

## Seeing No Progress, Some Schools Drop Laptops



Narayan Mahon for The New York Times

John Gabriel, 18, left, Jeff Hendel, 17, and Mary Grace Van Ness, 17, used a school-issued laptop for fun during lunch at Liverpool High.

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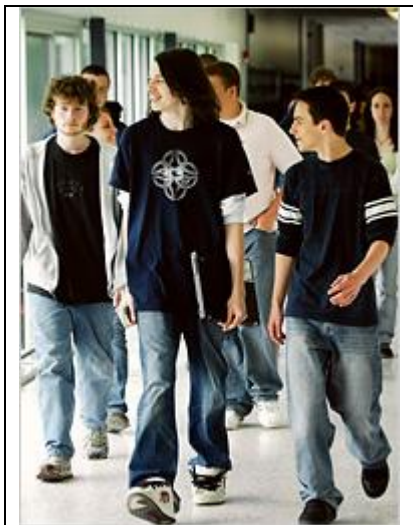
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LIVERPOOL, N.Y. — The students at Liverpool High have used their school-issued laptops to exchange answers on tests, download pornography and hack into local businesses. When the school tightened its network security, a 10th grader not only found a way around it but also posted step-by-step instructions on the Web for others to follow (which they did).

Scores of the leased laptops break down each month, and every other morning, when the entire school has study hall, the network inevitably freezes because of the sheer number of students roaming the Internet instead of getting help from teachers.

So the Liverpool Central School District, just outside Syracuse, has decided to phase out laptops starting this fall, joining a handful of other schools around the country that adopted one-to-one computing programs and are now abandoning them as educationally empty — and worse.

Many of these districts had sought to prepare their students for a technology-driven world and close the so-called digital divide between students who had computers at home and those who did not.



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Chris Barry, 16, carrying his laptop at Liverpool High School in Liverpool, N.Y., where they are being phased out.

“After seven years, there was literally no evidence it had any impact on student achievement — none,” said Mark Lawson, the school board president here in Liverpool, one of the first districts in New York State to experiment with putting technology directly into students’ hands. “The teachers were telling us when there’s a one-to-one relationship between the student and the laptop, the box gets in the way. It’s a distraction to the educational process.”

Liverpool’s turnabout comes as more and more school districts nationwide continue to bring laptops into the classroom.

Federal education officials do not keep track of how many schools have such programs, but two educational consultants, Hayes Connection and the Greaves Group, conducted a study of the nation’s 2,500 largest school districts last year and found

that a quarter of the 1,000 respondents already had one-to-one computing, and fully half expected to by 2011.

Yet school officials here and in several other places said laptops had been abused by students, did not fit into lesson plans, and showed little, if any, measurable effect on grades and test scores at a time of increased pressure to meet state standards. Districts have dropped laptop programs after resistance from teachers, logistical and technical problems, and escalating maintenance costs.

Such disappointments are the latest example of how technology is often embraced by philanthropists and political leaders as a quick fix, only to leave teachers flummoxed about how best to integrate the new gadgets into curriculums. Last month, the United States Department of Education released a study showing no difference in academic achievement between students who used educational software programs for math and reading and those who did not.

Those giving up on laptops include large and small school districts, urban and rural communities, affluent schools and those serving mostly low-income, minority students, who as a group have tended to underperform academically.

Matoaca High School just outside Richmond, Va., began eliminating its five-year-old laptop program last fall after concluding that students had failed to show any academic gains compared with those in schools without laptops. Continuing the program would have cost an additional

\$1.5 million for the first year alone, and a survey of district teachers and parents found that one-fifth of Matoaca students rarely or never used their laptops for learning. “You have to put your money where you think it’s going to give you the best achievement results,” said Tim Bullis, a district spokesman.

Everett A. Rea Elementary School in Costa Mesa, Calif., where more than 95 percent of students are Hispanic and come from low-income families, gave away 30 new laptops to another school in 2005 after a class that was trying them out switched to new teachers who simply did not do as much with the technology. Northfield Mount Hermon School, a private boarding school in western Massachusetts, eliminated its five-year-old laptop program in 2002 after it found that more effort was being expended on repairing the laptops than on training teachers to teach with them.

Two years ago, school officials in Broward County, Fla., the sixth-largest district in the country, shelved a \$275 million proposal to issue laptops to each of their more than 260,000 students after re-evaluating the costs of a pilot project. The district, which paid \$7.2 million to lease 6,000 laptops for the pilot at four schools, was spending more than \$100,000 a year for repairs to screens and keyboards that are not covered by warranties. “It’s cost prohibitive, so we have actually moved away from it,” said Vijay Sonty, chief information officer for the district, whose enrollment is 37 percent black, 31 percent white and 25 percent Hispanic.

Here in Liverpool, parents have long criticized the cost of the laptop program: about \$300,000 a year from the state, plus individual student leases of \$25 a month, or \$900 from 10th to 12th grades, for the take-home privilege.

