



Games, Standards, and Assessment: Staying out of the Toxic Mess

James Paul Gee
Mary Lou Fulton Presidential Professor of Literacy Studies
Arizona State University
james.gee@asu.edu

In many of our schools today there is a very tight fit among standards, testing, and punitive accountability for teachers and schools. This has turned out to be a toxic mess leading to cheating and teaching to tests of largely rote knowledge (Kohn 2000).

Recently two new panaceas have been discussed for our current assessment mess. First is Common Core Standards, which promise better standards that might be testable at least in part by performance factors. The other is video games and other digital platforms as Big Data assessment platforms.

Video games can, I believe, give us new and better ideas about how standards and assessment can and should work in schools and society. Nonetheless, they can also be used as a platform for “Big Data” collection and deliver “drop out of the sky” tests to which we can teach and on which we can cheat.

There is real potential here, both for good and for another toxic mess, especially if punitive accountability and high levels of inequality (among people and schools) remain in place. Indeed, if we want to standardize at scale both assessment and testing, then the temptation will always be

to teach and assess the commodified knowledge of facts, information, and formulas, not innovation, collaboration, and genuine problem solving skills. It is just easier.

And that is the problem: In video games and in most of the world today standards are not standardized. In any academic field, no one writes down the standards. Rather, standards emerge indigenously through practice as paradigms emerge of what people in the field accept as “good work”. Others in the field seek to emulate and sometimes surpass these paradigms (Gee 2010). Paradigms change as knowledge advances and we move the goalposts. Good work is never meant to be a rote imitation, but always to put some innovative spin on the “standards” as they are incorporated into paradigms of good work based on shared (but contestable) values.

Standards work the same way in video games. No one reads the ten standards for being a good *Halo* player. Rather, a player looks at videos of what is taken to be good play, discusses play with others at various levels of expertise inside and outside the game, and is normed during and after play by fellow players. Standards here are a matter of paradigm examples of good play (some of which are shown and contested on the Internet these days) and of becoming a participating member of a learning community. This learning community shares, contests and sometimes changes the standards as people move the goalposts forward through innovation and knowledge building.

Standards—and judgments about how they are being met—are indigenous to practice and participation. They are understood from the inside and internalized, not applied top down from

above. They vary among different groups seeking different forms of excellence in a market of ideas, just as they do in science.

In games at their best, as real players play them, learning and assessment mean different things than they do in public policy discussions of our schools (Gee & Shaffer 2010). In a game, assessment and learning are completely integrated. It is hard to tell them apart. We players are always getting feedback and not allowed to move on to the next level until we have mastered the last one.

Finishing a well-designed and challenging game is the test you are good at it. You don't need another test. No one gives someone who has finished *Halo* on the hard difficulty level a *Halo* test after they have won the game. The game is well designed so that you cannot finish it without knowing how to play it (which means knowing how to solve problems in the game). If we design algebra classes as well, we would need no tests. But note, too, that in good games and in good schools, language, facts, and formulas are used as tools to solve problems, not as lists to be remembered for no apparent reason.

Games collect lots of data to which players can sometimes have access (*Halo* is an example here as well). In terms of this data, assessment is based on multiple variables across long hours of play in comparison to a great many other players, which includes data about growth, development, and different trajectories toward mastery. However, in the end, the data does not

judge or evaluate players. What makes players “good” is a judgment from a group of people whose values, practices, and paradigms the player has come to accept and want to join.

Unlike so much of the rest of our society today, games are not “winner take all” phenomena leading to greater and greater inequality. They can’t be. We players need lots of others so we have something to belong to.

In gaming, failure is courted as a learning tool. The cost of failure is lowered so that innovation, exploration, and trying new styles of play and learning are encouraged. Games and gaming are devoted to making better players and better games. Schools should be devoted to making better people and better societies (Gee 2013).

We can use games to make a new toxic mess if we use them merely as a shiny new delivery device for old bad ideas about teachers, testing, and learning. Just like books, games are a technology that can be used for good or ill. Textbooks are the least good educational tool ever made (VanLehn et al. 2007). This is so because they seek to be a one-size-fits-all, standardized, single system, stand-alone delivery platform for facts fit mostly for testing. Games should, together with other tools and with good teaching, deliver customized and collaborative problem solving for a complex, high-risk, fast-changing global world.

References

- Gee, J. P. (2010). *New digital media and learning as an emerging area and "worked examples" as one way forward*. Cambridge, MA: MIT Press.
- Gee, J. P. (2013). *The anti-education era: Creating smarter students through digital learning*. New York: Palgrave/Macmillan.
- Gee, J. P. & Shaffer, D. W. (2010). Looking where the light is bad: Video games and the future of assessment. *EDge* (Phi Delta Kappa International) 6.1: 2-19.
- Kohn, A. (2000). *The case against standardized testing: Raising the scores, ruining the schools*. Portsmouth, NH: Heinemann.
- Partanen, A. (2011). What Americans keep ignoring about Finland's school success. *The Atlantic*. <http://www.theatlantic.com/national/archive/2011/12/what-americans-keep-ignoring-about-finlands-school-success/250564/>
- VanLehn, K., Graesser, A. C., Jackson, G. T., Jordan, P., Olney, A., & Rose, C. P. (2007). When are tutorial dialogues more effective than reading? *Cognitive Science*, 31, 3–62.