Gamification in Instruction and the Management of Intersubjectivity in Online University Courses

Diane Nahl, Department of Computer and Information Science, University of Hawaii, HI, USA
Leon James, Department of Psychology, University of Hawaii, HI, USA

ABSTRACT

Technology integration with twelve online undergraduate and graduate courses over four semesters provided the occasion for experimenting with effective ways of managing student learning at a distance. Students had online access to the publicly available applications used for communicating and coordinating activities with each other. Gamification principles guided some of the course procedures, such as a point system, feedback, awards and penalties, social networking, team tasks, individual options. A theoretical framework is proposed for understanding how to manage instructional intersubjectivity for students meeting online. Student thinking and motivation is observed to be higher under conditions of intersubjectivity in comparison to doing the same tasks alone. Learning from each other through participation promotes intersubjectivity when the instructional strategy installs technological affordances that keep each student informed of what the others are doing in context, and how they are reacting or responding to each other.

Keywords: Biological, Communicative Action, Gamification, Immersive, Intersubjectivity, Online Teaching, Optimizing, Satisficing, Second Life, Virtual

INTRODUCTION

Today college students are digitally literate and increasingly engaged with the online world. However, research shows they lack vital critical thinking abilities to evaluate and apply online information (Dahlstrom, de Boor, Grunwald, & Vockley, 2011; Head & Eisenberg, 2010). Concurrently there is an increase in online asynchronous courses and hybrid face-to-face and online courses where students must independently acquire and apply online skills to successfully complete coursework. Since future careers and personal lives require great facility with lifelong distance learning, online transactions, managing one’s online identity, online conferencing and virtual team collaboration, higher education needs to equip students

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with needed online communication, research, production and presentation skills. As the demand for virtual work skills continues to rise (Blascovich & Bailenson, 2011), one pedagogical aim has been to develop viable online skills to process course content through technology integration, project-based learning, and teamwork (Boss, 2012; Boss & Krauss, 2007).

Innovative teaching methods that utilize online immersive environments afford education opportunities for expanding and personalizing delivery of content and building virtual abilities. A key component in virtual instructional environments is integrating social networking for communication, interaction, and collaboration among learners. Students who have agreed to meet online synchronously to carry out collaborative tasks assigned in a particular course make use of a variety of free interactive technologies. For example, the use of Second Life as an immersive platform for student engagement provides a special opportunity for implementing synchronous role-play that can effectively integrate content with informative, educational, immersive and engaging drama. In this modality, creativity becomes a resource because students use their imagination to address course content and issues, building models, creating narratives and enacting scenarios of actual situations for analysis and interpretation (Thomas & Brown, 2011).

The virtual world is a laboratory that can be used as a virtual classroom, online workspace, communication medium, presentation venue, role-play medium, simulation tool, creativity machine, and more, depending on the ideas and flexibility of instructors. Employing a virtual world platform in education has advantages and limitations. Barriers to use have been widely reported in terms of technical issues and learning curve issues. Despite these problems, benefits to instructors and students lie at the center of cultural and behavioral shifts brought about by technology. Demand for virtual abilities continues to spread into all domains including education, nursing, medicine, aerospace, genetics, aquaculture, business, etc. (Thomas & Brown, 2011).

### The Instructional Context

We applied gamification strategies derived from the literature in 12 courses over five years from 2008 – present. Each course is taught at least twice in different semesters, and eight of the courses are offered every semester. The undergraduate courses are Cyberpsychology, Driving Psychology, and Marriage and Relationships. The Graduate courses are Intro to Reference and Information Services, Teaching Information Technology Literacy, Human Dimension, Information Systems, Information Behavior in Virtual Environments, and Virtual World Librarianship.

The Web and the virtual world platform Second Life are used in all courses for the purposes of attending pre-announced events or class sessions, making observations of some inworld or online activity, working in project teams, finding objects and information for assignments, designing and building interactive exhibits, and presenting results to the class and to specific audiences.

Students use their own mobile, laptop and netbook wireless technologies as well as campus lab computers and a variety of free software, to participate in and produce assignments. Our technology integration strategy now includes the following applications:

1. Jing for screen capture and annotating images
2. Instagram for photo sharing through smartphone
3. Facebook course pages for information sharing
4. Google Groups for reports and discussions
5. Google Drive Documents for collaborative work
6. Google Drive Spreadsheet for self-initiated record keeping, project choices, and team scheduling
7. Joomag magazine presentation
8. Pinterest uploading and repinning through Web browser
9. Google Presentations

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