

Games as a Vehicle for News: What We Know About This Kind of Learning '...we learn differently from content-driven media than we do from choice-and-problem-solving-driven media.'

By James Gee

In our interconnected world, what does it mean to understand issues like climate change or the global economic meltdown or events such as conflict in the Middle East? Traditionally, we have used news reporting and documentaries, as well as, novels, which seek a "deeper truth" through fiction rather than fact, to provide us with what such a level of understanding requires. Another name for such providers is content-driven media, which strings together facts or fictions to report on events or tell us stories.

Video games are not content driven media, though they do have content. They are driven by choice and problem solving. Content is there to motivate player choices about how to solve problems. Our understanding or illumination comes through actually solving problems or trying to solve them or by realizing there are multiple ways to solve them. Perhaps the problem is how to wage war in contemporary global conflicts (Full Spectrum Warrior), how to sneak past enemies unseen (Metal Gear Solid), how to manage a city (SimCity) or a civilization (Civilization), or how to clean house and keep a family happy when you are a four-inch, house-cleaning robot (Chibi-Robo).

Learning Changes

Our expectation is similar with these different kinds of media; we expect to learn new things, whether the source is news, novels, textbooks, movies, or games. But we learn differently from content-driven media than we do from choice-and-problem-solving-driven media. In content-driven media we learn by being told and reflecting on what we are told. Of course, it is not always easy to ensure that reflection happens and some content producers—especially in our polarized and entertainment-driven media—do not really encourage wide-ranging reflections on all sides of an issue.

With games, we learn from best from a well designed "guided experience." This means inhabiting virtual worlds that are designed to guide players to make choices, solve problems, and reflect on the results. Here, players do have to reflect, because their choices lead to results that impact whether they win or lose.

Game designers create digital environments and game levels that shape, facilitate, and, yes, teach problem solving. For example, after playing Chibi-Robo I know how to clean a house when you are only four inches tall and, more, I know how the world looks to a four-inch robot and what dilemmas he faces in the world. In a real-time strategy game like Rise of Nations, players have to make a decision like, "Should my civilization invest in technology now or wait 500 years?". In Portal, a player has to think about how the laws of physics in the game world – for example the law of conservation of momentum – can be used to manipulate the environment. In Tactical

Iraqi the player must be a soldier in Iraq and learn to use Iraqi Arabic in realistic settings without culturally insulting anyone.

We learn from games quite differently than we do from news and books. And we also learn from games quite differently than we learn in school, where failure is a big deal. Not so in games; just start over from the last save. A low cost for failure ensures that players will take risks, explore, and try new things. Games give language (e.g., instructions and information) "just in time" when it can be used or "on demand" when players want it, need it, and ask for it.

Games are based on "performance before competence": learn by doing, then read. Often, school is based on "competence before performance": learn by reading, then maybe you get to do. Players are able to understand what they read about games (e.g., manuals and strategy guides) based on having experienced the game worlds that the words they are reading are about. In school, too often, students have not lived in the worlds the books they are reading are about (e.g., they have not "played" the game of biology, but only read about it).

Games let players practice skills as part and parcel of larger goals and actions that they want to accomplish; in school, kids are often skilled-and-drilled apart from any meaningful context. Games make players attain mastery of skills through lots of practice and then challenge that mastery with a "boss battle," forcing the player to learn something new and take mastery to the next stage. For many poor kids, school can be too challenging if they are never allowed to practice enough to attain mastery. Alternatively, school too often fails to challenge the routine mastery of kids who are good at "doing school."

Finally, games encourage players to think about how they are designed—in order to beat them—and even to design games themselves through "modding," in which they use design tools that often come with games to make new levels or entirely new games. School rarely lets kids design or redesign the curriculum.

Be Told or Be Involved

An example of this learning dichotomy can be found in a book and a game about what it is like to be poor. Barbara Ehrenreich, in her book "Nickel and Dimed," tells what it is like to be poor by describing how hard a time she had, as a middle-class, well-educated person, trying to get and keep low-level service jobs. She shows us how she tried to solve problems, and as readers we are meant to learn through her experiences.

On the other hand, players in The Sims, which is the best selling game in history, give each other a challenge to see if they can live the life of a poor single parent in the game and get their kids out of the house safely into young adulthood and even into college. This isn't easy to do in the game. Being a commercial entertainment simulation of families, communities, and life, The Sims is not well constructed to simulate a life of poverty, since being poor is not fun. So the challenge contains lots and lots of rules about what the player can and cannot do in the game in order to simulate the "feel" and difficulty of poverty.

In assuming such a challenge, players learn by facing the problems themselves, as Ehrenreich did herself. And they can "win" or "lose." One rule is that players cannot "quit without saving," even if bad things have happened or they have made bad choices. They have to live with the bad things. Of course, poor people cannot quit without "saving" what has happened day to day; they have to live with the consequences of what they've done or what has happened to them. Players in the challenge are not learning from someone else's experience; they are learning from their own.

Yet, these players are learning something else as well, something beyond what it means to be poor: they are learning that solving problems (such as poverty—or it could be global warming) depends a lot on how the problem is set up and what the "rules" that one must follow in solving it are. Call them "constraints," if you like. Along the way, they discover that poverty is a "system" and that there are different ways to view or simulate (or discuss) that system.

At a time of polarized, entertainment-driven new and dying newspapers, and in a world replete with risky, dangerous and complex systems – global warming, economic meltdown, the clash of civilizations, poverty, epidemics, or politics in our country, a place where demographics, media, ideology, polarization, marketing and campaigning converge and interact – maybe it is better to make a game as a way for people to engage and learn than it is to write or broadcast a report.

Journalism is part of a content-driven media world. News articles, like movies, novels, and non-fiction books are about their subjects. A story about the conflict in the Middle East is about conflict in the Middle East and Tolstoy's "War and Peace" is about war and peace. Both the news story and the novel are meant to inform us and, perhaps, to move us emotionally through their content. Maybe the novel goes "deeper" into truth or understanding than a more ephemeral news story, but in both cases content is being used to make us learn, think, know, and perhaps feel.

Games are about things, too, and have content; for example, the infamous Grand Theft Auto series of games is about crime. And sometimes, games have elaborate stories, sometimes they don't. But games are not about their content in the way in which a newscast or a novel is about its content. Games are about problems to be solved by the player and the content is there only to establish what the problems are or to motivate players to want to solve them.

In one of the Grand Theft Auto games the player must sneak into a parking lot and, unseen, plant a bomb in the trunk of a car and then get away without doing damage to the get-away car. Our intuition about content-driven media tells us that this is about a crime, but the task could be changed to planting flowers in a loved one's car without being discovered, and the problem and its difficulty would be the same. What matters are the problems and how a player responds.

Content doesn't make a game good; game play does with the problems players solve and the ways in which they solve them. If content contributes to this effort in ways that motivate, then it's good to have. Otherwise it is detrimental to the game or, at best, a distraction. Digital media enable journalists to devise games as a platform for sharing news. Doing this, however, requires not only knowing how to use the technology to create effective games but recognizing that the

player's ability to absorb the information will likely rely more on what he does than what he sees.##

James Paul Gee is the Mary Lou Fulton Presidential Professor of Literacy Studies at Arizona State University and the author of "What Video Games Have to Teach Us About Learning and Literacy," published by Palgrave Macmillan.