Overcoming the Fear of Gaming: A Strategy for Incorporating Games into Teaching and Learning

The effective use of games in academia requires a critical approach to the medium and a willingness to let go of the learning process and harness its outcomes

By **Rafael C. Alvarado**

Of the many compelling genres of new media that currently vie for faculty attention, none seems more risky to the traditional academic than gaming. (By "gaming" I refer primarily to immersive computer-based video games such as *The Sims*, *Civilization IV*, and *World of Warcraft*.) Although digital storytelling, podcasting, blogging, and collaborative writing with wikis are each revolutionary in their own ways, they rely heavily on traditional oral, written, or cinematic forms already familiar to academics. Although these forms originate from the "Wild, Wild Web," they have penetrated academia in part because they have "domesticated" variants—even if their perceived "coolness" by association with the web is played up to attract students and technologists or down to comfort parents and administrators. Not so with digital games. As many advocates of academic gaming point out, gaming is the new rock 'n' roll—a lightning rod that inspires overblown fears of moral decline among critics, infatuation and often excessive use among consumers, and lofty hopes for social change among advocates.

One reason for this perception is the gaudy, crass, and violent nature of many video games. They are, after all, products of mass consumer culture, participating in the same market dynamics that produce cultural forms many people believe have little place in academia except as objects of study. If an academic technologist proposed to a faculty colleague that she use a game like *Civilization IV* in a course on international relations, for example, she might dismiss gam-

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ing itself out of hand. Without direct experience of effective use of games in pedagogy, preconceptions about games will trump arguments most of the time. Call it fear of gaming.

Aesthetics and low-brow associations might not be the main cause of the fear of gaming, however. Many professors can get beyond the "pop culture" aspect of gaming—indeed, many will embrace it in accordance with a cultural studies populism. More profound are the cognitive barriers to gaming compared to other new media genres. To use Janet Murray's language, gaming as a genre provides a specific form of "cognitive scaffolding."[1] Unlike the essentially discursive nature of new media forms like podcasting and blogging, the typical immersive video-based game's scaffolding appears difficult to integrate into the ecology of teaching as currently understood by a wide variety of faculty.

As one tool among many available to faculty, games do not necessarily "play well with others" because a game is, almost by definition, its *own* game. The more immersive a game, the more it threatens to either replace or contradict the larger social game that is the college course itself. If, as Diana Oblinger wrote, "games have become complex learning systems," they have done so without the help of academia. When introduced into the classroom, they can become the center of cognitive gravity, pulling all other resources into their orbit of praxis.[2]

The effective use of games in teaching and learning, then, requires an explicit strategy. Based on familiarity with my colleague Todd Bryant's pioneering work on gaming as a pedagogical tool, I recommend a strategy of adopting an overtly critical approach to the game itself.[3] For example, instead of using *Civilization IV* to replace the voice of an authoritative text (or podcast, for that matter) on the nature of historical change, faculty can ask students to study the logic of the game as it applies to the subject matter. What assumptions about historical process are made in the game's "Civilopedia," both in terms of its form (a causal tree) and its content? Can it be characterized as historical materialism or cultural determinism? What categories (or ontology) are used to represent historical change? At a deeper level—moving into what might be called "experimental criticism"—students can observe what happens to historical outcomes when categories are changed through "modding" (slang for *modifying*) the game's configuration files.

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Another strategy is to have students create their own version of the game, moving beyond the categories and into historical persons, places, artifacts, and institutions. Because this process requires collaboration, research, selection, and decision making at the level of knowledge representation, it allows for a critical investigation not only of the domain knowledge covered by the game but also of knowledge construction itself. Exercises built around such critical tasks can be used to discuss ideas that might otherwise remain abstract and opaque when expressed in a text.

So, what is the lesson here? I think that in making the case for gaming across the curriculum, academic technologists need to be aware of the paradox of gaming—the game-within-the-game problem—to both manage its disruptive effects and explore its affordances. We ought to warn faculty up front that, in addition to having a learning curve, games require a little getting used to, not unlike learning to drive a car. Because of their immersive nature, they demand a higher tolerance for "letting go" of the learning process than other new media genres. For precisely this reason it is possible to design courses that capture and channel the emergent and metacognitive side effects of the teaching process.

Ultimately, to take full advantage of games as engines of learning, we should move from a critical approach to a creative one and encourage the innovative use and development of games (and gaming engines) within our colleges and universities as collaborative new media projects. Such projects would take advantage of our unique social arrangement of students, developers, and faculty and allow us to rely less on consumer culture to provide game content. The design of these games would be guided by the experience of managing the pedagogical outcomes of games in real-use contexts, forming a feedback loop that would identify and select for better games.

With this sort of direct participation in the process of developing and using games, it is hard to imagine that an entrenched fear of gaming could survive anywhere but in the most hidden recesses of the academy. *e*

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Endnotes

1. Janet Murray, "Cyberinfrastructure as Cognitive Scaffolding: The Role of Genre Creation in Knowledge Making," Academic Commons, http://www.academiccommons.org/commons/essay/cyberinfrastructure-murray.
2. Diana Oblinger, "Simulations, Games, and Learning," EDUCAUSE Learning Initiative white paper (Boulder, CO: EDUCAUSE, May 2006), http://www.educause.edu/ir/library/pdf/ELI3004.pdf.
3. Todd Bryant, "Games as an Ideal Learning Environment," *Transformations* (April 13, 2007), http://nitle.org/index.php/nitle/transformations/2007_4_13.

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