Chapter 6

Blending Technology-Centric Strategies for Faculty Development in Higher Education

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ABSTRACT

Many universities in the United States are working to incorporate innovative 21st century skills, new active learning pedagogical approaches, and technology. Creating new physical and virtual spaces requires agile faculty professional for technology-centric experiences. Designing and offering meaningful professional development to faculty members in new virtual and physical learning technology-centric environments is a challenge. This case study explores the journey of one higher education institution in the Midwest as they implemented new technology-centric strategies, initiatives, and support. Data from faculty participants indicate the program’s success and establish an agenda for future research.

INTRODUCTION

Universities are continually challenged to integrate new technologies for teaching and learning, and there is a distinct need for meaningful faculty professional development. Integrating innovative technologies and active learning pedagogies that engage 21st century learners are pervasive topics in the literature. As hi-tech new learning ecosystems are designed and implemented in higher education institutions, the need increases for faculty to be skilled with the design, facilitation, and assessment components in the teaching and learning process. This study explores agile technology-centric professional development for faculty members as a solution.

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With classrooms no longer limited by brick and mortar, this chapter addresses one particular experience and technology-centric faculty development model focused on an individual faculty member’s transition to teaching in new physical and virtual learning environments. It discusses the planning, implementation, and assessment of learning spaces and professional development for faculty members over a three-year time span. At the end of the program, participants cited improved technology self-efficacy, specific student-related successes and challenges, and increased student interaction. Most notably, faculty participants indicated that these collaborative, agile-designed faculty development opportunities addressed their specific needs and resulted in successfully transforming their teaching practices, as opposed to the former “one-size-fits-all” approach to mass faculty training offerings. The result was a blend of collaborative technology-centric space design, iterative professional development, and cultural change. This chapter details a case study of a higher education institution as they embarked upon a journey to implement innovative technology-centric initiatives.

TECHNOLOGY-CENTRIC LEARNING SPACES AND PARADIGMS

According to Sheskey (2010), “Educators in the 21st century realize that students entering the classroom today are much different from those who have come before” (p. 197). In higher education these changes extend beyond addressing traditional demographics of students. Rather, institutions are challenged to address how desires and expectations have changed, demanding physical and virtual learning spaces in which students can be actively engaged. Concurrently, active learning opportunities afforded by educational technologies can take on many forms. According to Meyers and Thomas (1993), the basic tenants of active learning include providing students opportunities to read, write, and reflect as well as talk and listen. Many forms of technology address the varying learning styles, needs, and expectations of students.

Current literature on active learning notes the four “Cs” that make up these skills: creativity, critical thinking, communication, and collaboration skills (Trilling, Fadel, et.al, 2009). According to Malaguzzi (1998), there are three components influencing education; teachers, students, and their environments (Edwards, et al., 2011). Instructional space (whether virtual or physical) should be considered the third teacher in supporting the educational environment of excellent teaching staff, instructional material and equipment as well as the application of a creative curriculum and pedagogy (Nair et al., 2009; O’Donnell et al., 2010).

Soine and Lumpe (2013) recommended that educators have professional development designed in a way they can take control of their own learning (p. 303). DuFour (2014) identified five critical factors for faculty development that builds staff capacity: sustained and on-going; collective; job-embedded; results-oriented; and functions as a professional learning community. Taking this into account, technology-centric faculty development was planned. This paper documents the journey of one private Midwestern university from initially developing new technology-centric environments to analyzing data on professional development activities. The university worked to launch an integrative, iterative model for this process.

Developing a training protocol for faculty and establishing a culture of inquiry and collaboration regarding technology-centric learning spaces became critical. Over the past ten years, multiple resources in the literature have surfaced that analyze the importance of learning spaces—including informal learning spaces and campus design (Painter et al., 2013). Recently, Byers, Imms, and Hartnell-Young (2014)