Workshop: Let the ball drop – with Etoys

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Abstract: The participants will get an introduction to “Squeak Etoys” a free, multimedia, multi-platform authoring and simulation tool kit. They will get a short demonstration of Etoys projects from different geographic and subject matter areas, suitable for learners of multiple ages, and then will start a hands-on experience using Etoys to create their own projects.

Schedule

Squeak Etoys (http://www.squeakland.org) is a free, multi platform, authoring tool. It is tile based programming and is available in 13 languages at the click of a mouse. It is an “idea processor” for children of all ages. Squeak was developed by a small group of people under the direction and vision of Dr. Alan Kay. Kay, often referred to as the “father of the personal computer”, is best known for his invention of the “Dynabook”, and his days at Xerox PARC, Atari, Apple Computer, Hewlett-Packard and Walt Disney Imagineering. Research and development of Squeak has been done under Alan Kay and Kim Rose at the Viewpoints Research Institute, Inc. the non-profit organization they established in 2001. Starting in early 2009 a new non-profit organization will continue to develop, support and maintain Etoys and its growing community of users.

Rita Freudenberg is an assistant teacher at the Otto-von-Guericke University of Magdeburg. She conducts Etoys’ courses for children, students and teachers. She is a board member of the German Squeak Association and member of the working committee to develop a curriculum framework for computer science in German schools.

Kathleen Harness works for the Office for Mathematics, Science, and Technology Education at the University of Illinois and as an enrichment teacher in the Champaign Public Schools. She has not only developed Etoys curricula, project plans and support materials, but has also conducted numerous workshops
for both children and adults. She is a retired music teacher with a strong interest in mathematics and computer science for young students.

Kim Rose, Executive Director of Viewpoints Research Institute, has worked with Alan Kay since 1986 when she joined his research team at Apple Computer to participate in the Vivarium research project at the Open School. She works with children and teachers in schools and community learning centers worldwide developing and testing collaborative dynamic curriculum and exploring how powerful ideas can become more accessible to children around the world.

Marta Voelcker is a Brazilian social entrepreneur that believes that information technology can be of great improvement for children’s education. Co-founder and Executive Director of Fundação Pensamento Digital, she coordinates projects in Brazil to promote ICT access and professional development for educators from telecenters and schools. Since 2004 she is a research collaborator at UFRGS, currently a PhD student in Information Technology for Education. Since 2007 Marta integrates the research team from UFRGS that works with OLPC’s XO laptops to guide and analyses the use of one to one computing at Luciana de Abreu School in Porto Alegre.

The workshop will start with a brief introduction of Etoys and sample projects to show the variety of projects that can be created with this tool and how these projects can be integrated within a school curriculum. That will give the participants an overview of how to use Etoys in a classroom.

The second and larger part of the workshop will introduce the basic ideas in developing Etoys projects: creating objects, describing their behavior and producing dynamic behavior. Using the “drive a car” - project we will walk the participants through the basics of painting an object, exploring its properties through the viewer, scripting it, controlling it with another object and performing simple tests (which will illustrate the if/then feature). The participants will receive hand outs with the basic description on it, that they can take away so they will some reference materials when they try it again on their own. Knowing the Etoys basics they will be able to create their own projects and to reproduce the projects shown at the beginning of the workshop.

Finally, participants will have a chance to ask questions and exchange ideas on how they might take Etoys into their particular learning environments. This workshop would be appropriate for beginner, intermediate or advanced computer users and teachers and administrators from elementary to high school.

**Participants:**
Our group could lead a workshop for as many as 50 participants.

**Facilities:**
We would request use of a computer lab, ideally with a computer for each participant (Linux/Windows/Mac OS), with Etoys pre-installed (open-source, platform-independent), projector, and white-board. (Participants with their own lap top would certainly be welcome to use their own.)