ABSTRACT
Many institutions across the United States and internationally have adopted the flipped classroom pedagogical model for its potential to enhance learning and retention by creating interactive classroom environments. While the flipped model has plenty of promise, the technology involved—including access to online videos, readings, and other materials—can be problematic for students on campuses in rural settings. Furthermore, traditional classrooms designed for lecture also inhibit student mobility and flexibility, which complicates the implementation of flipped models. The authors examine the challenges faced by those attempting to incorporate flipped strategies when electronic spaces are intended to supplement physical ones.

INTRODUCTION
EDUCAUSE (2012) defines the flipped classroom as “a pedagogical model in which the typical lecture and homework elements of a course are reversed.” More recently, the Flipped Learning Network (2014) defines flipped learning as a pedagogical approach “in which direct instruction moves from the group learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject.
An argument is that teachers need not be present when students process passive instructional content—thereby reserving physical classroom time for exercises and interactivity that enhance learning outcomes. As this model gains exposure and popularity, experienced professors have found ways of increasing in-class interaction, even in physical environments that favor the traditional lecture method through front-oriented resources and immovable furniture. Outside of class, flipped models, however, often require computer access, web-based technologies, and prerequisite skills on the part of the student. All too often, these requirements are not met as technology is viewed as merely a supplement to the instruction that takes place in the classroom and classrooms are not designed to support active learning, therefore presenting challenges when faculty implement flipped pedagogies.

Universities are islands of creativity, learning, and socialization, especially in rural regions that lack technological resources and are plagued by poverty. The pedagogical approaches that attempt to engage students through the flipped classroom model might also serve to alienate students who lack these resources once they leave campus. Paired with classrooms that were designed for more traditional models such as lecturing rather than in-class activities, any challenges related to technological access off campus can serve to inhibit productive pedagogical developments. Universities generally employ highly developed infrastructures as well as stakeholders who are relative experts in accessing tools that support learning, yet students face unique challenges. They come to school unpracticed in using technology, commuting from rural homes without affordable Internet or even a reliable cell signal. Oftentimes their families do not understand the need for such tools or skills. These students will struggle to keep up in many classes, especially when instructors place heavy emphasis on the use of technology outside of the classroom and are faced with their own pedagogical challenges in outdated classroom spaces.

While EDUCAUSE (2012) has explained that, “There is no single model for the flipped classroom,” we are in a position to discuss the technological challenges of the flipped classroom model, especially in light of traditional classroom environments that problematize student collaboration and other active-learning strategies. This chapter analyzes key challenges for reshaping flipped-classroom pedagogies to provide equitable engagement among students in the face of these realities at a regional comprehensive university. By better understanding the pedagogical landscape—to include the relationship between physical and virtual spaces—as well as the technological challenges students face, faculty may better develop flipped classroom pedagogies at institutions of a variety of sizes and contexts.

In fall 2013, the Noel Studio for Academic Creativity—which provides services that support the design of written, oral, and multimodal communication design at Eastern Kentucky University (EKU)—aligned with the Teaching & Learning Center (TLC). The program, with its technologically sophisticated space and active-learning classroom—referred to as the Discovery Classroom—formed student-facing and faculty-facing initiatives that focus services for students in communication design and composing along with those that develop teaching and learning initiatives. A major topic of university-wide collaboration and conversation during the spring 2014 semester was flipping the classroom on campus.

Our conversation highlighted two interconnected issues: technological disconnect and physical classroom constraints. Exploring and sharing flipped classroom models from across campus prompted us to realize that these two related factors often hinder teaching and learning developments. For the purposes of this chapter, we define two spatial divides: first, the spatial divide in digital learning spaces, the gap between the ideal world of the flipped classroom and the harsh realities of the digital world within eastern Kentucky and beyond; second, in on-ground learning spaces, the gap between the ideal model of the flipped classroom and the constrained physical realities of current higher education classrooms.
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