### **IITG Project Outcomes Form**

#### Name of person reporting outcomes

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#### Email

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#### IITG Project Title (truncated)

Developing an Informed Community Advancing 3D Virtual World Instruction

## IITG Project Theme

Gaming and Simulation

#### Do you wish your current abstract to be used?

No

# If you wish to re-word the abstract to reflect updates or outcomes, you may do so in this text box (please keep it brief - less than 150 words - you can expand on this in your files and links)

The authors of this study were directly involved in designing and imparting a graduate-level Principles of Creative Problem Solving (CPS) course in a 3D virtual world (Qube). They have utilized this experience to monitor and evaluate the effects of their facilitation approach, QUBE features and pedagogical activities with the aim of improving and generalizing practice. To study the potential of this platform a participatory action research method was selected. This worked differed from the original abstract. The necessary subjects needed to conduct the work, as described in the original abstract, were not obtained.

The objectives of this pilot study were to: (1) explore the potential of the virtual world, QUBE, for CPS activities; (2) understand the barriers and solutions to using QUBE, including participant and presenter training; (3) measure participant learning outcomes and feedback. Overall, the results of the study were encouraging, and supported the initial belief that a collaborative, 3D, platform could be used to teach CPS in an interactive manner. In post course evaluations, students agreed that course objectives were met.

#### File One Upload and Brief Description

Paper submitted to and accepted by the Marconi Institute of Creativity, Bologna Italy.

Burnett, C., & Cabra, J. F., & Burnett, A. (September, 2013). Towards frictionless collaboration: Teaching creativity in a 3D virtual world. Conference Proceedings paper for the 1st annual Marconi Institute for Creativity, Bologna, Italy.

http://www.mic-conference.org/session-3

#### File One

Marconimaster-FINAL.pdf

#### Project Website Address (Hyperlink 1)

http://www.mic-conference.org/session-3

#### Any additional comments or resources you wish to share?

Although we were unable to find subjects for our study (as a result we had to switch the focus of the study and project), we were able, however, to support one Buffalo State College professor who used the platform for her science class. She has expressed an interest in its continued use. Groups outside of SUNY, such an organization in Chile and alumni of the international center for studies in creativity have used the platform for meetings and classes. We presented two graduate level courses, 100% all in Qube, which was well received and showed promise for the use of this platform. We also supported an organization based in Chile, which continues to use the platform for distance training and new product development sessions. Feedback from these three sources

was instrumental in improving the platform. Based on feedback, the following improvements were made since the mid term report:

1. Places List - ability to configure and control what is shown in the places list, to make navigating complex spaces simpler for participants

2. Sticky Notes - complete rewrite of the sticky note code to enable word-wrapping and better scaling of stickynote content, improve performance and reduce memory use for spaces with large numbers of notes

3. Tabbed Walls - the ability to automatically create anonymous sticky-notes, to enable anonymous brainstorming if required

- 4. Tabbed Walls the ability to create very small Tabbed Walls on desks, for personal study / documents
- 5. Display Panels easily create snapshots of display panels / shared windows as posters
- 6. Display Panels simplification of naming scheme for easier identification of stored documents / images
- 7. Posters default layout improved, and control visibility of goto buttons

8. Applications - replace OpenOffice with LibreOffice for performance improvements and compatibility with new MS Office formats

9. UI - tidying up of some dialogue boxes, error reports, links, menu items.

- 10. UI introduced new toolbar with easy access to commonly used features
- 11. Server robust backup system for easy recovery of lost data & server failure
- 12. Server relocation to new data centre for increased reliability and reducing ongoing support costs

• Tutorial Video #1: http://www.youtube.com/watch?v=pz4In7QI2As

- Tutorial Video #2: http://www.youtube.com/watch?v=nKCkmO7rmos
- Tutorial Video #3: http://www.youtube.com/watch?v=8uUzX\_jmuYk

# Do you intend to create an ongoing "Community of Practice" within the SUNY Learning Commons to continue work and dialog regarding this project?

#### No

#### **Comments?**

At this time we do not plan on creating an ongoing "Community of Practice". The 3D virtual world (Qube) system needs further development to limit the occasional crashes and the slow performance. Qube is in the early development stages and until it moves to the internet, independent of software, then the platform prevents its widespread use. We hope to move the platform to a web based platform in one year. We suspect the reason why we did not receive SUNY-wide faculty interest to experiment with Qube is closely related to the technological challenges described above. We would like to wait until Qube is converted to a web based platform; we expect to have this happen in one year. Currently Qube's performance is slow at times and prone to occasional crashes.

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