# Cloud's Clear Benefits

Districts are saving money, improving service, and retaining flexibility by switching to cloud computing.

BY ERIC BUTTERMAN

KEN GRAHAM knew he had a problem. Students in his district, Hauppauge Public Schools in Long Island, New York, were creating great work, from videos to graphical presentations. But these files needed space and when Graham, the district's assistant superintendent for administration and technology, learned the story of a shy girl who found the courage to speak up with the help of her computer, he knew he needed to make a change. He had to create a powerful enough network to address both of these needs.

He needed extra space and he needed to stay within the limits of his district's privacy policy. "Children have to be protected but we also need to help them move forward," Graham says. That's where ePals, a K–12 network with more than 200 million students, came in. "We began with them to get a hybrid cloud to supplement the content storage available and provide safety measures," he says. "We also looked to them in terms of dealing with bandwidth issues."

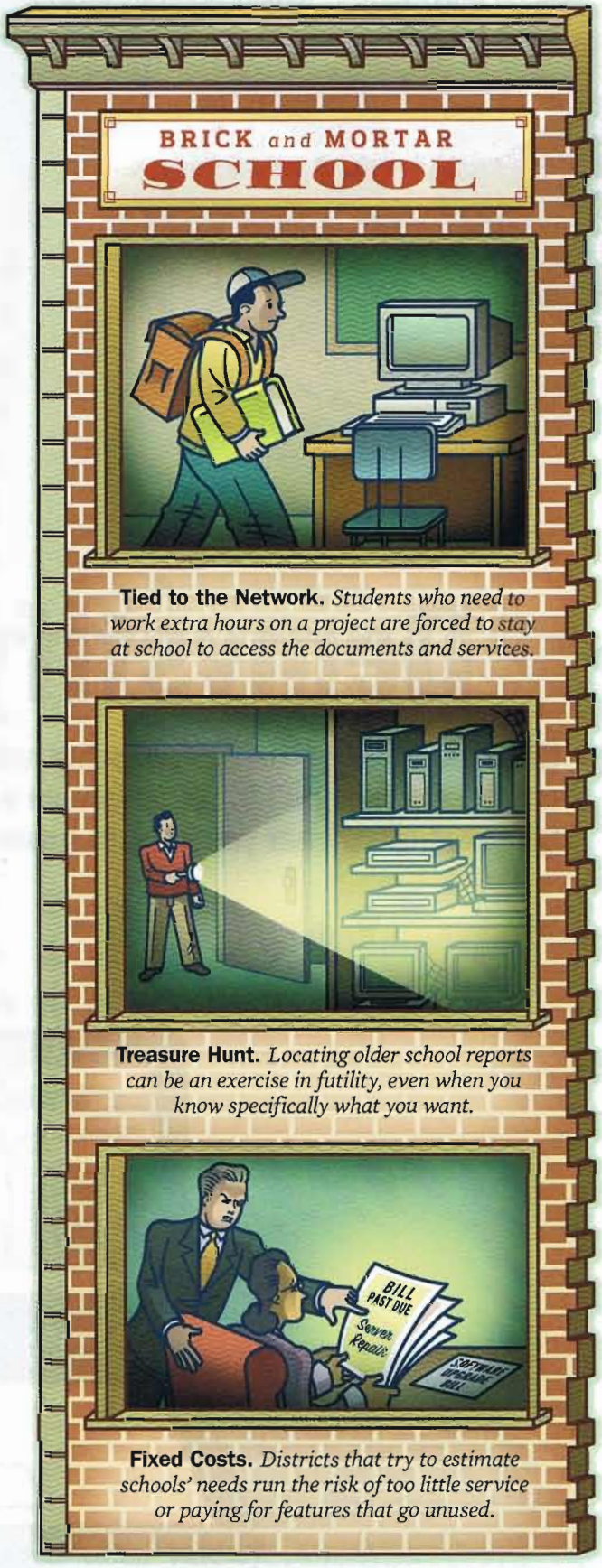
For some, cloud computing is an amorphous issue. But for Graham, its definition was simple: technology the district could use without owning hardware. Graham had more ideas on how to use the cloud for his district's needs.

