

My Educational Philosophy and the Role of Technology

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My educational philosophy has been constantly evolving in the 17 years that I have been a mathematics educator. In my early years as an educator, my classroom was very much a teacher-centered learning environment. It was very much in the style of, “Here are the notes on the section. Here are some practice problems we can do together. Now here are some problems to try on your own.” Nowadays I am trying to work the class into a student-centered learning environment where available technology is able to promote a well rounded learning environment. Although I tend to lean towards constructivist learning environments, I believe that a blended style of teaching that includes behaviorism and cognitivism, while using technology to facilitate education, are essential in reaching all students wherever their math competency finds them.

Behaviorism “contributed to concepts such as behavioral objectives and the importance of practice in instruction” (Driscoll, 2018, p. 53) which is essential to learning the foundational content of certain mathematical standards, while maintaining order in the classroom. One must learn the basics of math concepts in order to progress into the more complex and involved problems. Using cognitivist strategies, students can improve their problem solving skills especially on mathematical word problems. These strategies can include self-questioning, self-evaluating, summarizing, and illustrating the problem. Students reflect on their thinking on how to solve problems by referring to worked-out examples that the teacher may provide thus allowing students to acquire knowledge while also constructing a deeper understanding (Tajika, Nakatsu, Nozaki, Neumann & Maruno, 2007). A constructivist learning environment may provide the student the greatest opportunity for intellectual growth because it engages learners in authentic activities, provides for collaboration, supports learners with self-regulating skills, and encourages learners to reflect on their learning (Driscoll, 2018). Although I believe a deeper understanding would occur in a constructivist classroom, I also acknowledge that not all students might

respond to that environment. A healthy mix of the three learning theories should be implemented in a math classroom.

The role of technology in my philosophy of teaching lines up with the definition the Association for Educational Communication and Technology (AECT) put forth in 2008: “Educational technology is the study and ethical practice of facilitating learning and improving performance by creating, using, and managing appropriate technological processes and resources” (Reiser, 2018, p. 4). One of the major reasons I decided to take the Instructional Technology program at CSUSB was to learn and improve my performance in the classroom “by creating, using, and managing appropriate technological processes and resources.” Two words in this definition stand out to me though...ethical and facilitating. With technology, ethics most definitely come into play when dealing with intellectual integrity and content viewed and distributed. As educators we must be cognizant of a moral code when using and implementing technology. As it pertains to facilitating instruction, technology is not the be all end all in the classroom, nor is it to be used as a crutch. Technology is a support that promotes best practices in the classroom. It is as Jessie Woolley-Wilson said at her TEDxRanier talk in 2012 when she was speaking about Intelligent Adaptive Learning, “It’ll never replace great teachers, but it can support great teaching.”

I am currently experimenting with the flipped classroom by producing my own instructional videos, as well as recommending already existing videos for students to use to learn the material while the math is practiced and collaborated upon in the classroom. I have been supplied with a class set of ChromeBooks that I hope to incorporate in many different ways to advance and facilitate the learning. I also have a Promethean Board installed in my room that I use to deliver content and instruction. Not to mention all the software that is available to educators, there is a plethora of technologies at my reach that I wish to implement and use to promote learning.

Beyond the mathematical content in my classroom, I am also looking to develop positive behavioral practices with my students to develop a learning environment that is welcoming and constructive. I seek to have my students learn and understand the value of working through persistence...to not give up if you did not arrive at the desired outcome. Sometimes the practices in a math classroom apply to your practices in life.

Throughout my years as an educator I have looked within myself and asked..."What type of teacher am I?" I have my beliefs and attitudes when it comes to delivering the material and having the students gain knowledge...but how fervently do I practice it? Am I a positive force in my classroom and ultimately, my school? My hope is that in the coming years, especially with my work in the Instructional Technology program, I can answer those questions with confidence. I am a work in progress.

## References

Reiser, R., Dempsey, J. (2018). Trends and Issues In Instructional Design and Technology. (4th ed.).

New York, NY: Pearson.

Tajika, H., Nakatsu, N., Nozaki H., Neumann, E., & Maruno S. (2007). Effects of Self-Explanation as a

Metacognitive Strategy for Solving Mathematical Word Problems. *Japanese Psychological*

*Research*, 49(3), 222-233. doi: 10.1111./j.1468-5884.2007.00349.x

Woolley-Wilson, J. (2012, November 10). *Blended technology and classroom learning: Jessie*

*Woolley-Wilson at TEDxRainier* [Video File]. Retrieved from

<https://www.youtube.com/watch?v=o0TbaHimigw>