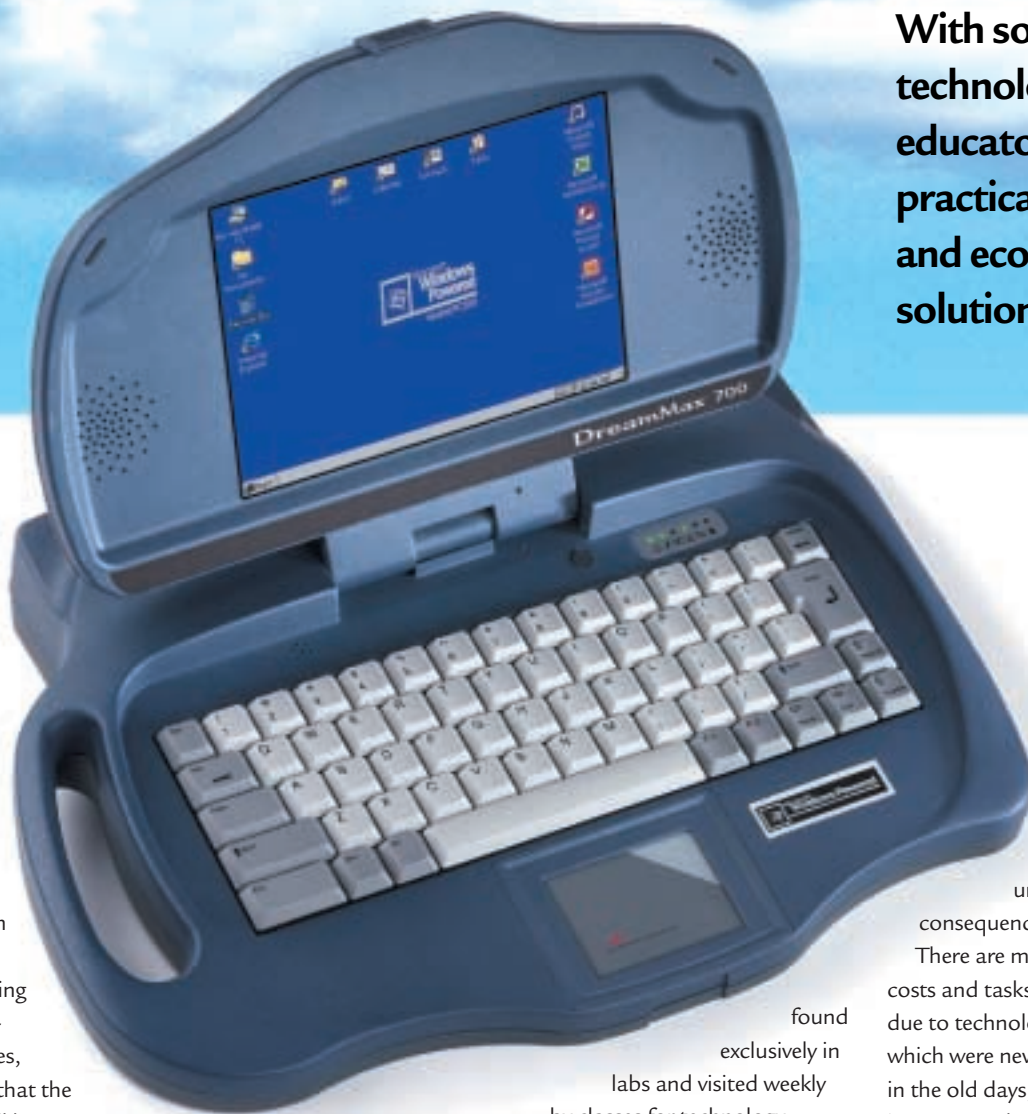


Maximizing Your Technology: Brainium Technologies and the Portable Revolution

With so many technology choices, educators need practical, accessible and economical solutions.



These days, the education landscape offers a dizzying array of technology choices, with no sign that the onslaught will let up anytime soon. There are, of course, standard desktop and laptop computers, which continue to get faster chips and larger hard drives with each iteration. But perhaps the most exciting arena in educational computing is in embedded-systems based products—handhelds such as the Palm, and education-specific products such as Brainium Technologies' DreamMax 700™.

