Chapter 53
Virtual Constructivism
Avatars in Action

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ABSTRACT

Contemporary educators have been reassessing pedagogical frameworks and reevaluating accepted epistemologies and ontologies of learning. The age-old debate whether knowledge is gained or constructed seems drawn to a consensus in the 21st Century: those who seek knowledge are active participants in the learning process and they have uniquely 21st Century attributes. Web 2.0+ technologies, various social media (Facebook, MySpace, Blogger, YouTube) and online virtual reality environments (Second Life, World of Warcraft, Sims) have influenced today's students in ways that constructivists should explore, embrace and exploit. This essay explores how Second Life (SL) effectively employs and distills the principles of educational constructivism. SL offers endless opportunities for immersion within user-constructed environments and activities. Educational use of SL may facilitate learner-led activities and yield learning that is prompted by desire and curiosity rather than learning for learning's sake. By exploiting these qualities with constructivist pedagogies, educators create environments that challenge and enable students to engage in the deepest kinds of learning.

INTRODUCTION

Teaching within Second Life—one of the most successful three-dimensional online virtual worlds—characteristically enables the deployment, application and distillation of several key principles of educational constructivism. Second Life (SL) offers its participants virtually endless opportunities for immersive experiences within user-constructed environments, communities and quests. By exploiting these qualities inherent within the SL platform, educators may create

mediated, distributed learning scenarios and environs that challenge and enable students (as 3-D graphical avatars) to participate in their own learning. Such learning is motivated by curiosity and may provoke deep thinking and the construction of new knowledge.

The use of SL as a constructivist *milieu* ultimately rouses learner-led and learner-centered activities. My experiences inworld have shown that hands-on learning (even virtual hands-on) is constructivist at its core due to the intense engagement of immersive cognitive responses and the application of scaffolded learning from user-participants. Utilization of such pedagogical practices is promising, especially considering how many neomillennials seem to live their wired lives. The advent of Web 2.0+ technologies, various social media (e.g. Facebook, MySpace, Blogger, YouTube) and online virtual reality environments (e.g. Second Life, World of Warcraft, Webkinz) have appealed to and acted upon today's youths in ways that constructivists should explore, embrace and exploit for educational purposes—across the disciplines.

We have all seen our students juggle hypertexts, collaborate on synchronous and asynchronous storytelling, produce PowerPoint presentations and iMovies, send photos via their cell phones, update their romantic status on their web pages, while they simultaneously text and instant message each other. Despite questions of access and the injustices of the economic and digital divides, this generation of students—in general—is comfortable in the digital world.

Consequently, as SL and other virtual environments continue to grow in their capabilities, and as their technologies become more elegant and more ubiquitous, the academy may find itself on the wrong side of the educational digital divide. Unless academicians learn to appropriate, adopt and adapt various digital and virtual reality environments to our special disciplinary needs and to our students'

multi-modal, multi-tasking learning styles, we may lose this opportunity to stay on or ahead of the technological curve. We must do so however, with pedagogical authenticity and constructivist validity.

Based on the work of several foundational pedagogical theorists and educational technologists (such as Dede, Gee, Kuhn, Vygotsky and Yee, among others) this essay discusses how educators may exploit these constructivist characteristics of SL and enable avatars to:

- journey through the learning environment's unfolding episodes and processes
- foster and nurture community between and among classmates and the instructor
- engage in collaborative knowledge-building
- distribute cognitive capital among and between the engaged groups and individuals
- forge identity formation strategies
- communicate with each other
- strengthen their own sense of agency
- engage with digital and virtual artifacts
- construct and learn content in context and in application
- activate meaning-making strategies

While theoretical in principle, this essay is the outgrowth of nearly two years' worth of personal and academic, inworld experiences and gleanings from my time within SL exploring ways to supplement my upper-level university literature courses.

BACKGROUND

This is the age of millennial and neomillennial learners, two subsets of digital natives whose learning styles have affected shifts in the skills and knowledge that our contemporary society

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