

Engagement or games? And all I need to know I learned watching soccer

The Problem with Learning, Koster, 2005, from *A theory of fun for game design*
How People Learn: Brain, Mind, Experience, and School — Chapter 10: Conclusions,
Bransford

Overview

Although both chapters for 9/21 class had interesting material, Bransford's had the most content that was new. I am not an education expert; this material on how people learn and barriers to learning was all relevant and interesting. I need more of this kind of material if I want to effectively present new material to learners. Koster's material was a bit more confusing. Plopped into the middle of his book, I was uncertain what his schtick was. As a writing teacher, I really emphasize letting readers know what the big picture is and how you are going to address it. I missed that direction in this chapter.

My take home message from Bransford was not so much about his work but about mine. Bransford contended that "effective comprehension and thinking require a coherent understanding of organizing principles in any subject matter" (p238) and the other side of the coin, "deeply rooted misconceptions interfere with learning" (p240).

A few months ago, I spoke with a scientist about communicating science to public audiences. He mentioned the problem of misconceptions and specifically addressed the moon problem: most people think the phases of the moon are caused by the earth shading the moon. Not so. However, you can teach why there are phases of the moon and test on it with good results. But retention is poor because you did not address the underlying misconception.

If, however, you allow students to predict an outcome based misconceptions then evaluate the outcome, students will recall later that the experimental outcome was different from what they predicted. This is not a game, but it is interactivity, or maybe just engagement. An east coast physics department (cannot recall which one) does just this with introductory classes. Students predict, test, and revise, all digitally.

My insight was that perhaps I am not nearly as interested in gaming as I am in interactivity and engagement. Games are fine, but perhaps what I am looking for more with the curriculum I develop is exploration – delving into historical primary source documentation, assembling taxa on a family tree and calculating the likelihood of relatedness, listening to eyewitness accounts of historical events. But exploration is not a game. And I really have a lot of value for the reflective components that can be integrated into exploration through teacher guidance.

I guess I am still trying to get a feeling for where exactly I think games belong and can make the maximum contribution. Some time in class playing games that successfully teach something would be a great help.

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Last night I watched my son play soccer with his high school team. I have watched him play this game since he was 5 years old. He is much better now than he was then (p120, Koster, practicing in advance).

I think tonight saw demonstrated nearly every principle discussed by Bransford and Koster in this week's readings.

The line judge called a ball out that did not travel all the way across the line. "That wasn't out!" yelled a parent. Parents love to argue the rules with referees (p112-114 in Koster).

I watched as a player took a throw in. He threw the ball to a hole as another player streaked to that hole (Expertise requires well organized knowledge of concepts, principles, and procedures," Bransford, p239). Younger players throw the ball to a player, not to where a player can run to.

Soccer has so many elements of effective games. None of the LCHS girls soccer team thought it was worth going to Clovis for a 10-0 blowout, but they would drive twice as far for to lose to a worthy opponent (Koster p. 126).

And so on.