Chapter 7

Electronic and Mobile Learning for Workforce Development

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ABSTRACT

This chapter covers the construction of a digital ecosystem grown organically to digitize a workforce development organization. A criteria matrix was developed from a listening tour to plan and adopt blended, electronic, as well as mobile learning (e&mLearning) as part of its practices. The chapter describes the organic approach to diffuse the technological innovation for cultivating supportive teaching and learning communities. The process started with the establishment and implementation of an academic vision and strategy; the building of a blended, electronic, and mobile learning criteria taxonomy; as well as a theoretically informed, technology integrated educational framework. The results and findings of the implementation of an LMS as the foundation of the e&mLearning vision is shared, followed by recommendations from successes and organizational needs.

INTRODUCTION

This chapter focuses on the vision and strategic implementation of electronic, blended and mobile learning into the educational processes of a national training organization’s workforce development program. The perspectives are offered from a diffusion of educational technology approach, as well as from program design and leadership lenses. Through a six-month intensive training program followed by a six-month internship, Empowered Professional Internships with College Credits

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(EPICC) provides urban young adults, between the ages of eighteen to twenty-four, with a combination of hands-on technical and professional skills, college credits, and corporate internships.

In order to initiate systems change and introduce mobile accessible eLearning in an integrated manner, a research framework was established. The framework consisted of field observations through site visits, semi-structured interviews and focus groups. Existing organization survey data was inspected and enhanced to create survey feedback loops to gather information from students and staff as customers. The results of the research site visits is reported as well as informed the construction of the academic vision and strategy. The chapter also covers the construction of an educational taxonomy, and the building of a learning criteria matrix to help select a mobile friendly Learning Management System (LMS). The results and findings of the LMS implementation is also shared followed by recommendations from current successes and organizational needs.

BACKGROUND

Seven years ago, EPICC, the then twelve-year-old organization, was running its six-month learning and development program primarily with paper-based models. In one week of an Information Technology course, students were printing five to ten assignments with screen grabs. The assignments would typically be 20 or more pages per student. Apart from the heavy printing cost and printer maintenance, which was not tracked separately as budget items, the “instructors” would be saddled with massive stacks of assignments to grade. Imagine the demotivation that would be induced when looking upon those heaps of assignments to grade. Additionally, instructors were only required to submit grades at the end of seven weeks, which is the time frame of one module. This impacted whether students and staff could see immediate or regular evidence of a student’s learning and development progress. For the most part, aside from a few instructors at all sites, there was a heavy reliance on anecdotal evidence of a students’ progress. A lack of criteria-based assessments and evidence of learning was overwhelmingly present within the organization. The issues of clarifying why criteria-based assessments were important, was further compounded by the lack of hiring educators that have undergone any type of teacher training. In a few cases, other program staff would be allowed to switch to teaching positions even though they had no training, no certifications or experience to educate methodically the young adults of the program. At times, the struggle to attract experienced or teacher trained staff was a result of program staff without any relevant academic background, industry or higher education work experience writing