Games for Learning Design and Assessment

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good games are models for good learning
games  learning  disciplines
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role of assessment in learning game design
comparison to outcomes we care about

math games may have most impact for students with low math scores
Hieftje, et. al. 2017

digital games significantly enhanced student learning relative to non-game conditions
Clark, Tanner-Smith & Killingsworth, 2016

students who play online video games obtain higher scores on PISA tests
Posso, 2016
what can the learner do (as a result of play)?
Confronting the Challenges of Participatory Culture
Media Education for the 21st Century

Henry Jenkins
with Ravi Purushotma, Margaret Weigel, Katie Clinton, and Alice J. Robinson

MacArthur
The John D. and Catherine T. MacArthur Foundation

Henry Jenkins
USC
in which communities does the player meaningfully participate?

Jenkins, et. al. 2009

affiliations
expressions
collaborative problem-solving
circulations
WHERE IS XUR AND HIS WARES FOR THE WEEK

(August 9 – August 13)

You can find Xur on Nessus this week, located near the Watcher’s Grave area. Spawn into this part of the map and start heading north, but rather than go toward the large tree he used to be located at, look farther forward for a giant floating ship. Climb to the top of this ship and go to the far edge and you’ll find Xur waiting for you.

collaborative problem-solving
This website is not affiliated with The Sims or Instagram. This is a fan made social network based on the sims.

kinsleystone
2 days ago • 1 min

first post❤️ meet my daughter, Zaylee!
what can we learn from game data?
Halverson, Owen, Wills & Shapiro, 2012
what can we learn from game data?

Halverson & Owen 2014
what can we learn from game data?

Ramirez & Berland 2016
what can we learn about player characteristics from play data?

stealth assessment
Shute & Ventura, 2013

Persistence
DiCerbo, 2014

Figure 5
Competency model of conscientiousness with indicators from *Newton’s Playground*
what can we learn about changes in player values and perspectives?

epistemic network analysis
Shaffer & Ruis, 2017

**Figure 15.1.** Epistemic network of a high school student (Student A) representing the structure of cognitive connections the student made while solving a simulated urban redevelopment problem. Percentages in parentheses indicate the total variance in the model accounted for by each dimension. The integration of multiple sources of data.

**Figure 15.2.** Epistemic network of a high school student (Student B) representing the cognitive connections the student made while solving a simulated urban redevelopment problem.
How can we use games as assessments?
Playful Assessment

A well-designed assessment should be seen as a tool to help students learn and progress.
AT PLAY IN THE COSMOS
Play as Jo Wilder, a scrappy girl who spends her days with her pet badger Teddy and her grandpa, a historian. When some mysterious artifacts show up at the History Museum, you must unravel the clues to find the real stories behind the artifacts.
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