Teachers and parents play to learn

Play-based instruction in computer technology

by Denise Parker

Play is fun!
Babes, toddlers, preschoolers and senior-citizens do it.
At every stage of life man plays.
Play is important!

Play is so important that it is declared as one of the human rights by the United Nations. The Office of the United Nations High Commissioner for Human Rights (1997-2002) made this declaration at the General Assembly in 1959. In the seventh principle it proclaims:

The child shall have full opportunity for play and recreation, which should be directed to the same purposes as education; society and the public authorities shall endeavor to promote the enjoyment of this right.

Play has global impact, political clout, and is fun. And although the proclamation is focused on children, play does *not* stop there.

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Play is not just for children

In the 1990s I designed and facilitated a blended curriculum for a Head Start Program. The instructional goal was to introduce and get the children to effectively and independently use computers. This opportunity arose out of a grant from The Children's Museum (TCM) of Indianapolis. The grant focused on computer literacy and technical training for Head Start program staff. In keeping with the Head Start philosophy, it stipulated training for the instructional staff, volunteers, custodial parents, and legal guardians so they could play an active role in participating in the children's learning process.

I began to plan the training by retrieving lesson plans from the teachers. I identified developmentally appropriate games and programs that would reinforce classroom instruction as well as provide the appropriate scaffolding for children. Once I had an educationally sound mix of software to support the Head Start curriculum, development of the curriculum in computer-aided instruction (CAI) began. Special attention was paid to sequencing the lessons so that each lesson built upon the skills and knowledge gained in the previous lesson.

The next step was to design and develop the four-hour in-service Technical Training. It was intended to engage, educate, and motivate the adult learners across three generations to use the technology effectively and to confidently aid and assist preschoolers in their use of technology. I had many questions:

- How could I train such a diverse group? With ages ranging from 20 to 70 and educational backgrounds equally diverse, which teaching method(s) would be most effective?
- More importantly, how could I support retention and recall during the two weeks between the in-service training and the children's CAI sessions? (The participants did not own their own computers, nor was there a computer lab at the school. No funding was available for job-aids or performance support materials.) So how would I deliver training that met their needs?

The answer: Play! What better answer existed? I was at TCM, the world's largest children's museum! It is the place for the young and the young-at-heart, a

place where those from three to 93 come to learn. Play is not just for children!

Now, the goal was to increase adult learners' knowledge and skill in using computers, and the method to achieve this is play. Now, to set the stage. . . . All training took place in TCM's Computer Discovery Center (CDC); the configuration was a traditional computer training set-up. This was not conducive to the social aspects of teacher training, nor to team building. What was I to do? Answer: Learning centers. Areas of the computer lab could be created to focus on skill development. This would be conducive to the adults' learning and to the playful spirit of the training. In addition to the age and educational diversity of the group, it was the beginning of the school year, so many of the participants in the training were not well acquainted. What would be the most effective way to get everyone acquainted? Answer: A party-like atmosphere and theme would create a naturally playful and interactive setting. With that in mind, the 'computer lab' was transformed into a sensory 'edutainment' (educational and entertainment) center. Computer workstations were now mixed-media (blending high-tech with no-tech) learning centers. The stage was set.

Four hours of food, fun, and frolic produce laughter and learning

In keeping with the playful party atmosphere, invitations were sent out. On the day of the in-service:

- The aroma of warm cinnamon rolls and freshly brewed coffee greeted the group.
- The atmosphere in the CDC was relaxed and friendly.
- Lively synthesized music filled the air as they filled their coffee cups and got acquainted.

The performance objectives were technical, but the content and exercises contained levity and humor. Throughout the training the group giggled, chuckled, and laughed. They were having fun and learning, too.

