The Development of a Personal Learning Environment in Second Life

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ABSTRACT

In this qualitative pilot study, the authors report on curriculum field trials within a personal learning environment (PLE) designed by a collaboration of academic researchers and nonprofit volunteers working together in the virtual world of Second Life. The purpose of the PLE is to provide learners less likely to have access to educational opportunities with a means to create a “new life” in the real world, through a basic web-based curriculum and an advanced Second Life curriculum. Field trials of the Second Life curriculum were held with youth from underserved populations (n=6) to identify participant characteristics that facilitate success with the curriculum. Performance on instructional outcomes was examined in addition to a participatory action research methodology (PAR) that was employed with participants as co-researchers. To protect identities, the authors use a case study approach to track one composite participant/co-researcher through the curriculum.

Keywords: Digital Divide, Disabilities, Homeless, Participatory Action Research (PAR), Personal Learning Environment (PLE), Second Life, Virtual Worlds

INTRODUCTION

We report in this paper on Transitions: a Place for Dreams, a personal learning environment (PLE) designed by a collaboration of academic researchers, nonprofit volunteers and social action developers, who met and work together in the virtual world of Second Life. In the following sections, we briefly note the project purpose, then outline the research questions, the research approach, the hallmarks of the personal learning environment concept with regard to the project design, and present the results of the Second Life curriculum field trials.

THE TRANSITIONS: A PLACE FOR DREAMS PROJECT

Transitions: A Place for Dreams is first a collaboration of academic researchers work-
ing with five core nonprofit and social action organizations located physically in Arizona/Mexico, Canada, Boston, Los Angeles, Seattle, and ‘virtually’ in the Nonprofit Commons (NPC) in Second Life, a virtual community founded in 2006. Each of the five collaborating partner groups has a focus on issues of homelessness, poverty and disempowerment. All five report the successful use of various technologies with clients, in some cases via computer technology centers or loaned computers. A small but growing percentage of clients own laptops. The Transitions: A Place for Dreams PLE builds on the five organizations’ experience in seeking to provide accessible, appropriate online instruction to as wide an audience as possible. The primary goal of the instruction is to allow users to design a better life, after individualized mentoring in areas such as technology skills and small business practices. A carefully designed PLE, flexible enough to meet the needs of the individual, was chosen as the vehicle for the instruction.

The PLE includes both web-based and Second Life portions (as not all members of the target population have access to Second Life); this paper focuses on field trials with the Second Life portion of the PLE.

SECOND LIFE CURRICULUM FIELD TRIALS

The purpose of the field trials is twofold: first, to identify user characteristics that may lead to success with the Second Life curriculum, as well as any hindrances to success; and second to monitor efficacy of the program curriculum, by examining performance with regard to instructional outcomes.

RESEARCH QUESTIONS

Within a PLE constructed according to the principles of flexibility, symmetry, and attention to means of coordination (Wilson, Liber, Johnson, Beauvoir, Sharples, & Milligan, 2006), as well as in accordance with features of the online participatory culture (Jenkins, Purushotma, Clinton, Weigel, & Robison, 2006; Seely Brown & Adler, 2008), we ask the following questions:

1. What participant characteristics facilitate success within the curriculum, and what hindrances to learning appear? We seek to identify these participant characteristics and hindrances in order to be able to design and refine scaffolding.

To answer this research question, we observed the paths of pilot users through the curriculum and participatory environment. We then conducted follow-up interviews based on questions arising during these observations.

2. Are the participants able to accomplish the instructional outcomes? Success with completion of outcomes is an initial indicator of the efficacy of the instruction in empowering users to redefine and recreate their lives.

To answer this second research question, we noted outcomes in terms of art making, action plan, participation, technology skills and proposal writing:

Outcome: Art making. To an extent the Second Life curriculum design may be seen as arts-based: students are immersed in a user-created environment and have access to content creation tools. They are introduced to a variety of arts-based making concepts (Irwin, 2004) through interactive examinations of art works, and express these concepts in the building of a series of virtual objects. We examine these virtual objects as outcomes.

Outcome: Action plan. Each student creates an action plan for a business or other initiative; the plan must satisfy a basic rubric. The action plan is modeled on the concept pioneered by Ashoka and entails a plan for a social ‘changemaker’ venture, as a next step in the student’s own life (Ashoka,
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