



GUEST Expert

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Tools for Change: A Day in the Life of a Student in 2005

It's hard to predict too far into the future, especially with technology. But let's look at a day in the life of a fifth grade student in 2005... The backpack is still necessary to transport instructional materials to and from school. Whereas, today's typical backpack weighs about thirty lbs., the backpack of 2005 weighs about five pounds. What's in this backpack of the future? Let's take a look...

With the success of wireless networks and the diminishing costs of technology, the advent of anytime, anywhere learning has become a reality. The first item out of the backpack is a personal portable device (PPD), which allows input via an on-screen keyboard, handwriting recognition, and voice recognition. This PPD gives student access to both the network and the Internet via a wireless access card, allowing them to retrieve multimedia from the Web and the network for projects. The PPD has a slot for infinite expansion possibilities, adding to the tools found in the classroom such as scientific probes, GPS systems, digital cameras, and more.

No more papers to hand in! Students beam their homework to their teachers' desktop infrared ports as they enter the classroom, and teachers grade assignments and put corrected assignments on the network for student retrieval. As an ongoing assessment of student progress, corrected assignments are also stored in a folder that will be burned onto a CD for students' digital portfolios.

Next out of the backpack is the folding keyboard attachment that students use when taking notes, practicing keyboarding skills, doing text entry, or while surfing the Web.

In 2005, when it is time to read their assignments, students take out their electronic books, which hold all of their textbooks and reading materials for the entire school year (over 40,000 pages). This paperback-size device allows keyword searching, note-taking, highlighting, and much more. Students may add information to the e-books of their collaborative learning group members by simply beaming. Having textbooks in electronic form keeps information current; publishers can send electronic updates, corrections, and additions whenever there are changes.

The morning routine starts as on any other school morning: attendance is taken and lunch preferences are recorded. However, the classroom teacher has no involvement with these procedures in 2005. Attendance is taken as the students enter the room by placing their fingers on the fingerprint recognition device near the door. This device serves a dual purpose: for the first half hour, it is set to take attendance, and the rest of the day it is set to allow students to enter and exit the room without needing a pass.

Using their PPDs, students log onto the cafeteria Web site to choose their lunches. Since the cafeteria computer recognizes students by their IP addresses, their selections are stored in the database under their names. Students pay for their lunches electronically with their e-wallets, an online debit system that credits the school's cafeteria account. No more forgotten lunch money and cafeteria charges!

In 2005, students log on to the office server to read daily announcements. Each student is responsible for reading the daily announcements and sharing information with parents at home. When students log on to the office server, any notes specifically for that student or that student's parents are also downloaded to their PPDs.

The remaining tools in the classroom include two full multimedia personal computers with assorted peripherals such as scanners, video cameras, and video- and audio-capture devices that act as production stations. In addition, in order for students to work together utilizing an interface that enhances their PPDs, each student is assigned a wireless tablet device that they can use anywhere in the school. The tablet is a fully functioning computer that utilizes touch input and is the size and weight of a laptop screen!

As students conduct research using their PPDs, tablet computers, or classroom computers, they utilize both the free Internet, Internet 2, and subscription services. The school allocates money to each student's e-wallet for conducting research, and students can easily debit their online account for pay services. While they are using Internet 2, they have access to high-bandwidth applications and programs designed especially for students in K-12.

The 2005 classroom looks different from today's classroom. In order to facilitate the new instructional practices of students as researchers, problem solvers, and strategists, the classroom is set up to take advantage of collaborative, real-world, and project-based work. Everything is movable to allow for the best use of space, there are distinct work areas to be used depending upon the task, and students have access to many other tools to facilitate learning. A description and illustration of this classroom can be found on this article's companion Web page at (<http://kathyschrock.net/tools/>).

The classroom of 2005 will include all the necessary problem-solving tools. Our students need to learn which tools to use to solve the problem at hand, whether they need pencil and paper or a video-conferencing camera. The NETS*S for students at this grade level (<http://cnets.iste.org/35pro.htm>) includes performance indicators that support the important need of access to technology choices.

In order to attain these goals, it is important that the tools are available and that teachers continue to provide real-world, higher-order thinking, collaborative, research-based problems for their students to solve!

Footnote: All of the items described in this article are readily available today! See the companion Web page (<http://kathyschrock.net/tools/>) for links to the tools!