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## DESIGNING A GAME-INSPIRED CLASSROOM: VIDEOGAMES AS MODELS OF GOOD TEACHING

Jeffrey Brandon Holmes  
Arizona State University

This paper describes the design of a “game-inspired” undergraduate course based on the premise that games demonstrate good *teaching methods*, not just good learning contexts. It uses games as an inspiration for designing instructional experiences in which learners can realize the various principles Gee (2003) first described without *necessarily* creating game-like experiences. Instead, this game-inspired teaching is a way of recognizing the effective pedagogical methods videogames use as part of the “good learning tools” Gee has described tied to what we know about learning and teaching, particularly as described by Hattie and Yates (2013). Indeed, it is possible to reconsider Gee’s learning principles as *design principles* which can drive instructional practice. These design features allow teachers to structure learning experiences in ways that work for their particular learning goals and leverage the growing body of game-based learning research (Tobias and Fletcher, 2011). These design principles also allow for flexibility in creating a course or other learning environment by serving as guidelines and not absolutes; the type of content, the type of learner, and the various affordances and limitations of the teaching spaces change the ways in which game-inspired teaching methods might be useful, so teachers may use them as guidelines rather than being stuck within rigid boundaries of game scenarios.

### **Design principle: Collaborative learning**

One key design principle is covered in this paper: the notion of collaborative learning, cooperative practice, and shared production of knowledge. There are many other principles; this example highlights the *specific* design rationale behind a *specific* course in order to show the various ways game-inspired methods can be used and adapted to various teaching moments. The course, titled “Videogames and Digital Rhetorics,” focused on exploring rhetorical concepts through the lens of videogames with an emphasis on experiential practice. The course was a “hybrid” course, with one face-to-face meeting each week and an online component. Students played games--primarily *World of Warcraft*--as a regular part of their class meetings and course assignments.

*WoW* provided a core organizing principle for cooperative play (learning), that of the “party” system in which various specialized experts work cooperatively to accomplish a task (e.g. a 5-player dungeon party includes a tank, a healer, and three damage dealers

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in order to defeat enemies). The course was designed around a similar concept in which students chose one of three content-area specializations to focus on during the semester (identity, design, or teaching and learning); each week students read an article common to the entire class as well as a supplemental article specific to their domain. Students became “experts” in a given concept in order to collaboratively develop a weekly principle within their cohort of experts which was then shared out to the rest of the class. Students from the other disciplines did the same, and then utilized the various principles to tackle a weekly challenge in class.

These challenges provided opportunities for students to apply the knowledge they collectively developed around a specific problem, and to create a solution as a *class*. For example, the class was faced with the problem of creating games (in small groups) using the various principles they created; students were provided a game template which they “filled out” by incorporating the knowledge they shared and then play-tested their games with each other.

This design principle is fueled by the recognition that learning is an inherently social act and that meaning making is contingent and works through dialogue and dialectic practices. Further, the “science” of learning suggests that it is highly interpersonal (Hattie and Yates, 2013) and that the human mind is geared for social collaboration in knowledge building tasks. In modern classrooms, however, students are often simply parallel learners (learning side-by-side) with various instances of shared labor (group work). The *WoW* party model is an effective metaphor for how teams can blend specialized perspectives, abilities, and interests around a shared goal. Since each role has unique functions, and each player has a specific knowledge of their tasks in each encounter, the team distributes their knowledge across the various players—and relies on each others’ expertise. This is similar to various observations on collective intelligence in which the group as a whole might be considered the unit of analysis; the group collectively has more knowledge, and more capacity to put that knowledge to work, than any individual member. The course design owed much to Aronson and Patnoe’s (1978) concept of the “jigsaw classroom,” in which each student had one “piece” of the knowledge necessary to complete each weekly tasks but it required the efforts of all students.

Further, by sharing out their knowledge, they served as masters/experts and teachers for the other groups. They provided enough information for the other students in the other cohorts to understand (at least superficially) the particular perspective in order to both incorporate it into their own perspective as well as to synthesize as a class around a weekly problem. For example, one week the topic was “big ‘G’ gaming,” and in class students were tasked with building a model of a network of “big ‘G’-like” sites for a classroom. The students various perspectives were each necessary to creating a more robust model. Students who specialized in identity, for example, brought many issues of identity play (being a student, being a peer such as a dorm mate or sorority-mate, being a child, being an adult and so on) when deciding what features and what sites would go into a “big ‘G’ -like” network. Similarly, the students focused on design brought issues of access, user-centered design, aesthetic and technological concerns and more; students specializing in teaching and learning helped ground the types of content and the methods each site might need to include in order to effectively structure the other

perspectives. In total, each group helped illuminate, complicate, and strengthen the other perspectives.

Importantly, just like in a *WoW* party, each member does not need to be an expert in each role; however, each player needs to know enough about the other two roles in order to gauge how the group is doing and how their own performance might be altered. In a similar sense, this course was designed to give students an opportunity to engage with other perspectives and know at least something about them in order to complicate their own thinking. In a sense, sharing the cognitive load across all the students helped cover more ground than any single individual student could handle. Students taught each other by distilling at least a key idea from their own perspective, and they learned enough from each other to gain a deeper understanding of each weekly topic. They learned both deep knowledge on one topic and broad knowledge across several, and—critically—how these related in a broader ecological sense.

## References

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