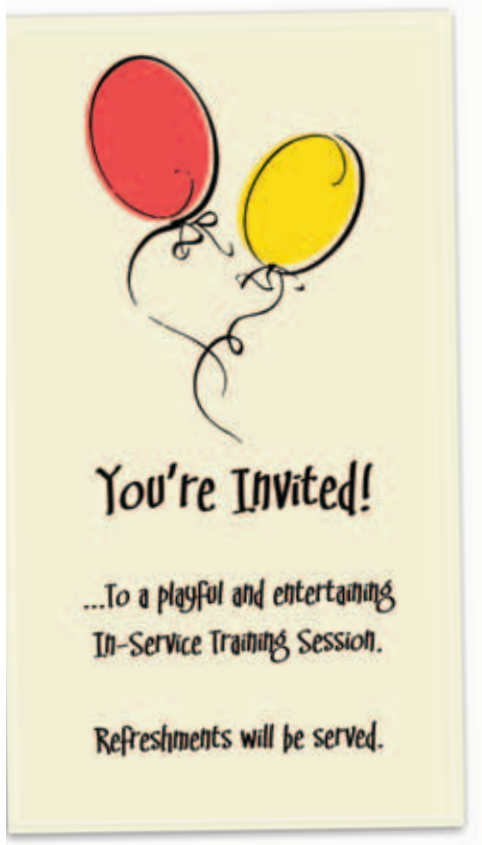
Play produces measurable results

My worries about the two weeks between the in-service and the start of the children's training were unfounded. From the beginning, the adult learners assertively and confidently assumed a coaching posture with the children. They watched as the children followed my verbal commands, gently aiding, assisting, and encouraging the children as needed. The four-hour investment in-service was yielding a return. Without any additional computer exposure, the adults were now effectively applying technical skills and exhibiting the helping behaviors needed to support the children's learning.

Play worked!

Reference

Office of the United Nations High Commissioner for Human Rights. (1997-2002). Geneva, Switzerland. Accessed January 2009 from www.unhchr.ch/html/menu3/b/25.htm.



Six Edutainment Centers

Center	Description of Activities	Performance Objective
Business Applications	Performed basic functions with word processor and spreadsheet to create hilarious correspondence, extravagant household budget, and grade book	To use the mouse and open word processor To use the mouse and open the spreadsheet To use the keyboard to create word processing file To use the keyboard to enter figures in spreadsheet
E-mail	Performed basic e-mail functions (write, send, reply, and forward) with silly, but politically correct e-mails among the group	To use mouse to open e-mail program To use keyboard to perform basic functions
Internet Shopping	Interactive shopping spree to gain exposure to Internet and use of the mouse (shopped for cars, household, and luxury items)	To familiarize self with Internet To use mouse and keyboard to interact with Internet
Interactive Storybooks	Demonstrated children's CAI: Reading Circle followed by developmentally-appropriate interactive session with story on computer	To use mouse and keyboard to advance and interact with electronic storybook
Claymation	Audio-visual entertainment via a claymation CD created by children on the PC	To familiarize self with other applications created on PCs
ILT	Identified internal and external computer components, functions, and operations	To familiarize self with computer components, functions, and operations To recognize and respond correctly to verbal commands

Inservice Agenda

9:00 am- 9:15 am	Mix 'n mingle
9:15 am- 9:45 am	Computer introduction
10:00 am-10:20 am	Business applications
11:00 am-11:15 am	E-mail
11:20 am-12:00 pm	Internet shopping spree
12:00 am-12:15 pm	Interactive story book
12:15 am- 1:00 pm	Discovery (self-directed time to return to Edutainment Center(s) to delve deeper into activity and Q&A)

Points of Engagement Used in In-Service Training

SENSORY	Olfactory	Smelling the pastries and coffee
	Taste	Eating refreshments during training
	Sight	Familiar storybooks; icons such as a plush mouse to associate with the computer mouse and a toy school bus to associate with the PC's internal bus cable, but Claymation CD is unique
	Sound	Instructor's verbal command and instructions, but digitized music played in background is unique
	Tactile	Hands-on exercises and PC interaction
RELATIONAL	Personal	Use of technology had immediate, personal application
	Professional	Use of technology had immediate, professional application
	Familial	Use of technology had immediate application with family