

NEWS

Tools & Toys

The Amazing Personal Computer

Over 120 million personal computers are in use today, according to International Data Corporation. Their small size and low cost make them accessible to millions of people worldwide. But many people never go beyond word-processing or spreadsheets.

Tools & Toys: The Amazing Personal Computer, an exhibit opening June 13, goes far beyond these uses, stretching the boundaries of today's applications. Music, group ware, graphics, video production, and simulations are some of the exciting and amazing new applications. The \$1 million exhibit will feature over 35 different interactive programs for visitors to try out.

Originally known as the Computer Discovery Center, *Tools & Toys* was initiated by The Boston Computer Society (BCS). Now, some 40 corporations and volunteers, a blue ribbon and junior high school advisory group, and Museum staff, led by Greg Welch and David Greschler, are busy creating the exhibit.

The exhibition is being divided into seven different personal computer applications: Making Pictures, Playing Games, Making Sound, Sharing Ideas, Writing, Adding It Up, and Exploring Information.

Over 75 percent of the interactive programs featured in the exhibit are not commercially available now, but characterize the cutting edge of future uses. Museum staff, a growing cadre of volunteers, and a number of software companies are creating and adapting these interactive programs for Museum use.

One of the most exciting is a networking game: two to four visitors communicate via live video images and audio, as they work together to solve a puzzle. Exhibit Developer David Greschler explains, "Most network games are about fighting with other players. Ours is about networking with each other.

The main message is cooperation—people exchanging information with each other to achieve a common goal." The program is being created by Museum staff in consultation

He is developing a 3D action game, called *Manic Episode*, where visitors don special red/green glasses that render the images on a computer screen 3-dimensional. Visitors then travel through space contending with abstract 3D flying objects.

Another application that is not widely available is being designed for the "Writing" area by American Management Systems. It is for a pen-based system enabling people to use a pen to write letters, numbers, and math symbols on a screen and then watch the computer turn their writing into print.

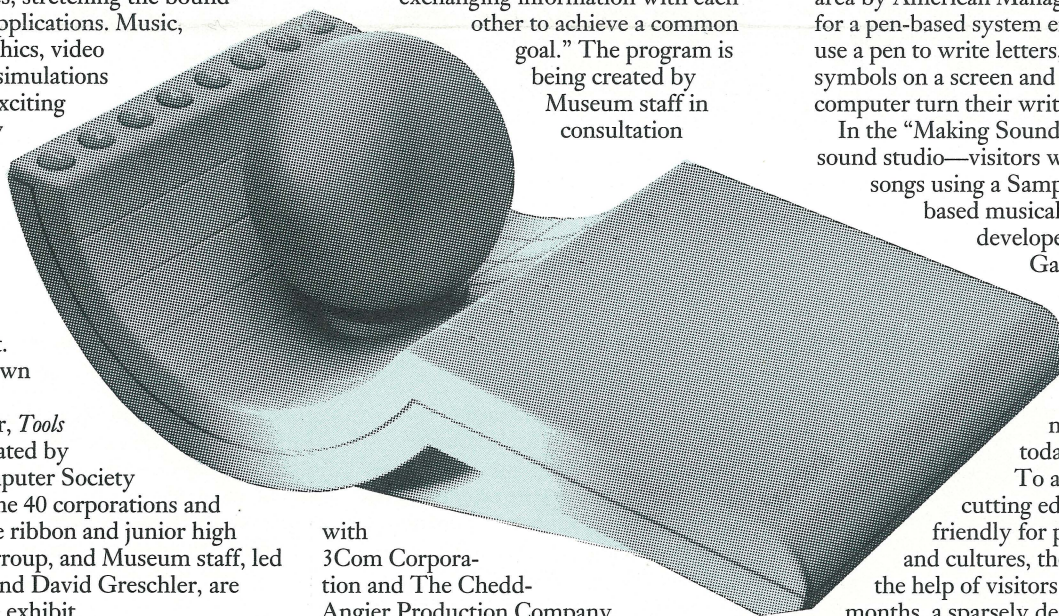
In the "Making Sound" area—built like a sound studio—visitors will be able to create songs using a *SampleStick*, a computer-based musical instrument being developed by *Airtight Garage*. This technology involves

"sampling," rearranging recorded sounds, a technique popular with today's rap musicians.

To assure that this cutting edge software is user-friendly for people of diverse ages and cultures, the Museum enlisted the help of visitors themselves. For five months, a sparsely decorated, modest prototype area on the 5th floor, called the *Exhibit Lab*, became a center of activity, where visitors were asked to "road-test" the software.

The Spaceball™ (at center) is a new hand-device people can use to interact with a personal computer.

Photo: Courtesy of Spaceball Technologies, Inc.



with 3Com Corporation and The Chedd-Angier Production Company.

For "Exploring Information," the Museum is writing entirely new software to use with a videodisc of experiments published by the American Chemical Society. The program takes a chemical explosion, which people find inherently fascinating, and makes it educational. Visitors can try out potentially harmful experiments in a safe environment, while also learning about the use of videodisc technology controlled by personal computers.

Another program is based on an original idea of volunteer programmer David Temkin.

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Photograph: Ása Chibas



Shahi Smart (left) and Mercedes Manning try out "Making Your Own Movie" in the Tools & Toys Exhibit Lab. The students are from the Martin Luther King School's 8th grade computer class.

In a process known as formative evaluation, visitors contributed over 300 evaluations of various software interactives in the form of written comments, general suggestions, and observations. Many of these are being incorporated into modifications of the software. For example, the Making Your Own Movie program is being changed so that visitors will be able to record and edit more than one video segment of themselves.

At the end of the exhibit, the visitor is helped with the

question, "Where Do I Go From Here?" Along with practical advice, digital video provides a live forum on the subject: "Do computers save people time?" This final interactive station is being designed by Fluent, Inc., Founder and Museum Board Member Dr. David Nelson. He is modifying his company's state of the art technology to create what will be a first-of-its-kind Museum exhibit, where visitors will enter their own opinions via a digitized video image of themselves.