# Chapter 11 Disrupting the College Classroom Experience: Avoiding Technology Pitfalls

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#### **ABSTRACT**

This chapter provides readers an overview of the potential advantages and disadvantages of technology integration in higher education. As technological innovations continue to advance, faculty are provided ample opportunities to enrich their curriculum to further enhance student engagement and learning. Further, the inclusion of technology promotes student retention and provides them access to real-world content. Innovations in technology have resulted in a plethora of tools that can be incorporated into today's classrooms. However, faculty are often hesitant to integrate technological tools given security, accessibility, and access considerations. Further, faculty may perceive technology as disruptive to their classrooms resulting in distracted learners who experience lower academic gains.

#### INTRODUCTION

The educational landscape is constantly changing and evolving. Dennis (2018) stated that "while the traditional university is still indispensable, technology and innovation are disrupting the status quo" (p. 3). Subhash and Cudney (2018) further indicated that technology has shifted traditional classroom approaches that were lecture-based to reflecting digital learning environments. Institutions should consider that the technology itself may not be disruptive but how it is implemented or utilized within the classroom. There are many advantages associated with using technology in college settings. In fact, Englund et al. (2016) postulated that advances in educational technology over the past 25 years have the potential to revolutionize teaching and learning. Advancements in technology have driven globalization and digital transformation, resulting in the faculty's roles evolving to guide students in the development of the necessary skills needed to succeed in technologically-driven workplaces. Online resources are easily accessible, further advancing the adoption of technology in higher education resulting in faculty

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having access to a wider range of learning materials. Yet, as postulated by Smith et al. (2018), educators may feel intimidated to integrate technologies they do not fully grasp (e.g., artificial intelligence, virtual reality). Additionally, faculty may perceive technology as disruptive because students may utilize it to engage in multitasking and off-task learning behaviors (Flanigan & Babchuk, 2020).

Schindler et al. (2017) contended that the integration of technology in higher education is not a new challenge for faculty. However, continual advancements in technology-enhanced learning have resulted in faculty needing to understand how to most effectively utilize electronic resources to enhance student engagement and avoid disruptive off-task classroom activities. The transition into adopting these emerging technologies can be difficult. Flavin and Quintero (2018) suggested "there is an institutional willingness to embrace sustaining innovation and efficiency innovation but a disinclination to engage with disruptive innovation" (p. 10). Promoting the integration of supportive technologies that aid learning is imperative to avoid disruptions and to provide opportunities focused on the endorsement of technology-enhanced environments that result in student engagement and success. Especially given that students who are more strongly engaged in their learning show higher academic performance (Shah & Barkas, 2018; Trowler, 2010).

#### BACKGROUND LITERATURE

#### **Digital Distraction**

Innovative technologies have provided individuals the capability to do nearly anything on their digital devices. In fact, it is not uncommon to observe students using their mobile phones, laptops, and other technological devices on college campuses (Dontre, 2020). Although technology is rapidly changing the educational landscape in how faculty teach and students learn, the inclusion of it can be challenging and create nuances that hinder learning. Indeed, Dontre (2020) indicated that technological use by students has become problematic given that "students have more temptations than ever before to engage in media multitasking" (p. 1). Further, Neiterman and Zara (2019) expressed that technological devices offer many academic opportunities but pose challenges due to off-task technology use. Prior researchers have proclaimed that mobile technology use is considered an addiction for many college aged students (Griffiths, 2012; Roberts et al., 2014). Essentially, compulsive use of technology can negatively impact learning since students find it difficult to suppress their habitual behaviors of constantly checking and using their mobile devices. Rosen et al. (2018) discovered that students unlock their smartphones over 60 times per day for at least three to four minutes each time resulting in daily cell phone use of 220 minutes.

Flanigan and Babchuk (2020) highlighted that mobile technology use hinders student learning and that faculty feel frustrated by student digital distraction. Specifically, students' use of technology in college classrooms has resulted in off-task behaviors that are perceived by some faculty as distracting due to students engaging with their phones, laptops, and tablets for nonacademic purposes. These instructor views seem to align with student views about the impact digital distraction has on their academic success. Students have also reported that disconnecting from technology provides opportunities for growth and engagement (Smith et al., 2016) and that multitasking behaviors negatively impact their memorization of course content (Jamet et al., 2020). Integrating carefully designed technology-enhanced activities can discourage off-task behaviors and foster on-task activities with the use of relevant learning tools (Wood et al., 2018).

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