The Power of Digital Games for The Next Generation of STEM Learning

Dr. Jodi Asbell-Clarke
Director, EdGE at TERC
Learning is Ubiquitous
We Learn through Play
Digital Play ....

...creates Digital Data
Measuring Implicit STEM Learning
Complex Skills: Scientific Inquiry

I can't identify it as human from what I see.

Josie BrokenPM
Complex Skills: Computational Thinking

NSF/EHR/DRL/DRK12#1502882
Reveal Implicit Knowledge
Reveal Implicit Knowledge
Reveal Implicit Knowledge

We build learning analytics to find the patterns of play in the data logs.
Revealing the Implicit to the Teacher

Teacher Dashboard

Student Alerts
- Marisa
- DeLoit
- Thom

Class Progress

Outcome A

Graph: Age in Years vs. Outcome A

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Rapidly Blurring Reality
Researcher Director: Elizabeth Rowe
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