Designing Online Interactions:
What Kids Want and What Designers Know

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Last year, I was invited to my child's school to celebrate her birthday. When I walked into the classroom early, I was surrounded by 7 and 8-year olds with stuffed animals in their hands, on their laps, and hanging from their shoulders. The children were sitting under tables, curled up in the book area, crawling by the math blocks, all with their stuffed animals. My daughter greeted me from the book area with, "Mom, you came in time for Webkinz School." Since I knew this was not the name of her school, I was a bit confused. What I came to find out was that these children were actually "acting out" an online environment for children!

During "free choice time", and without prompting from their second grade teacher, the children initiated dramatic play with their stuffed animals. This had started with just a few children, but had grown into a classroom-wide activity. Boys and girls were carrying the stuffed Webkinz everywhere they went. Webkinz is a "convergent toy" – an online environment (http://www.webkinz.com) for children 6-13 years old is accessed via a password that is provided through the purchase of a stuffed animal. At that time, my own child was not using Webkinz. However, she had decided she wanted to be a part of the fun, and so she brought in her own "regular" stuffed animals to Webkinz School. Later that year, she become an official Webkinz user, going online to see her plush animal in the form of a virtual pet. There she cared for her screen pet, furnished virtual rooms, and played games to win "KinzCash" to "buy" pieces for her room. Today, she has ten Webkinz animals; she also has Webkinz trading cards, and a Webkinz charm which lets her into special places on this world. Her collection is small by comparison to her friends, who have amassed a huge quantity of the animals, cards, and trinkets.

What has truly amazed me, both as a parent and as a researcher, is how loyal (or "sticky") these children are to this online environment. According to *Science and Strategy*, April 2, 2007, "Between April 2006 and January 2007 kids spent an average of two hours per visit on Webkinz. YouTube, by contrast, averaged 32 minutes per visit during the same period…"

How can we learn more about interaction design from these online environments for children? Webkinz is just one of these many new environments; others include Club Penguin (http://www.clubpenguin.com/) and Shining Stars (http://www.shiningstars.com/). Many of these worlds, such as Kookeys (http://www.kookeys.com/) and Ty Girlz (http://www.tygirlz.com/) have physical toys associated with their online experiences.

Webkinz has enjoyed a level of popularity that is unchallenged by these other environments. This toy was introduced first, and they quickly moved their business model away from the traditional "software subscription" and into a gift and specialty market. There was essentially no traditional advertising, with the popularity spreading via viral word-of-mouth (keep in mind that those doing the "viral marketing" are six year old children). Had I not walked into that classroom last year, I would never had understood the power of children's online environments. Webkinz was not virtual, but a real and integral part of the whole child's day. According to the Ganz Communication Manager, Webkinz, "…came from an examination of who kids are and what they like to do and how we can give them all of it in one experience. There are other toys with virtual components on the market, but our concept was to simultaneously offer a plush toy with a Web site, not to introduce a plush, then roll out a Web site." (PlayZak.com, September 2006, http://www.playzak.com/article.asp?id=2113)

When I first read this article, I was curious how the company was able to understand the children. How did they figure out what they liked and didn't? I was curious about their brainstorming methods and design process. I didn't get very far in finding out much from Ganz, the Webkinz creators, and so I spent some time comparing the capabilities of Webkinz with the lessons learned with my team over the years. Over the last three years, my team has supported by the National Science Foundation to develop an online community for children that supported their use of books and sharing stories (Druin, 2005; Hou et al., 2007; Komlodi et al., 2007). In addition, I've spent time in my lab with children and Webkinz, watching the interaction patterns between children and between technology and children. Given these research experiences, I provide here a summary of what Kids Want, and what Designers know.

Kids Want…

• Stories
Children want to listen to stories, read them, experience them interactively, and to create their own. Stories can frame an abstract concept; stories can be a reason to collaborate; they can be a reason to be social; stories can be what engages reluctant learners; stories can enable creative expression and communication; and all of these findings are consistent with much of the storytelling literature in the field (Baker-Sennett, 1997; Nicolich, 1977; Sheldon & Rohleder 1992).

• A relationship with characters in many forms
Today's children move seamlessly between television, online environments, printed books, and stuffed animals, all because they have formed a relationship with Barney or Big Bird (Strommen, 1998). What has been a recent development is more tightly coupling these various forms, so that one can depend on another for passwords, viral outreach, changes/additions in content.

• To be creators, not just consumers
Before there was Web 2.0, social networking, and IM, there was Logo, Basic, and SmallTalk. All of these programming languages helped researchers to understand how powerful it was to put tools in children's hands, not just interactive textbooks (Solomon,

1986). Seymour Papert reminded researchers that constructivism (by way of Piaget), suggested that children can learn by constructing or creating their own paths to knowledge, and that computer tools could support children as builders, designers, and researchers (Paper, 1980).

- Control

There are few times that children can control their world, without the rules of parents, teachers, or other adults. To the extent that computer tools can support children to exert more control of their experiences, suggests new possibilities for learning, identity development, and social awareness (Hou et al., 2007; Resnick, 1998). To watch a child placing a new piece of furniture in a virtual room is to experience the ultimate in control.

- To collect

Children collect rocks, shells, stuffed animals, pictures, and stickers; the list is endless (Martin, 1991). This desire to collect by children has not been lost on the creators of Webkinz. Pokeman, and NeoPets. Not only can you buy a stuffed animal for Webkinz, you can choose from any number of physical objects (including trading cards, charms, mouse pads, and lip gloss) that offer secret surprises.

What Designers Know…
- Limits on how much time kids can be in a specific activity

We need to leave kids wanting more. This is a design decision that permeates many interactions on today's online communities for children. If you choose to play some games, you may only get one chance at it a day. The more important or precious an online interaction can feel, the more children will be drawn to it.

- Limits to what children can say online

Thanks to government regulations, limiting what children can say with online chats or email can keep children safe from online bullies, predators, and scams. It can also keep designers of such sites out of court litigation as well.

- There needs to be "green design"

Online environments need to always be growing and changing to keep kids coming back. This is the case with the objects as well. Without change and additions, children may feel that the site is stagnating, not as "cool," and edging towards boring. The viral buzz about a site or toy can only come when users feel there is continual activity and caring of these resources.

There is still much to be learned from children and their online interactions and technologies. Can adult online communities benefit from the lessons of children? After 20 years in making new technologies for children, I've learned that children will make us work very, very hard: they may, ultimately, prove to be our toughest user group to please.

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The author's daughters surrounded by their Webkinz playing on the computer with their virtual pets.