

Chapter 59

Exploring Technology Through Issues of Social Justice

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ABSTRACT

This action research project focuses on student-centered learning through the application of cultural relevant pedagogy and culturally responsive teaching in a high school summer enrichment computer science course. The research question guiding this project was: How does the integration of cultural competencies and culturally responsive teaching impact student learning in the secondary classroom? The content of the course focused on students learning about computer applications, research using digital resources retrieved from the Internet, and digital literacy as outlined by the International Society for Technology in Education Standards Students. This chapter examines pedagogy and practice highlighting the integration of culturally relevant pedagogy and cultural relevant teaching into a computer science course focused on current events and issues of social justice.

INTRODUCTION

Teaching and learning is not merely a profession that I have chosen to pursue in my life, but it is one of my greatest passions and part of my identity. Teaching students at the secondary and post-secondary levels has given me great joy and the opportunity to be both a teacher and a learner along side the students that I have had the opportunity to work with. When given the opportunity to work with high school students and preservice teachers, I strive to create a student-centered learning environment where the teacher is a facilitator of learning and the teacher assumes the role of learner and the students become the teachers (Freire, 2014). Student-centered learning is teaching that involves active learning where students are held responsible for their learning and learning is self-paced and/or cooperative (Felder & Brent, 1996). Employing a student-centered pedagogy in the classroom, rather than the banking concept of education where the teacher deposits the knowledge into the students, gives the students ownership in their learning in the classroom (Freire, 2014).

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During the summer of 2015, I had the opportunity to serve as an instructor of a computer science course for a Classic Upward Bound Summer Enrichment Program. The Classic Upward Bound Program is a program that works with first generation and/or low-income high school students to achieve academic success in high school and assist students in preparing for post-secondary education (Classic Upward Bound, 2015). The directors of the program gave me creative freedom over the curriculum to be covered in the course, with the understanding that the high school students would be learning about and using technology throughout the four and a half week summer program. Creating and teaching this course allowed me to blend my secondary social studies teaching experience with my background in technology integration and my current work with social justice education to create the course *Exploring Technology Through Issues of Social Justice*.

Technology including digital devices (e.g., computers, tablets, smartphones), applications and programs, the Internet, and social networks are powerful tools that 21st century students have access to both in and outside of the classroom. It is important that students learn the appropriate use of these technologies in order to be responsible digital citizens in the globally connected society that they are living in today (November, 2008). Issues of social justice (i.e., people standing up for equitable treatment and equal rights) and technology are interconnected (Coghlan, 2014). As we saw during the Arab Spring, the people used the Internet and social networks including Twitter, Facebook, Audioboo, YouTube, blogs, and other applications to communicate and share stories of the movement on a global scale (Parvaz, 2011). By using these social networks, the people were able to communicate and record details about events as they were occurring, rather than relying on the mainstream media that could be influenced by the governments in power. The communications and stories chronicled using social networks can also serve as a reminder to the people of the events that unfolded during the Arab Spring, even if the official historical account of the events paints a different picture (Parvaz, 2011).

Today, we see the same use of technology and social networks used for the social justice work of the Black Lives Matter movement. #BlackLivesMatter has helped to chronicle the story of the struggle for equitable and just treatment of African Americans in the United States (Garza, n.d.). Through the use of technology and social networks, these stories of social justice movements are being chronicled for the people, by the people, and will serve as a record of historical events that may never be captured in the pages of mainstream history books (Parvez, 2011). By working with students and helping them to see the important roles that technology plays in today's society, students can become empowered, informed digital citizens and contributors and creators in the 21st century (November, 2008). This is a story of pedagogy and practice highlighting the integration of culturally relevant pedagogy and cultural responsive teaching into a computer science course focused on current events and issues of social justice.

BACKGROUND

When creating and teaching this course, the student-centered principles of culturally relevant pedagogy were used as I constructed the course syllabus, projects, and assignments. Ladson-Billings (1995b) explains that culturally relevant pedagogy “addresses student achievement but also helps students to accept and affirm their cultural identity while developing critical perspectives that challenge inequities that schools (and other institutions) perpetuate” (p. 469). Culturally relevant teaching emphasizes student-centered learning and teaching in which the students become the teachers and the students and the teacher work side by side through the educational process. Culturally relevant teachers strive to create a collabora-

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