Teaching and Learning in 3D Immersive Worlds: Pedagogical Models and Constructivist Approaches

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Virtual worlds are an area of growing interest in many sectors, including higher education. While Web-based tools have existed for years to help deliver course content, these tools have not traditionally provided means for creation of community with the embedded communication and collaboration necessary for successful teaching and learning.

Teaching and Learning in 3D Immersive Worlds: Pedagogical Models and Constructivist Approaches examines successful implementation of social constructivist instructional design tenets in 3D virtual immersive environments. Authors share best practices, challenges, and advice to those working to utilize virtual environments in higher education and other venues. Readers will gain both a research background in the use of virtual worlds for teaching and learning and practical advice as they begin to design and implement these environments.

Topics Covered:

- Action learning/action research
- Activity theory
- Case-based learning
- Cognitive apprenticeships
- Collaborative learning
- Community-based participatory research
- Problem-based learning
- Project-based learning
- Situated cognition
- Transformative learning

Dr. Amelia Cheney is an Assistant Professor in and Program Director for the Instructional Technology program at Appalachian State University, where she has taught in 3D virtual environments since 2006. Prior to joining the faculty, Dr. Cheney had more than thirteen years experience in K-12 education, including serving as a high school teacher and a Chief Technology Officer for two school districts. She is a Board member of the Applied Research in Virtual Worlds (ARVEL), SIG of the American Educational Research Association (AERA), as well as Past-President and current Board member of the North Carolina Technology in Education Society (NCTIES). Dr. Cheney also serves on the Technology Committee of the Virtual World Consortium, and as a steering committee member for the International Journal of Web-Based Communities. Her current research is focused on constructivist teaching and learning in virtual environments, particularly issues of community, presence, and the building of relationships.

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McClannon Terry W. (Appalachian State University, USA)
Cheney Amelia W. (Appalachian State University, USA)

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Learning as Immersive Experience:
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Dunwell Ian (Coventry University, UK)
Rebolledo-Mendez Genaro (University of Veracruz, Mexico)

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Minocha Shailey (The Open University, UK)

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King Bob (University of North Carolina School of the Arts, USA)

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