Cost of Progress

With all the changes in schools and in technology, it's difficult to stand back and evaluate the effectiveness of technology initiatives which, over the last decade, have seen schools go from having a single dial-up Internet connection in the media center to installing sophisticated LANs and WANs bringing connectivity to each classroom. Computers, once

some unintended consequences as well. There are maintenance costs and tasks facing schools due to technology integration, which were never in the budget in the old days, forcing administrators to do some hard number crunching to evaluate the total cost of ownership (TCO) of its computer investment. TCO factors in dedicated IT staff who maintain and upgrade systems. Added to this, TCO also accounts for the downtime that can result when finicky systems go AWOL. This is an important consideration, as downtime in education is not just a loss in productivity, as it would be for a corporation, but a loss in learning.

found exclusively in labs and visited weekly by classes for technology literacy exercises, are now more commonly found in classrooms, where they play an integral role in the curriculum. So far so good. But don't rest on any laurels just yet. With all the benefits computers have given schools—from streamlining administrative systems to informing parents about upcoming assignments and giving students access to cutting edge research tools—computers have unleashed

The DreamMax 700 inspires

Given these realities, technology coordinators, administrators, curriculum specialists and teachers nationwide are reevaluating their assumptions and demanding technology solutions built for the realities of education.

The Educator's Alternative

"About the most expensive you can do with your technology money is to wire a room to be a lab," says Gary Sloat, self-described "alpha geek," and more officially, Director of Learning and Information Services for the Davenport, Iowa Schools. "Most of our buildings were wired 40 years back to run a clock, yet this same circuitry is now supposed to handle complex networks. My budget was recently slashed by 66%, so I don't know about other districts, but I need economical ways to bring technology to my schools without sacrificing functionality."

To determine the best equipment for his schools, Sloat evaluated how computers

were actually being used, and discovered some striking trends. "Most of our computer activity relies on productivity tools such as word processing, spreadsheets, email and web browsing," he notes. In searching for economical ways to extend technology to Davenport's students and teachers, Sloat discovered Brainium Technologies' DreamWriter I.T., and its newest entry to the field, the DreamMax 700.

Leveraging the remarkable innovations of portable technology—including the powerful Windows CE operating system and the Intel StrongArm RISC processor—the DreamMax 700 gives educators a practical, accessible and economical alternative to consider when evaluating technology needs.

Because the DreamMax 700 has an embedded operating system, "there's very little students can do to malign it," says Sloat. He also notes that it requires little of his IT staff's attention, lowering its TCO. And because it's an "instant

on" product, there's no instructional time lost waiting for the system to boot up.

"We were looking for a portable solution with a low TCO that could survive the school environment," says Sloat. "The DreamWriter fits the bill."

A Versatile Tool

The DreamMax 700 ships with on board "pocket" versions of standard business applications such as Microsoft Word, Excel, Access and PowerPoint, combined with Internet Explorer 4.0. It's an 802.11 compliant product with wireless networking capabilities including built in drivers for Cisco, Proxim, Lucent and Symbol.

"Our teachers already have great content," says Davenport's Sloat. "They have lessons that have successfully reached kids for years. That expertise, plus the on board tools like PowerPoint and other office standard programs go a long way toward amplifying the curriculum, to make it the MTV of education."

What does that look like on ground level? Brainium Technologies products have long been a cost effective way to give students technology to write with, but now math and science teachers are getting in on the act using spreadsheet and database applications. By adding optional science probes or Brainium's science curriculum, the DreamMax 700 transforms into a portable data gathering and analysis station. With a battery that lasts the entire school day, and wireless networking capabilities, the DreamMax 700 can join students wherever learning occurs.

In Davenport, Sloat uses DreamWriter I.T.'s in a variety of ways. To provide additional Internet access in the district's high schools, each media center complements its desktop workstations with five wireless enabled units. Intermediate school libraries are similarly equipped, giving students extra access to the software tools they use in class. To address fluctuating

learning and elicits understanding.



class sizes, Sloat combines laptops and DreamWriter I.T. units.

“It’s a scalable solution for us,” Sloat comments, “and it complements our other systems well. Since it uses a version of Windows, file transfer between the DreamWriters and our desktop or laptop systems is seamless.”

Knowledge on Wheels

Brainium Technologies, a pioneer in bringing the technology to the student, has 10 years’ expertise designing, building and deploying carts through its unique Rol-A-Lab®. These fully assembled carts are built specifically for the units with an easy to use “dock and charge” feature. With it, up to 20 DreamMax 700 units fit into docking slots that simultaneously charge each unit. There’s space for a printer on the cart as well. This rolling productivity station means teachers no longer lose time taking kids

to the technology lab or media center. Instead, the cart can be rolled into class, and since the DreamMax 700 turns on instantly, kids get directly to work.