“I feel like I was ripped off,” said Richard Ferrante, explaining that his son, Peter, used his laptop to become a master at the Super Mario Brothers video game. “And every time I write my check for school taxes, I get mad all over again.”

Students like Eddie McCarthy, 18, a Liverpool senior, said his laptop made him “a lot better at typing,” as he used it to take notes in class, but not a better student. “I think it’s better to wait and buy one for college,” he said.

More than a decade ago, schools began investing heavily in laptops at the urging of school boards and parent groups who saw them as the key to the 21st century classroom. Following Maine’s lead in 2002, states including Michigan, Pennsylvania and South Dakota helped buy laptops for thousands of students through statewide initiatives like “Classrooms for the Future”

and “Freedom to Learn.” In New York City, about 6,000 students in 22 middle schools received laptops in 2005 as part of a \$45-million, three-year program financed with city, state and federal money.

Many school administrators and teachers say laptops in the classroom have motivated even reluctant students to learn, resulting in higher attendance and lower detention and dropout rates.

But it is less clear whether one-to-one computing has improved academic performance — as measured through standardized test scores and grades — because the programs are still new, and most schools have lacked the money and resources to evaluate them rigorously.

In one of the largest ongoing studies, the Texas Center for Educational Research, a nonprofit group, has so far found no overall difference on state test scores between 21 middle schools where students received laptops in 2004, and 21 schools where they did not, though some data suggest that high-achieving students with laptops may perform better in math than their counterparts without. When six of the schools in the study that do not have laptops were given the option of getting them this year, they opted against.

Mark Warschauer, an education professor at the University of California at Irvine and author of “Laptops and Literacy: Learning in the Wireless Classroom” (Teachers College Press, 2006), also found no evidence that laptops increased state test scores in a study of 10 schools in California and Maine from 2003 to 2005. Two of the schools, including Rea Elementary, have since eliminated the laptops.

But Mr. Warschauer, who supports laptop programs, said schools like Liverpool might be giving up too soon because it takes time to train teachers to use the new technology and integrate it into their classes. For instance, he pointed to students at a middle school in Yarmouth, Me., who used their laptops to create a Spanish book for poor children in Guatemala and debate Supreme Court cases found online.

“Where laptops and Internet use make a difference are in innovation, creativity, autonomy and independent research,” he said. “If the goal is to get kids up to basic standard levels, then maybe laptops are not the tool. But if the goal is to create the George Lucas and Steve Jobs of the future, then laptops are extremely useful.”

In Liverpool, a predominantly white school district of nearly 8,000 students, one in four of whom qualify for free or reduced lunches, administrators initially proposed that every 10th through 12th-grade student be required to lease a laptop, but decided to make the program voluntary after parents protested. About half the students immediately signed up; now, three-quarters have them.

At first, the school set up two tracks of classes — laptop and non-laptop — that resulted in scheduling conflicts and complaints that those without laptops had been shut out of advanced classes, though school officials denied that. In 2005, the school went back to one set of classes, and bought a pool of 280 laptops for students who were not participating in the lease program.

Soon, a room that used to be for the yearbook club became an on-site repair shop for the 80 to 100 machines that broke each month, with a “Laptop Help Desk” sign taped to the door. The school also repeatedly upgraded its online security to block access to sites for pornography, games and instant messaging — which some students said they had used to cheat on tests.

Maureen A. Patterson, the assistant superintendent for instruction, said that since the laptop program was canceled, she has spoken to more than 30 parents who support the decision and received five phone calls from parents saying they were concerned that their children would not have technological advantages. She said the high school would enlarge its pool of shared laptops for in-class use, invest in other kinds of technology and also planned to extend building hours in the evening to provide computer access.

In a 10th grade English class the other day, every student except one was tapping away on a laptop to look up food facts about Wendy’s, McDonald’s, and Burger King for a journal entry on where to eat. The one student without a computer, Taylor Baxter, 16, stared at a classmate’s screen because she had forgotten to bring her own laptop that day.

But in many other classrooms, there was nary a laptop in sight as teachers read from textbooks and scribbled on chalkboards. Some teachers said they had felt compelled to teach with laptops in the beginning, but stopped because they found they were spending so much time coping with technical glitches that they were unable to finish their lessons.

Alice McCormick, who heads the math department, said most math teachers preferred graphing calculators, which students can use on the Regents exams, to laptops, which often do not have mathematical symbols or allow students to show their work for credit. “Let’s face it, math is for the most part still a paper-and-pencil activity when you’re learning it,” she said.

In the school library, an 11th-grade history class was working on research papers. Many carried laptops in their hands or in backpacks even as their teacher, Tom McCarthy, encouraged them not to overlook books, newspapers and academic journals.

“The art of thinking is being lost,” he said. “Because people can type in a word and find a source and think that’s the be all end all.”