—the importance and necessity of these developments cannot be overstated. Yet, for situations when digital technologies are thrown unreflective into many classrooms, shouldn’t we pause, reflect, and demand evidence of the success of such applications and devices? Of course. To do otherwise would be foolish.

So, what is technology’s place, then? Good technology use in the writing classroom happens when teachers figure out what they want their students to learn first and then determine what technology might help. There are ongoing professional development opportunities for teachers regarding media and technology use in the classroom. Teachers can also balance technology in the classroom with more traditional hand-to-paper note-taking and writing activities, erring on the side of less tech and not more tech, unless they know why they’re asking students to use it. Students can use technology deliberately, to problem solve, collaborate, and engage with a variety of real-life audiences that remain unavailable without the technology. Finally, and perhaps most importantly: Writing teachers, educators, and parents don’t have to cave to the pressure that comes with the belief that students are digital natives and, therefore, need or require technology in the classroom for effective learning. Let’s better think through why technology is being used and to what ends.

Further Reading

Writing scholars have extensively studied how writing and learning is enhanced and affected by technology in the classroom. Most notably, Richard J. Selfe and Cynthia L. Selfe’s article “‘Convince Me!’ Valuing Multimodal Literacies and Composing Public Service Announcements” published in the academic journal Theory into Practice provides an overview of and recommendations for how to effectively incorporate technology into the writing classroom. Barbara Jean Monroe’s Crossing the Digital Divide: Race, Writing, and Technology in the Classroom (Teachers College Press) and Anne Herrington, Kevin Hodgson, and Charles Moran’s Teaching the New Writing: Technology, Change, and Assessment in the 21st Century (Teachers College Press) explore effective and ineffective strategies, assignments, and assessment methods for teaching writing with technology.

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University. As members of the iGeneration who teach at laptop-heavy campuses, they enjoy researching and teaching how to use technology in the classroom effectively and mindfully. Because of the importance placed on technology in society and on their campuses (and their love for their iPhones), they have first-hand experience with how technology can interfere with daily life and learning. As such, Genesee and Aurora are always looking for ways to get some tech-balance in their classrooms and after hours. Follow Genesee on Twitter @ GeneseeC or visit her website at geneseacarter.com.