

# Edutainment

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박경신

## TV Series

- ▣ PBS Barney
- ▣ PBS Arthur
- ▣ PBS Sesame Street
- ▣ BBC Teletubbies
- ▣ Nick Jr. Blue's Clues
- ▣ Scholastic The Magic School Bus



## What is Edutainment?

- ▣ Edutainment (educational entertainment) is a form of entertainment designed to educate as well as to amuse.
- ▣ Edutainment typically seeks to instruct or socialize its audience by embedding lessons.
- ▣ Television programs (e.g. PBS Sesame Street, BBC Teletubbies), computer and video games (e.g. Carmen Sandiego), films, music, websites, multimedia software, toy, etc

## Educational Game

- ▣ Carmen Sandiego by learningcompany.com
  - Originally focused on teaching geography and culture
- ▣ Zoombini by Broderbund.com
  - The player can select Zoombini characteristics like eyes/glasses, hair/hats, nose color, and shoes/means of locomotion.
- ▣ Kid Pix by Broderbund
  - Interactive painting and drawing tools



## Educational Game

- **Mavis Beacon Teaches Typing** by Broderbund in 1993
- **Food Force** by United Nations Woirl Food Program (WFP) in 2005, [www.food-force.com](http://www.food-force.com)
  - designed for 8-13 year olds -- puts players in the role of the rookie on a food aid team working in the fictional country of Sheylan
- **Jumpstart** by Knowledge Adventure
  - Children's educational software builds fundamental skills from math and reading to music and nature



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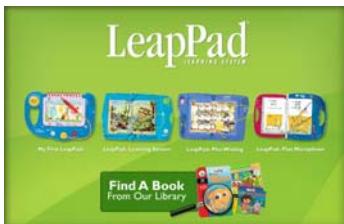
## Educational Game Vendors

- Broderbund
- Byron Preiss Multimedia Company
- Children's Software Revue
- Davidson & Associates
- Disney Interactive
- HarperKids Interactive
- Knowledge Adventure
- Living Books
- Sierra On-Line

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## Educational Toy

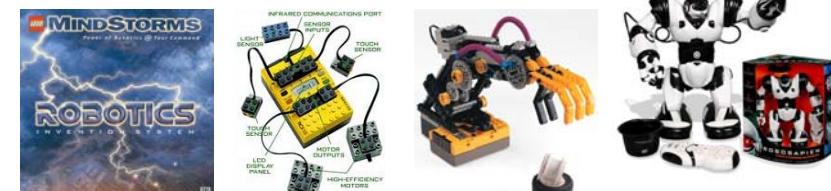
- **LeapPad** interactive learning system by LeapFrog
  - Includes a software that combines a magic pen with an interactive book designed to help children spell, follow a story and improve their vocabulary and concentration
- **iQuest** handheld by LeapFrog
  - Provides a customized learning experience that revolutionizes the way students study for tests and quizzes by making the process fun



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## Educational Toy

- **Mindstorms:** Robotics Invention System by Lego
  - Let you construct a variety of moving robot vehicles and then program them from your PC. The key is the revolutionary LEGO RCX, a programmable microcomputer that acts as the brain of your robotic inventions
- **Robosapien Programmable Robot** by WowWee
  - A humanoid with attitude and intelligence, & the first robot based on the science of applied biomimetic robotics



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## Educational Toy

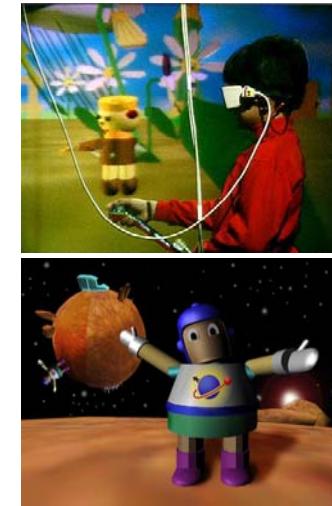


### PicoCricket

- Let you create musical sculptures, interactive jewelry, dancing creatures, and other playful inventions
- Mitchel Resnick (@ MIT Media Lab Lifelong Kindergarten research group)'s new desktop programming kit
- Similar to LEO MindStorms robotics kit. MindStorms is designed especially for making robots, while PicoCricket is designed for making artistic creations with lights, sound, music, and motion.

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## Virtual Learning Environment



- NICE (Narrative Immersive Constructionist Environments) Persistent garden
- Round Earth Project is intended to teach young children the concept of a spherical Earth

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## Virtual Learning Environment



- KidsRoom (developed by MIT Media Lab Perceptual Computing Group) is an interactive narrative playspace
- KidsRoom recreated a child's bedroom
- KidsRoom guides children through an interactive imaginative adventure
- The story, inspired by Peter Pan, Bedknobs and Broomsticks, and Where the Wild Things are begins in a child's bedroom

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## Tangible Interface for Learning

- Power Eco-Pods is a TUI-controlled system which mimics the growth of a flower.
- The control devices represent the elements of nature such as the wind and the sun's. The display presents a ecosystem.
- A group of children is encouraged as a game to physically enact the role of the elements whose pod they hold.



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## Stealth Learning (Edutainment)

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- Edutainment is a kind of embedded learning in motivational activities that helps kids learn without them knowing it.
- Use of edutainment is to hook children's interest (they may feel only entertainment), but the purpose is to help them learn.

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## Hype

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- Play is very important to learning
- E-learning market growth - "The next killer application for the Internet is going to be education. Education over the Internet is going to be so big it is going to make email look like a rounding error." John Chambers, CEP, Cisco

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## Anti-hype

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- A commonly heard complaint is "These kids were raised on Sesame Street, Super Mario, etc. Because I don't hop around the explode, I seem less interesting by comparison. **These kids don't have the attention span necessary for sustained learning.**"

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## How to Choose the Best

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- Children's Software Revue  
<http://www.childrenssoftware.com>
- "Educators should have the lens of their school district's curriculum, making them watch out for lousy pedagogy. **Interactive media is like any other educational material – it has to enhance what you're teaching.**" Warren Buckleitner, editor of Children's Software Revue

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## Changing the Way of Learning

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- "Teacher needs to change. We can't hold on to the 1950s. These kids are accustomed to quick messages, interactivity, processing information and choices rapidly, fast communication. And as a teacher, I want to communicate as efficiently as possible." Dave Warlick, Landmark Project
- The teacher's role is to make certain the kids drive the technology toward educational goals, not that the technology drives the kids toward the product-maker's goals.

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## Reference

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- Children's Technology Review  
<http://www.childrenssoftware.com/>
- 과학교구 <http://www.science.co.kr/>
- The KidsRoom  
<http://vismod.media.mit.edu/vismod/demos/kidsroom/>
- That's Edutainment,  
<http://www.districtadministration.com/page.cfm?p=376>

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