Windows CE: Power in Your Pocket

In a time when desktop and laptop sales have all but flattened out, the big news in computer innovation is the handheld device, and increasingly, Windows CE is the operating system of choice for these pocket powerhouses.

The reason is simple enough—because most people use a handheld device in conjunction

with an existing desktop or laptop system, working from the same operating system family means smoother synching of data, consistency in user experience and enhanced productivity. Windows CE allows users to create documents in the applications they work with most frequently, and when it comes time finesse their work on more powerful systems, the task is seamless.

This 32-bit, multi-tasking operating system enables different Windows products to “talk” to each other easily, and ships with appropriately scaled down versions of Word,

Excel, Access, PowerPoint, Outlook and Internet Explorer.

For Brainium Technologies, bringing industry leading technology to the school has always been the mission, and Windows CE has

enabled the company to add robust functionality to its DreamWriter and DreamMax 700 products.

The Curriculum Connection

Brainium Technologies now offers a compelling curriculum solution to complement its portable technology. The result? The technology tool custom designed for education now hooks you into standards-based curriculum resources.

The company’s flagship product, Science Brainium, winner of a gold NewMedia INVISION Award, as well as

Choosing Technology for Your School: A Checklist

Speeds and feeds used to be the primary criteria for technology choice. Then came laptop versus desktop. Now the horizon is even more complicated, with wireless networking and an array of powerful new portable devices. What's a technology buyer to do? These questions can help you sort through the miasma.

Was the product designed for education? Many computer companies see education as simply another outlet for products intended for a business environment. As you well know, schools and businesses are radically different, and your equipment should be too. Some things to consider are:

- ❑ **ruggedness and durability:** can it be dropped, played with and otherwise incorporated into the daily life of children? The **DreamMax 700** has a six hour battery life to provide kids with learning tools throughout the school day.
- ❑ **ability to share equipment among many users:** look for a tamper proof operating system, instant reset to the starting configuration and good network connectivity so that kids can access servers.

Is it economical? Technology entails costs greater than the buying price of a given piece of equipment. Consider these factors:

- ❑ **easy to install, upgrade and maintain:** do you want to spend money on IT staff or on furthering learning goals?
- ❑ **match the tool to the task:** sometimes the most powerful tool is simply the one that works.
- ❑ **think in complementary terms:** combine different technology systems—portables, desktops, calculators, large screen projectors—for the most effective results. The **DreamMax 700** can do composite video on TV screens without special adapters.

Is it accessible? With instruction moving increasingly toward project based learning, kids need tools that move with them. Networking has brought amazing resources to education, but now it's time to go the next step, and cut the wires.

- ❑ **compliance with wireless standards:** The **DreamMax 700** is 802.11 compliant, which is the current wireless networking standard.

a Parents' Choice Award for Best Online Children's content, is an online science resource for grade 3-8 students and teachers. Users explore the world of science by engaging in self-directed, interactive science games, lessons, experiments, and animated adventures. Each lesson links to appropriate Web sites, and current science news stories.

Using engaging storylines and interesting characters, Science Brainium creates a safe, fun, interactive learning environment for kids. Self-directed at home, or teacher-assisted in the classroom, it offers an effective and fun learning experience.

Difficult subjects become less complicated with self-paced learning units and activities. Science Brainium supports a variety of learning levels and styles, and built-in formative assessment features give educators the tools they need to monitor progress and provide help when needed.

Brainium Technologies' success with teachers and educational professionals stems from clear, comprehensive teacher support materials to ensure successful integration

into the instructional day. For each product there are suggestions for presentation techniques, ideas for teaching a variety of learning levels, and solutions for varying computer access. Brainium Technologies' lesson plans, activity sheets and evaluation rubrics enable efficient and easy classroom use.

Kids and teachers deserve the very best tools for learning, tools that enable the most imaginative aspirations of teachers, without requiring a degree in electrical engineering to work. Designed for education, the **DreamMax 700** and **DreamWriter** family of products combine front-line technology innovation in a durable, kid friendly package. With its low initial cost and minimal support needs, the TCO of the **DreamMax 700** makes it immediately attractive to penny-wise technology buyers. Its robust applications, rugged portability, and ease of use make it a hit in the classroom. Add in Brainium Technologies' wireless networking strengths, and you have a tool that travels at the speed of curiosity.



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