



# Smart Solutions For Education

Newsletter for Educational Technology Leaders  
Spring, 2001

## Case Study: Princeton JHS 7 Years...Still Running!

Most modular education systems installed in middle schools around 1994 have long been replaced or are gathering dust. Not so at Princeton Junior High School in greater Cincinnati. Their Synergistic labs have been operating successfully for over seven years. In Princeton's two labs, known as the "Center for Applied Technology," teachers Mark Schallip (Department Head) and Donnie White team-teach up to 39 industrial technology students each class, while teacher Debbie Leman teaches up to 23 life management students each class. As veteran industrial arts and home economics teachers, all three teachers agree that they can't imagine teaching any other way. Want to learn more about Princeton or schedule a site visit? Contact Paul Karlin at Smart Solutions.



Center for Applied Technology

## Smart Solutions Announces Partnership with Pitsco

In January, 2001, Smart Solutions entered a partnership with **Pitsco, Inc.**, a national leader in innovative educational technology. Smart Solutions now is the sole source for two nationally-recognized Pitsco systems for integrated math, science, and technology: **Synergistic**, designed for grades 7-8, and **Pathways**, designed for grades 9-10.

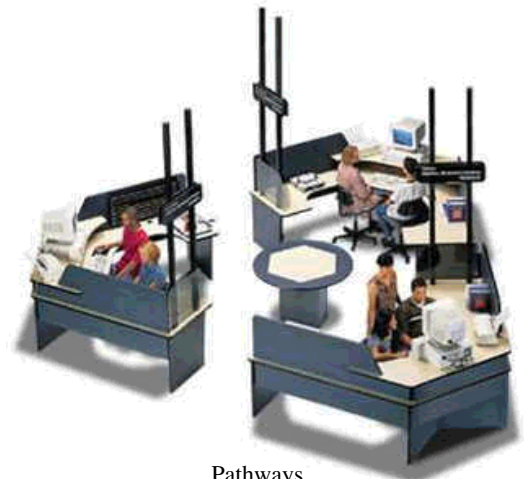


Synergistic

In contrast to teacher-centered instruction, **Synergistic Systems** transfers the responsibility for learning to the student. Paired students rotate through curriculum topics using computers, video, hands-on activities, and other educational materials. No longer the primary source of information, teachers become facilitators for individualized learning. Over 2,000 Synergistic Systems can be found in middle schools throughout the United States.

**Pathways** is a unique teaching and learning environment that integrates the concept of "modular learning" with higher level thinking. Teams of six students engage in 9-week long "suites" where they learn math, science, and technology concepts and apply them to solve real-world problems. In the "Intelligent Systems" suite, for example, students design and build a prototype of a bionic limb to be marketed by a medical company. With successful deployments all over the country, Pathways is now expected to become a presence in high schools in Ohio, western New York and western Pennsylvania.

Founded in 1971, Pitsco began as a catalog company for science, math, and technology kits. Today, Pitsco has three divisions: Pitsco Catalog Products, Synergistic-Pathways, and Pitsco-Lego Dacta.



Pathways

## Tools For Math, Science, and Technology

### Hand-Held Video Microscopes

**Scope On A Rope** was developed by Louisiana State University for facilitating classroom activities that usually require sophisticated equipment. It is hand-held and self-lighted with interchangeable



lenses that produce instant, high quality images magnified up to 200X on a TV or computer. By touching the tip to a sample, a teacher or student automatically produces an in-focus image of fingerprints, butterfly wings, living protozoans,

microfossils, structure of crystals, or almost anything worth examining. It can function both as a compound and as a dissecting microscope, and can be used to examine traditional slides and samples. Samples of any size can be viewed, and little if any preparation of the specimen is necessary.

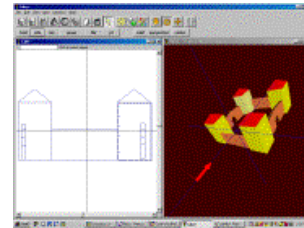
Similar to Scope On A Rope is the **USB Microscope**, a hand-held video microscope that displays images on any computer with a USB port. Since it is powered by the USB connection there is no power cord, and when used with a laptop it is completely portable. Included software allows screen display, production of single frame captures, and full-motion video.



See these hand-held video microscopes at our conference booth, or call for demo information.

### 3-D Modeling Software

**Tabs Plus** is a 3-D modeling program that allows students to design their own projects on the screen and then print them out and build them. It works in a 'split-screen' format. Students design their projects in a two-dimensional screen on the left side and immediately see the image rendered in three dimensions on the right side. As students work on their designs they see their creations



taking shape in 3D. They rotate, switch to wire frame or solid, zoom, and color their work as they go along. Changes are easily made to height, width or length of objects. This is recommended as a tool for integrating math concepts into interdisciplinary projects.

Check out the Tabs Plus web site to see student projects, lesson plans, and more:  
[www.knowledgetree.on.ca](http://www.knowledgetree.on.ca).

Available in Ohio only from Smart Solutions, Tabs Plus is sold as a building site license for both Mac and PC. See a Tabs Plus demo at our conference booth, or contact us for a demo CD.

### Please Visit Us!

#### **Ohio SchoolNet State Technology Conference**

Columbus Convention Center  
February 27-28 Booths 133, 135

#### **National Middle School Association Urban Conference**

Hilton Columbus  
March 1-2 Booth 10

#### **Ohio Technology Education Association Conference**

Akron Quaker Hilton  
March 29-30 Booth 21



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