Chapter 12

Facilitating Student Learning Through Multisensory Tools That Engage and Foster Collaboration

Daniel A. Novey
East Carolina University, USA

Hal L. Holloman
East Carolina University, USA

Marjorie C. Ringler
https://orcid.org/0000-0003-2484-3873
East Carolina University, USA

ABSTRACT

This chapter describes how university professors in a principal preparation program applied technology resources to face-to-face and online instruction to intensify student interactions and engagement with the professors and each other. As a result, the learning opportunities were transformed to increase effective student and professor interaction and student learning. Professors found that utilizing multisensory technology provided platforms in which robust learning exchanges occurred that deepened learning while students and professors worked collaboratively. The chapter describes how several studies show how the use of interactive multisensory tools such as Flipgrid, VoiceThread, and GoReact provided effective pedagogical strategies that enhanced communications. The studies took place at a university that serves students from rural communities and therefore provides research about utilizing multisensory tools to improve learning for students in locations where access to higher education is challenged by geographical distances.

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INTRODUCTION

Effective K-20 leaders and teachers are using multisensory technology like *Flipgrid, VoiceThread*, and *GoReact* to transform student content mastery and learning. This transformation is critical for rural settings like the one described in this chapter. In rural settings, multisensory tools help distance education students have access to rich programs. The students also experience learning opportunities that prepare and equip them with practitioners’ skills.

In this rural setting, several instructors and their students enrolled in principal and teacher preparation programs at a southeastern regional university in the United States are using interactive tools like *Flipgrid, VoiceThread, and GoReact* with great success. These tools, which personalize learning, allow students to build their professional language and communication skills for coaching and teaching in a safe digital setting. Doing this virtually helps students from rural areas, who now can take courses online and experience learning that may be just as authentic and effective as face-to-face instruction. These tools capture student performance, facilitate real-time focused coaching, and promote student success, helping students learn and sharpen skills to, one day, effectively coach teachers or to be better teachers themselves. By adding collaborative experiences incorporating multisensory technology across disciplines and departments, these instructors are providing more relevant, authentic learning opportunities for their students.

BACKGROUND

Principal preparation programs have moved from lecture-based programs to programs that incorporate adult learning principles and provide learning experiences for students to practice leadership skills in classes and within their field experiences (Orr, 2006). Many principal preparation courses are offered online, and these courses should offer opportunities to practice and apply leadership skills and content. Multisensory tools are often employed to aid in creating learning opportunities that promote problem-solving and real-world experiences. Multisensory tools such as learning management systems like Blackboard and Canvas and virtual conferencing platforms like WebEx and Skype are commonly used to educate principal candidates in distance education. When preparing principal candidates, however, it is important to develop their leadership skills. In courses offered online, professors can use technology to address the candidates’ need to practice leadership skills. Also, faculty need to provide timely and formative feedback to develop these skills (LaFrance & Beck, 2014). These opportunities seem to be easier when done in person, so when done online, there needs to be an intentional design of activities that incorporate multisensory tools that present visual, auditory, and cues that provide authentic feedback.

There is evidence that simulations provide opportunities that match real-world experiences. In a study of a principal preparation program in the southwestern region of the United States, where the courses were delivered face-to-face with some hybrid courses, 52 candidates indicated that simulations provided them active learning that allowed them to frame issues, problem-solve, and collaborate (Oliver, Gordon, & Oliver, 2018). Those three products of active learning help professors create something close to real-world experiences.

Principal preparation programs offering online courses are growing for two reasons: to increase enrollment and provide access for students in remote areas. Specifically, some principal preparation programs that serve rural communities offer online courses to provide access to candidates who live far