Out in the Real World, Virtually
Gerard Jalette, Ph.D. & Niko Poulakos, Ph.D.

Understanding Global Communication with Simulation and Game-Based Learning

GOAL: Use a role-playing simulation and media technology to increase student involvement and learning, and develop an assessment strategy to measure effectiveness.

Students work in groups to use the online story-building tool Twine to design a video game with a choose-your-own-adventure narrative for a real-world intercultural communication problem. Groups share their games, then present to the class to discuss how they developed their story.

BACKGROUND: A comprehensive review of educational gaming research [1] found that games were more effective when they featured role-playing in social scenarios and when they encouraged collaboration, reflection, and metacognition. Educational researchers suggest that games may be more effective when students can design games that can pose learning problems for other students to solve [2].

DESIGN: Fall '17 - 3 sections. Spring '18 - 2 sections.

Pretests: Test to Measure Intercultural Competence (TMIC) [3] and Personal Report of Intercultural Communication Apprehension (PRICA) [4].

Learning modules: Journey to Sharahad negotiation role-play [5], design intercultural Twine game, play the games from other groups, present on designing the game.

Posttests: Reflect on game design project, TMIC, & PRICA.

RESULTS: ENTHUSIASM & AWARENESS

A. Reflections: Increased enthusiasm for group projects & recognized that projects helped directly apply learning content into real-world examples.

B. Increased intercultural communication competency and decreased biased assumptions (Paired t-test for pre- \( M = 2.67, SD = .42 \) and post-test \( M = 3.13, SD = .51 \) TMIC, \( t(22) = -3.17, p < .005 \)).

C. Mixed support for reducing PRICA (varied by section).

Going forward, we seek to keep investigating games and simulations for learning in COM 100.

NEXT LEVEL:

- Increase motivation (e.g., engaging narrative setups).
- Shift towards more assessment for learning (e.g., portfolios, self-reflections) than assessment of learning (e.g., quizzes, essays).