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At the Corner of Technology & Student Centeredness

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Common Core State Standards. 21st Century Learning. AchieveNJ. Teacher Evaluation. Danielson. Marzano. Student Growth Objectives. Student Growth Percentiles. PARCC. Chromebooks. New Jersey Student Learning Standards. New Jersey Student Learning Assessments (NJSLA).

This alphabet soup of education jargon undoubtedly triggers strong memories and gut reactions. Like many NJ teachers, I too have been irrevocably influenced by these initiatives. Sometimes, it felt as though I was just jumping through bureaucratic hoops, and it made me wonder: how were all of these things actually helping students? In the midst of all this change and upheaval, I looked for something to ground me. For me, that was technology.

Because standardized testing switched to an online platform, many schools granted students consistent, reliable access to personal devices and high-speed Internet (Wells and Laurie 7; Wingfield & Singer). Not all schools have equal, equitable access to technology, and subsequently, education technology integration looks different from school to school (National Education Association 19). At my school, students have daily access to their own Chromebooks and a stable broadband connection. Over the past six years, determining how best to use that privilege has been a driving factor for me as an educator. The more I experimented with various tools and strategies, I realized that technology could be harnessed to bolster powerful student-centered classes.

My discovery was propelled by two factors. Firstly, I knew the Understanding by Design framework could be used to cultivate

student-centered classrooms that differentiated instruction to all learners (Tomlinson and McTighe 3). Empowering students and encouraging them to take an active role in their education was one of my core beliefs as an educator. Students are “funds of knowledge” and come to school with a vast array of experiences and expertise (Moll et al. 133). It was vital to me that I tapped into that when creating lessons and units. Secondly, students were coming to my class with increasing levels of savviness with technology and more sophisticated abilities in media creation, communication, and content consumption (Jenkins 6; Boyd 13). My students were growing up with unprecedented access to tools and information, and yet there were few opportunities for my students to put that access or those skills to use. Furthermore, technology was disrupting numerous industries and the economic landscape (Dede 3). The skills that used to be enough for graduates to lead successful, productive adult lives were starting to become insufficient (Dede 1).

By not addressing technology in the classroom, I felt as though I was acting as though technology was not important, that it did not have a place in education, or that technology was just to be used for entertainment. Yet, the rate of technological change was only going to exponentially increase with time. If I continued to ignore technology, I was not teaching my students in a way that was preparing them for their future (Dede 4). Subsequently, I felt compelled to model to students how technology could be used to enhance their education by fostering higher-order thinking

skills and improving their ability to read, write, think, and communicate.

Juggling how to infuse technology and pedagogy, however, has not been easy. To teach with tech integration effectively is a fine art, and one that is highly dependent on many local factors such as access to technology, making the shift to such a teaching style complex and uncertain (Meier 397).

Researcher Lee Shulman mentioned in 1995 that teachers needed to possess content knowledge, which he deemed to be key understandings about the subject, and pedagogical knowledge, which he defined as the knowledge of how to help learners learn new information and retain it (as cited in Mishra & Koehler 1021). However, researchers Punya Mishra and Matthew Koehler take his ideas further and add that today technological knowledge is also necessary—in other words, the knowledge of how to use technology to teach today’s learners and the knowledge of how technology has influenced the goals of one’s content (Mishra & Koehler 1023). Naturally, the overlap between content knowledge, pedagogy, and technology can be a messy affair. Effective understanding of technological pedagogical content knowledge informs teachers of what role their content area plays in the information age and compels them to be socially relevant and deliberate about what they teach. It also expects teachers to be mindful and purposeful about how technology will influence the learning process. In short, the advent of technology demands teachers to have new skill sets.

In my pursuit of perfect literacy-technology harmony, I have learned one crucial lesson. At the risk of sounding nihilistic, the tools don’t matter. The books don’t matter. Truly, what matters is that the lesson serves a worthwhile purpose. The question really boils down to: what do I

want students to be able to do? And why? Beginning with the end in mind has helped me plan my lessons strategically, so that I know exactly why and how each lesson ought to benefit students (Tomlinson and McTighe 12).

