An Exploration of Digital Storytelling Creation and Media Production Skill Sets in First Year College Students

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ABSTRACT

Though recent advancements in media and computing technologies have fostered greater instructor adoption of student media assignments, few studies have examined the role these projects play in the development of student media production skill sets. This study surveyed 12 first year college students in a postsecondary education class, each responsible for producing a digital story project communicating issues related to water sustainability. Students responded to a self-efficacy survey questionnaire before and after the production process, rating their confidence on ability to perform specific required and optionally suggested production tasks related to media components in the assignment. A paired t-test was employed to compare student responses from the pre and post self-efficacy survey questionnaires. Results from this study indicate significant gains in student self-efficacy beliefs on media production tasks that were required, while response changes for the optional tasks were found to be not statistically significant. Findings from this study suggest that digital storytelling projects can be beneficial in the development of student media production skill sets. To optimize opportunities for this development, instructors are encouraged to consider specific required media components with relevant production tasks and skill sets when designing a digital storytelling assignment.

Keywords: Digital Storytelling, Media Production Skill Sets, Motivation, Self-Efficacy, Student Media Projects

INTRODUCTION

Course integrated student produced media projects are becoming a popular form of instruction in higher education. Contributing to this trend are many factors, including the availability of inexpensive, user-friendly media production tools, the ubiquity of online digital media content and distribution platforms, and evolving pedagogical approaches from instructors toward more active, project based learning. For example, the 2008 Horizon Report noted that with the advent of low cost, mobile and pocket video capture devices, instructors have

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numerous opportunities to integrate student produced video into their courses, suggesting a range of genres including field data collection, “video papers”, in class video capture, and digital storytelling, that allow students to share ideas and can be effective in supporting group collaboration (New Media Consortium & EDUCAUSE Learning Initiative, 2008).

These projects require the development of new skill sets and “21st century literacies.” The report, A Global Imperative: The Report of the 21st Century Literacy Summit, published by the New Media Consortium, suggests that these areas include aural, visual, and digital literacies (New Media Consortium, 2005). The National Association of Media Literacy Education similarly suggested that media literacy, defined as “the ability to access, analyze, evaluate, and communicate information in a variety of forms” (National Association for Media Literacy Education, 2013), should be considered a necessary 21st century literacy. Though there has been this acknowledgement that students need to develop media production skill sets to effectively communicate in our current multimodal digital environment, supported by several models and studies describing the general benefits of media projects on production skill set development, there is a significant gap in the literature empirically measuring the extent to which these skill sets are actually attained. Understanding this dynamic more deeply offers several potential teaching and learning benefits, such as student production skill development assessment and considerations for how instructors structure their student media assignments.

In response, this study sought to measure the extent to which a digital storytelling production project had on the development of technical media production skill sets in a first year college course on water sustainability. To measure this development, student self-efficacy beliefs on specific media production skill sets were mapped to both required and optionally suggested project tasks, then captured using a pre and post self-efficacy survey questionnaire. A follow-up semi-structured focus group interview with a sub-set of the students was later conducted to capture greater context on their overall production experiences and survey responses.

This study inquires: To what extent does a digital storytelling assignment have on the self-efficacy beliefs of specific media production skill set development in first year college students?

### SELF-EFFICACY BELIEFS

The construct of self-efficacy posits that self-efficacy is at the foundation of human motivation and successful attainment, suggesting that the extent to which people feel they have personal agency of control to produce an outcome from their actions, will impact their motivation to persevere when faced with challenges (Bandura, 1997). Accordingly, those with higher self-efficacy tend to have higher motivation and goal attainment, while those with lower self-efficacy beliefs tend to have lower motivation and goal attainment (Bandura, 1993). Self-efficacy beliefs have been strongly correlated to performance across several domains, including academic outcomes (Multon, Brown, & Lent, 1991, Pajares & Johnson, 1996), cognitive strategies and self-regulating behavior (Pintrich & de Groot, 1990), academic motivation (Schunk, 1985), and group cooperation (Wang & Lin, 2006, Cheng, Lam & Chan, 2008).

### STUDENT MEDIA PROJECTS

There have been some general models put forth describing the benefits and production skill set needs of learning with digital media in the classroom. Notably, Millet, Frank, Miller, Wetzel, and Perry (2008) illustrated the learning benefits and skill set developed across multiple types of student produced media projects by mapping these processes to “Bloom’s Revised Taxonomy” (Anderson & Krathwohl, 2001) (see Figure 1).
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