

Title Virtual Environments and Game-based Learning in the Classroom

Contact Person

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Leaders

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Focus Area: This forum focuses on the integration of 3D virtual world environments, game-based learning, and digital story telling into a STEM curriculum that creates engaging content and provides students with simulated hands-on experiences and contextualized learning. Topics include the ability to share content, development of the technical infrastructure required for content delivery and its integration with lesson plans, curriculum, e-books, Massively Open Online Courses (MOOC), and other course delivery methods, dissemination, assessment, and the need for interdisciplinary teams.

Goals: The primary goals of this workshop are for participants to gain an understanding of what is possible with these emerging technologies, to examine models for integrating virtual and game-based learning activities into their curriculum, and to identify metrics for comparing the success of development and delivery platforms for individual projects. A secondary goal is for participants to network and build relationships for further discussions and collaborations.

Expected Outcomes

1. Participants will build a picture of how to best use virtual environments, game-based learning, and digital storytelling to their best advantage.
2. The forum will produce a comprehensive map of projects and PIs that participants can use to identify collaborators with whom to share content, artifacts, and assessments and to whom they can turn for technical support, and will share forum member email addresses and project links.
3. The forum will produce a website or other Internet presence to disseminate information from forum interactions and the project/PI map. The highlights of each meeting will be incorporated into the website.
4. Participants will build a team of collaborators who can support one another and nurture those new to virtual environments, game-based learning, and digital storytelling.

Meeting Schedule with Topics

M1 [Project identification, Wednesday, September 4, 2013 \(3-5:30 pm\) EDT](#)

Virtual 3D environments in the classroom, game-based learning, and digital storytelling: What types of activities are being developed and used? (focus on what has been done at a high level) [Outcomes 1, 3]

M2 Delivery platforms, Monday, September 16, 2013 (1-3:30 pm) EDT

Delivery of virtual and 3D content, game-based learning, and digital storytelling: What technical infrastructure is required for content delivery and what are its maintenance requirements? What is the key to ensuring the longevity of these systems? (focus on technology, what is required and who has expertise) [Outcomes 2, 3]

M3 Integration into lesson plans and curriculum, Wednesday, September 25, 2013 (3-5:30 pm) EDT

Integration of virtual 3D environments, game-based learning, and digital storytelling into lesson plans and curriculum. Modeling skills and behaviors for students. [Outcomes 1, 3]

M4 Enhancing experiences with interdisciplinary teams, Monday, October 7, 2013 (1-3:30 pm) EDT

How can interdisciplinary teams enhance virtual and 3D content, game-based learning, and digital storytelling? What models are being used to work effectively on interdisciplinary teams? [Outcomes 3, 4]

M5 Sharing content, Wednesday, October 16, 2013 (12-2:30 pm) EDT

What content can be shared, what makes it sharable, and how can sharing be facilitated? [Outcomes 2, 3, 4]

M6 Dissemination of content, Monday, October 28, 2013 (1-3:30 pm) EDT

What challenges are inherent in disseminating content from 3D environments, games, and digital stories? How can we overcome or minimize them? [Outcomes 2, 3, 4]

M7 Assessing impact, Wednesday, November 6, 2013 (12-2:30 pm) EDT

How are the impacts of virtual 3D environments, game-based learning, and digital storytelling being assessed? How should they be assessed? What assessment tools are available for sharing? [Outcomes 2, 3, 4]

M8 Integration with multiple course delivery methods, Monday, November 18, 2013 (1-3:30 pm) EDT

Integration of virtual environments, games, and digital storytelling with e-books, MOOCs, and other course delivery methods: What would we want content delivery to look like in five years? (anticipating and planning for the future) [Outcomes 1, 3]

Desired Participant Characteristics: Ideal participants will have current projects related to virtual environments, game-based learning, and digital storytelling; will be planning to submit proposals in this area; or will have recently completed related projects. Those with demonstrated expertise in related areas or interactive and online learning would also be valued contributors. We expect this forum to be highly interactive with participants eager to share experience and expertise, mentor colleagues, collaborate, and form consensus on best practices.

Application Process: Those interested in participating in this forum should send a brief statement describing relevant background and experience along with their contact information to saugust@lmu.edu, with the subject line "PI Forum". For questions, contact Stephanie August, (310) 338-5973, saugust@lmu.edu, or Jungwoo Ryoo, (814) 949-5243, jryoo@psu.edu.