Instead of relying on a transmission model of education, teachers have to adopt a more student-centered constructivist approach that teaches students skills and not static knowledge (Papert, 1963; Krajcik and Blumenfeld 318). New learning theories point out that due to the steady rate of change, the value of possessing sheer knowledge has gone down; it’s more important that individuals are able to use that knowledge effectively, and know where to find that knowledge again (Siemens). Instead of focusing on imparting chunks of information, teachers need to move towards instilling skills in students and encourage students to see their learning as a network of information they will traverse again when needed (Siemens). The goals of teaching are fundamentally changing. Furthermore, the expected change in teaching is not optional. For those who do not modify the way they teach, the old model is no longer as effective. The transmission model of pedagogy will not work on today’s generation who have grown up with a participatory culture (Jenkins 57).

Much like the pivotal plot moments I ask my students to analyze in a story, every major activity is designed to help students to reach their final goal. If the activity doesn’t help the end goal, then it serves a limited purpose and is cut from my plans, no matter how much I love it. This purposeful student-centered approach to ELA has been one of the shining take-aways from the past decade. When I pause to consider how such a methodology fits in the grand scheme of learning theories, I am reassured in some regard. Student-centered teaching essentially is a form of modeling or cognitive

apprenticeship (Collins et al. 3). A knowledgeable other demonstrates how to perform a skill; students are provided feedback that is both timely and specific; and then students are given the opportunity to demonstrate their understanding and application on their own. It echoes the age-old mantra: I do, we do, you do.

When planning and in teaching, I begin with the end in mind. In a student-centered ELA unit, the most crucial aspect of student-centered units are the end—the final summative assignments. Research abounds on the need for educators to ensure such assessments are accurate, authentic, meaningful, and rigorous (Tomlinson and McTighe 28). Crafting such activities often requires teachers to take students into account, and I have found it helpful to use these assignments as a way to meet students where they are, allow for student choice, and provide students with the space to utilize their abilities to create content and media. For instance, every year, I teach a short unit on persuasive skills and media literacy. At the end of the unit, students are expected to create an audio commercial that would either play at the local radio or at an upcoming school event. Consequently, at the very beginning of the unit, students read and analyze a script of a radio commercial, and they watch and evaluate several commercials from various companies. Through analysis of a sample response of their final assignment and various mentor texts, students understand exactly what they are expected to create. Technology allows students to have a consistent place online to which they can return and analyze mentor texts, it allows students and teachers to access and critically evaluate media they would not have been able to access normally (in this case, old and new commercials alike), and it allows students to easily create and record the audio commercial itself.

After students have a basic understanding of the unit's expectations, the next portion of a student-centered unit is used to provide students with the content knowledge, skills, practice, and feedback needed to complete the assignment. Now, going back to the radio commercial unit, the formative assessments during this unit all allow students to practice the skills they need to create their final product. In this case, they needed to know the persuasive techniques and rhetorical appeals people use to persuade others, how a commercial script is constructed, and a basic understanding of how to record. Throughout the unit, homework and classwork assignments revolve around those activities.

Of course, formative assessments can be offline or online, but the added advantage of online formative assessments has allowed me to provide all of my students with instantaneous feedback as well allowing my students to retain a copy of the activities. If a student desires or if I notice a student needs additional practice, they can simply go back to the formative assessments on the computer and simply redo the assignment for further reinforcement. New tools like Google Forms and Socrative allow teachers to build in tailored feedback ahead of time that is only released to students if they attain a certain score. Instruction is differentiated with little additional effort; I can spend more time analyzing student data and solving the gaps in understanding. A student-centered learning approach paired with technology that reinforces student performance along the way helps bolster progress towards mastery learning (Guskey 56). For other units that include long-term writing assignments, with the advent of Google Docs and the ability to comment on student work, students and I both can see their progress, check their revision history, and restore teacher comments and feedback to see if any changes were made at all.

