

InterActivity 2010

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Session: How the Brain Wants to Learn: Cognitive Science Informing Interactive Exhibit Design • E/E

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At the ACM conference I chaired a session called "How the Brain Wants to Learn: Cognitive Science Informing Interactive Exhibit Design."

I want to let the Childmus group know that we've started a facebook group to continue our discussion from the session.

You can find it here:

<http://www.facebook.com/group.php?gid=110841598955944&ref=ts>

Our Case Study

For those of you who didn't attend the conference, here's some background on our case study.

Brad Stefl, Exhibits Manager at the Children's Discovery Museum in Normal, IL graciously shared one of his on-the-floor exhibits as a case study for our session. A Rainbow on Your Plate is an exhibit to help children (and adults) learn that a rainbow variety of fresh food is a healthy way to eat.

There's a display showing a rainbow made of food of various colors and then visitors put together a plate from puzzle pieces, to create a rainbow colored plate. Then they can take it apart and put the pieces in a bin. The pieces can only fit together in one way: to make a rainbow (i.e. you can't make a plate that's all red, or alternating blue/green, blue/green).

The Rainbow exhibit is adjacent and complementary to a Fresh Market grocery exhibit, which only has healthy food to shop from.

I've posted photos of the exhibit under the Photo tab of this [facebook] site.

We want to discuss the Rainbow exhibit using Mike's design principle based on how Internalized Cognition and Affect can regulate each other. The principle, most simple goes like this:
Engagement=Goal+Options/Actions+Feedback.

That is:

1. A clearly defined goal (an activity or behavioral goal, from the visitor's POV, not the educational goal from the designer's POV).
2. Clearly understood options for action. What can the visitor do? These actions are best if they are close to or slightly above the visitor's skill level.
3. Immediate and clear feedback. Keep in mind that the feedback is not necessarily a reward. It can be feedback that lets you know you're off-track.

This progression or loop of goal+options+feedback creates engagement in the brain.