Exhibit Kits Take Off Across the Nation!

Courtesy: Franklin Institute

A boy finds out how tall he is from the Height Sensor, re-created from a Computer Museum Exhibit Kit at the Franklin Institute.

The Computer Museum is re-creating nine of its most popular and effective interactive exhibits into affordable kits to distribute to museums and science centers around the world. The Kits will be ready in August 1991.

The Exhibit Kits Program is made possible with over $130,000 in support from the National Science Foundation, the Hearst Foundation, and the American Association for Artificial Intelligence.

Six exhibits from the Kits Program are already on display at Philadelphia's Franklin Institute, the Discovery Center, Bridgeport, CT, and the Technology Center, San Jose, CA. In just a year, visitors have used them an estimated 200,000 times! One of them–How Tall Are You?–is one of the most popular exhibits in the Franklin Institute Future Center's computer exhibition, says Paul Helfrich of the Franklin Institute. The Height Sensor is "wonderful. People line up to try it out."

The Height Sensor doesn't have a keyboard or screen, but it has a voice, reflecting the sense of humor of Computer Museum Exhibit Engineer Dan Griscom and software engineer Peter McA'Nulty, who designed and built it. When encountering a tall person, it says, "Whoa! You're tall. You should call the Celtics." Sometimes the voice gets things wrong, but it always corrects itself just like a good computer should.

As a consultant to the Kit Program, Minda Borun, a noted exhibit evaluator from the Franklin Institute, devised a system to evaluate each exhibit being produced as a kit. The system involves both observing and surveying the people using the exhibits to see if they like, understand, and can use them. Changes are suggested and tried out and then further evaluated so that each exhibit meets its educational goals.

"It was a valuable process," says Education Coordinator Natalie Rusk. "Some exhibits that we thought worked well benefitted from modification, while people found others interesting and easy to use, just as they were."

Each Kit includes custom software and documentation, specialized hardware (when necessary), instructions for installation, maintenance and repair, recommendations for text and display, as well as educational materials. All the science center or museum adds is the computer equipment to run the program.

For more information, call The Computer Museum's Director of Marketing, Sue Dahling at (617)426-2800 ext. 396.

What each Kit does:

Two of the Kits introduce what computers do and how they are made to solve problems through programming:

How Fast Are Computers?
Lets visitors compare how fast they add figures with a computer to get a better grasp of the speed at which computers can do calculations. Visitors also see how computers' speed can be increased.

A Mouse in a Maze
Challenges visitors to write a computer program that makes a mouse find its way through a maze on the screen.

Three Kits explore innovative non-threatening ways for people and computers to communicate:

How Tall Are You?
Shows visitors how robots can use ultrasonic sensors to find the distance to obstacles, a crucial measurement for mobile robots to guide themselves.

Color the States
Invites visitors to learn how a computer can recognize their voices by using their knowledge of geography to color a map of the United States.

The Talking Computer
Explains to visitors in a computer generated voice how computers can talk with people by converting text into component sounds and using special circuitry to make the sounds. Visitors can experiment with the computer's diction by having it say whatever they type on the keyboard.

The remaining Kits illustrate the capabilities and limitations of artificial intelligence:

ELIZA: "The Computer Psychologist"
Shows visitors how a computer can be programmed to seem smarter than it is. As it mimics a Rogerian therapist, visitors can trick it into repeating itself.

Haggle With A Computer Fruit Vendor
Invites visitors to learn that a computer can follow a set of rules that make it seem surprisingly human.

HAL: Building an Intelligent Machine
Uses an interactive videodisc system to explore what would be involved in building a computer as smart as the fictional computer HAL in the movie *2001: A Space Odyssey.*

How Computers Play Games
Lets visitors challenge computers to tic-tac-toe or five-in-a-row to discover how a computer "thinks" when it tests moves according to a strategy it has chosen.