

Information Technology and Social Justice. An Interdisciplinary Approach to Enhancing Student Awareness

Joycelyn Streator, Ph.D.
School of Science and Technology
Georgia Gwinnett College
Atlanta, USA
jstreator@ggc.edu

Abstract— This paper reports on the development of an interdisciplinary approach to blending information technology education and social justice at an undergraduate institution in the Southern United States. A pedagogical model in which information technology students develop a deeper understanding of social justice through the intersection of digital media, American history, race relations, and African-American culture is presented.

Keywords—Computing education, social justice, Interdisciplinary collaboration, digital media, US history

I. INTRODUCTION

The Southern United States is at the nexus of a rich history in social justice movements and today's thriving technology industry. Moreover, the Civil Rights Movement created a lasting call for social justice that reverberates around the world. Today, southern metropolitan cities are centers of technology-driven innovation and opportunity. Analytics on large data sets of citizen information and surveillance technologies drive decisions on everything from home loan approvals to criminal arrests. Unfortunately, the use of these technologies amplifies inequities in society and often negatively impacts already marginalized groups.

II. PEDAGOGICAL MODEL

Students will participate in the project via dual enrollment in courses on digital media and US history. The digital media course is being taught by information technology faculty and will cover fundamentals of computing and digitization. The US History course will provide a survey of US history from the post-Civil War period to the present. In addition to the core curriculum, students will travel to throughout the southern United States and explore museums and historical sites.

Prior to embarking on the tour of the South, students will learn technical concepts and develop essential skills with digital

image, video, and audio software. During the trip, students will build a repertoire of digital artifacts connecting historical themes and current issues in social justice. Upon return from travel, students will synthesize their experiences and prepare a final multimedia project that meets technical, historical, and design criteria.

III. ENGAGEMENT GOAL

This project will increase awareness about alternative models for teaching technology courses and engaging with humanities. The goal is to serve as a genesis for conversation and interdisciplinary collaboration.

IV. PROJECT TYPE AND PHASES

This project is an educational approach that will include an empirical study in a latter phase of the project. The empirical phase will examine the impact of this experiential learning approach on social issues advocacy [1], critical thinking [2], creative self-efficacy[3], and student performance.

V. RELEVANCY

This work provides a unique model for combining experiential learning, interdisciplinary collaboration, and information technology. Moreover, provides a context for reflection on equity and inclusion through connecting community, history, and computing.

- [1] J. M. Marszalek, C. Barber, and J. E. Nilsson, "Development of the social issues advocacy scale-2 (SIAS-2)," *Social Justice Research*, vol. 30, no. 2, pp. 117–144, 2017.
- [2] L. Williams and M. Lahman, "Online discussion, student engagement, and critical thinking," *Journal of Political Science Education*, vol. 7, no. 2, pp. 143–162, 2011.
- [3] H.-L. Yang and H.-H. Cheng, "Creative self-efficacy and its factors: An empirical study of information system analysts and programmers," *Computers in Human Behavior*, vol. 25, no. 2, pp. 429–438, Mar. 2009, doi: 10.1016/j.chb.2008.10.005.