"We wanted to replicate content to a district data center and get the data center to the ePals' cloud as well," Graham explains. "This way, the work the students were involved in would be available at network speed in the domain, and then wherever students were doing their work individually. They would use our Internet bandwidth for accessing other content and then store it at the ePals site."

## Fewer IT Headaches

LEISHA SIMON, DIRECTOR OF technology and accountability at Wayland Public Schools, 30 minutes outside of Boston, saw Google as a vital solution. "We have Google Apps Education as our cloud for all students and staff," she says. "We're also extended to Google e-mail. We outsource our e-mail archiving through Google's Postini—all of that is also cloud based."

From a management standpoint, the pros of putting her schools in the cloud, says Simon, are streamlining work




**Tied to the Network.** *Students who need to work extra hours on a project are forced to stay at school to access the documents and services.*

**Treasure Hunt.** *Locating older school reports can be an exercise in futility, even when you know specifically what you want.*

**Fixed Costs.** *Districts that try to estimate schools' needs run the risk of too little service or paying for features that go unused.*

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## THE CLOUD SCHOOL

**24/7 Access, Anywhere.** *Students, teachers, and administrators can tap into schoolwork or school data anywhere they have an Internet connection.*


**Customized Information.** *By sharing data digitally from several sources, teachers can run customized reports as needed.*

**Pay as You Go.** *Schools can add services and functionality easily, and automatic updates will save IT money.*

and making files accessible for students and staff. The district also works with the technology education company it's learning, which created a one-stop portal for all resources.

Simon admits she has used cloud-based aspects for years but this complete overhaul meant losing the headaches of installing and updating. The negative side is that operating budgets go up along with a yearly fee—unavoidable to Simon. "No matter how you cut it you will be paying if you want to improve your technology," she says.

The learning curve comes not with training the kids, who were born into a constantly changing technological world, but rather with training their teachers, says Simon. She recommends adding a professional development focus for switching over to the cloud and allowing enough time for repetitive learning. "We had curriculum initiatives and online courses for staff," she says. "We found spending a whole year on it prepared them to lead students and gain their own confidence."

### Avoid Long-term Costs

STEVE NELSON, CHIEF IT strategist for the Oregon Department of Education, saw his own state turn to Google Apps, a move that he estimates saved $1.5 million. "Every user has e-mail, and we don't want to do it all by ourselves for a subset of that many students," Nelson says. "You could get free Gmail from Google but the problem was getting filtering and archiving. Bridging accounts between the two was a nightmare."

Even though there may be set offerings for opportunities such as Google Apps, Nelson encourages patience and an open communication in what you want. It is possible to get some degree of customization. "They included the Postini filtering service at no cost for K–12 and that opened up things," he says. "Integration into their applications also worked well. It makes for a feature-rich application, so we can take Google Docs and get into the learning management system."

Though the Google cloud may be a little inflexible at times, Hauppauge's Graham says what it adds to your budget makes it easily worth it. "It saves a lot of money because even though the cost of bandwidth increases, you can move enormous communication infrastructure to Google and you don't have to buy servers or licenses for proprietary software," he says. "What you're really trying to do is slow the growth curve of cost. The financial burden each year in terms of [technological] growth is fairly daunting. Now the key isn't so much long-term costs but long-term cost avoidance!"

### Boost Student Interaction

DESPITE THE FACT CLOUD computing has been around awhile, its time in the mainstream ed sector is rather miniscule. Simon says schools have only scratched the surface of the cloud era, to the point where the term *computer* will almost become obsolete. "I see virtual desktop interfaces in the cloud like an AirSet," she says. "We brought in 100 sim clients—when you're running everything back at a data center or using the Internet, you don't need software apps on a computer. You just need access to the Internet, and good access."

Nelson sees a lot more student interaction. "We talk about student data and academic success but not about student engagement," he assesses. "This technology will be critical to many future jobs, and you create options by allowing students to connect to the subject matter. That's how you win here.