OUT ON A LIM WITH EDUCATIONAL TECHNOLOGY

HIGH-TECH TOOLS FOR SCHOOLS

• As educators, we feel pressure to get technology into schools and classrooms. Is technology an essential aspect of education?

• We aim for schools that mold students in the image of Christ. Does technology fit into this process?

• We are preparing students for service in this life and the life to come. Is technology an essential part of this?

My own interest in these questions began while I was finishing my teaching certification. Working as supervisor of a computer lab at Andrews University in Berrien Springs, Michigan, and teaching computer seminars make me think about training issues. Studying cooperative learning, active learning, concept attainment lessons, and other strategies that encourage higher-level thinking skills, I thought about technology's possibilities to assist this kind of learning. In a summer course at the VHM Model Technology School in Santa Cruz, California,[1] I learned how multimedia, the Internet, laser discs, and video cameras could be used to enhance student reports, projects, and other creative classroom activities. The next summer, my team taught a similar class co-sponsored by Andrews University and the Berrien County (Michigan) Intermediate School District. I tried to connect my students' trips to the computer lab with the language arts skills I was teaching.

Now I work with public and parochial (including Adventist) schools, helping teachers integrate computers and other technologies into the curriculum. I also served on the technology committee for the Niles (Michigan) Seventh-day Adventist Elementary School. Each of these experiences has increased my conviction that technology is an essential part of preparing our students for service in this life. Let me tell you why.

First, let's define *technology. Webster's Dictionary* defines it as "Industrial science; the science of systematic knowledge of the industrial arts, especially of the more important manufactures, as spinning, weaving, metallurgy, etc."[2] Personally, I define *technology* as any tool or invention new to us. Often, it is advertised as making tasks easier. Technology includes computers, cars, digital cameras, cable TV, and more.

Technology plays a key role in modern society's rapid change from the Industrial Age to the Information Age. More and more jobs focus on information management, presentation, and production. Computers and the Internet are integral to performing many of these activities. Our students need to have computer information management skills for almost any job they choose. For example, when I had the oil changed in my car, I overheard the mechanics discussing how they used the computer to align and balance car tires. Mechanics also use computers to access car manufacturers' Web pages for information about car design and updates on recalls and new repair techniques. Manufacturing companies use computers to analyze production variables and profits; salespeople use spreadsheets and databases to improve record keeping and sales. The examples could go on.

We all use technology in our daily lives. Cars take us where we want to go. Cameras capture memorable slices in time. Television feeds us entertainment, news, and information. We communicate via fax, E-mail, and telephone. So how should technology be used in the classroom? The same way it is used in life. Computers are a tool in the workplace and home. They are also a tool in the classroom. A tool to access, report, and organize information—a tool that makes tasks easier (and sometimes more challenging). Under the guidance of a good teacher, students who use computers in their daily learning will also acquire the skills for productive service.

Public education is awakening to the idea of technology as a learning tool. The U.S. Department of Education's Director of Educational Technology recently said: "The lab concept was to introduce kids to computers. We've come to understand that you don't want to introduce kids to computers. You want them to use computers . . . 30 minutes a week at the lab doesn't have any impact for students."[3] A report to the President of the United States in March 1997 recommended: "Focus on learning with technology, not about technology. . . . While computer-related skills will unquestionably be quite important in the 21st century, and while such skills are clearly best taught through actual use of computers, it is important that technology be integrated throughout the K-12 curriculum."[4] In my own work, I emphasize ways to use technology to teach core subjects because this is the most effective way to use computers and other technologies in the classroom.[5]

This discussion is just the beginning of a new column on technology in education. It will focus on technology in the classroom, especially its use in the curriculum. We will explore topics such as instructional strategies, training, parent concerns, gender equity, funding, and assessment. We'll share lesson ideas for content areas and interdisciplinary themes, using the Internet as a teaching tool and as an instructional aid. Safety issues and challenges facing small schools in using the Internet will also be addressed. We have much to consider as we spend the Lord's money in our schools. We must think carefully about the intended results and plan thoughtfully to reach our goals.[6] Together, let us strive to effectively use various instructional tools in our classrooms.—***Janine Lim.***

NOTES AND REFERENCES

1. The Pacific Union Conference has greatly expanded the Educational Technology Project since I visited in 1995. Visit their Web page at http://www.pacificunion-atie.com.

2. *Webster's Hypertext Dictionary.* World Wide Web document http://work.ucsd.edu:5141/cgi-bin/http_webster.

3. Quoted in John Engler, *Response to Michigan's State Technology Plan* (January 27, 1998). Letter by Michigan's governor.

4. President's Committee of Advisors on Science and Technology. *Report to the President on the Use of Technology to Strengthen K-12 Education in the United States* (March 1997). http://www.whitehouse.gov/WH/EOP/OSTP/NSTC/PCAST/k-12ed.html.

5. For more reading on technology in education, visit an online educational technology journal called *From Now On.* http://www.fromnowon.org/

6. For more information on technology planning in Adventist schools, see *A Basic Guide to Technology Planning.* http://www.pacificunonatie.com/techplanning/techplanguide/intro.html.