Technology aids in holding students accountable and greatly reduces the emotional pain that comes with lost rough drafts. It helps support student management of learning processes while also helping students more easily trace their progress over time.

Granted, technology is not a magic wand that will solve the problems of education nor will it magically create more time to teach all the standards expected of Language Arts teachers. In addition, when technology is used to digitize the status quo, that can be more harmful than beneficial. Using technology to teach in the same exact ways before technology is not enough. Writing a paper in Google Docs or taking an online multiple-choice test cannot stand alone as examples of effective tech integration (Clarke-Midura & Dede 309). Technology should not be used to “automat[e] conventional teaching” (National Education Association 19). Instead, there should be a reason for its inclusion in the lesson and unit.

When used effectively, purposeful integration of technology can boost student engagement and performance in ELA classes. Writing, reading, and communication are process-oriented skills that need to be reinforced through consistent practice and feedback. A technology-infused, student-centered classroom provides the framework for such a set-up to happen; it allows me to set clear expectations, be responsive to student needs, track student progress, and empower students to create meaningful, multimodal products of understanding.

Works Cited

- Boyd, Danah. *It's Complicated: The Social Lives of Networked Teens*. Yale University Press, 2014.
- Clarke-Midura, Jody, and Chris Dede. “Assessment, Technology, and Change.” *Journal of Research on Technology in Education*, vol. 42, no. 3, 2010, pp. 309–328.
- Collins, Allan, John Seely Brown, and Ann Holum. “Cognitive Apprenticeship: Making Thinking Visible.” *American Educator*, vol. 15, no. 3, 1991, pp. 6–11.
- Dede, Chris. *The Role of Digital Technologies in Deeper Learning. Students at the Center: Deeper Learning Research Series*. Jobs for the Future, 2014.
- Guskey, Thomas R. “Lessons of Mastery Learning.” *Educational Leadership*, vol. 68, no. 2, 2010, p. 52.
- Jenkins, Henry. *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century. An Occasional Paper on Digital Media and Learning*. John D. and Catherine T. MacArthur Foundation, 2006.
- Krajcik, Joseph S., and Phyllis C. Blumenfeld. “Project-based Learning.” *The Cambridge Handbook of the Learning Sciences*, edited by R. Keith Sawyer, Cambridge University Press, 2006, 317–333.
- Meier, Ellen B. “Situating Technology Professional Development in Urban Schools.” *Journal of Educational Computing Research*, vol. 32, no. 4, 2005, 395–407.
- Moll, Luis C., et al. “Funds of Knowledge for Teaching: Using a Qualitative Approach to Connect Homes and Classrooms.” *Theory Into Practice*, vol. 31, no. 2, 1992, pp. 132–141.
- Mishra, Punya, and Matthew J. Koehler. “Technological Pedagogical Content Knowledge: A Framework for Teacher Knowledge.” *Teachers College Record*, vol. 108, no. 6, 2006, pp. 1017–1054.
- National Education Association. *Access, Adequacy, and Equity in Education Technology: Results of a Survey of America's Teachers and Support*

- Professionals on Technology in Public Schools and Classrooms*. National Education Association, 2008.
- Papert, Seymour. *The Children's Machine: Rethinking School in the Age of the Computer*. Basic Books, 1993.
- Siemens, George. "Connectivism: A Learning Theory for the Digital Age." 2005, <http://www.elearnspace.org/articles/connectivism.htm>. Accessed 3 Jan. 2007.
- Tomlinson, Carol A., and Jay McTighe. *Integrating differentiated instruction & understanding by design: Connecting content and kids*. ASCD, 2006.
- Wells, John, and Laurie Lewis. *Internet Access in US Public Schools and Classrooms: 1994–2005. Highlights. NCES 2007-020*. National Center for Education Statistics, 2006.
- Wingfield, Nick & Natasha Singer. "Microsoft Looks to Regain Lost Ground in the Classroom." *The New York Times*, 2 May 2017.