

Fostering ethics and morality in adult learning through gameplay

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EXTENDED ABSTRACT

Digital games often offer ethical dilemmas (Schrier, 2017) and position the player in moral decision-making situations in environments or events that would be otherwise distant or unthinkable (Gee 2011), raising awareness of one's own identity (Zheng, Newgarden, & Young 2012) and fostering understanding of other perspectives. Nevertheless, researchers have not, to date, explored the design of digital games to address particular moral situations that learners may face in their personal and professional lives; previous empirical (Schrier 2017; Zheng, Newgarden, and Young 2012) and theoretical (Katsarov et al. 2017) have focused on commercial off-the-shelf games (Kronenberg 2012) that offer simulated situations that bear little content-specific resemblance to learners' cultures.

This presentation discusses preliminary results of a design-based research study (Barab and Squire 2004; Amiel and Reeves 2008) in which the hypothesis that a narrative digital game which presents situations that students may face in real work environments can lead to higher efficacy in the learning process, yielding more meaningful moral and empathic gains and increasing transferability of concepts. Data collection was carried out in an adult learning instructional setting in the southern United States. The course in which data was gathered focused on Internal Controls in Local Governments. The material introduces laws, policies, and procedures that should be in place in governmental settings.

Taking this context into consideration, the following research questions are addressed:

- (i) What moral characteristics of the content taught in a governmental professional development course can be addressed in a game-based scenario?
- (ii) How do learners make moral decisions within a game-based scenario simulating a governmental setting?
- (iii) How can the design be improved to increase learners' awareness about their own moral decision-making processes?

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Initial observation notes were collected in order to identify specific content that could be addressed by the narrative game-based environment created by the researcher. Based on such observation, a simple interactive narrative game was developed, taking into consideration learners' use of mobile resources in the classroom context and varying levels of familiarity with narrative-focused games theorized.

After development of a prototype of this game-based environment, the artifact's usability and efficacy was tested with a sample of four participants. These participants presented varied levels of gameplay experience. After the testing phase, a multimodal analysis approach, focusing mainly on participants' choices and interactivity within the digital game, was conducted to identify possible moral reasoning choice conjectures and used to generate stimulated recall group interviews. Themes also emerged from such interviews, combined with the multimodal analysis. Member checking (Patton 2015) was adopted throughout all phases of the study in order to establish validity and credibility of researcher's interpretations. Participants were invited to provide feedback on the design of the tool, as well as the analysis conducted by the researcher. Furthermore, the results of the study were compared and contrasted with findings from previous research on moral decision-making in game-based environments so that the present investigation could be situated within a larger context.

In terms of learning gains, participants were able to recognize the influences of their subjectivities and biases in their moral and empathic decision-making in professional environments, as well as understand the process of coming to such decisions. Significant factors that were identified in this decision-making process were attachment to characters, hesitation due to potential in-game emotional consequences, and struggles to manage emotional decisions along with rules and regulations. Furthermore, participants were able to relate the game narrative to prior professional experiences, transferring concepts derived from real-world environments to the simulated context, which resulted in distinct outcomes for different individuals. Finally, in addition to the contributions to participants, the design-based research techniques adopted in the study can shed light into aspects of game-based learning that have been under examined by previous literature. Some of such characteristics are accessibility to different learner profiles and adequacy of game-based content to subject-matter.

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