Getting technical: Information technology in seminaries

by **Raymond B. Williams** in the **February 7, 2001** issue

A few years ago a technology consultant told a group of seminary deans and presidents that computer-based information technology is like a fast-moving train. "It doesn't matter whether you are in first class or third class, but it is essential that you get on the train." One of the deans commented, "Now I know what it feels like to be a ticketless hobo riding the rods."

Theological schools, most of them somewhat strapped for resources, are struggling with the challenges and potentials of the new technologies. Like Moses, they are peering into a land that promises to provide milk and honey but also may hold some dangerous giants. The new technologies have great potential for enhancing the education of pastors, transmitting the gospel and creating Christian wisdom in the new information age. But significant challenges and dangers lie ahead.

An astounding mass of material is already available on computer screens. Scholars are busily creating and digitizing resources for schools and churches. Here are a few examples from the expanding "library" of theological resources:

- The American Theological Library Association is digitizing 50 years of 50 journals in theology and religion, and will soon link them to the ATLA database. They will be fully accessible and searchable on CD-ROM and on the Internet (rosetta.atla-certr.org).

- Harold Attridge digitizes slides for teaching about the New Testament and makes them available through the Eikon Project (eikon.divinity.yale.edu).

- Harry Plantinga and his volunteers have digitized 500 books that are in the public domain. They are available free on the Internet in the Christian Classics Ethereal Library. Some 15,000 people visit the Web site each day and retrieve

over a million "books" per year. Plantinga provides a CD-ROM version of 300 books free to missionaries, pastors and teachers in developing areas (4,000 copies to date), and Calvin College sells them to others at a modest cost (ccel.org).

- Charles Bellinger created and maintains the Wabash Center Guide to Internet Resources for Teaching and Learning in Theology and Religion organized by subjects (wabashcenter.wabash.edu/Internet/front.htm).

- Rohr Productions markets The Holy Land Satellite Atlas with a CD-ROM containing satellite maps of the Middle East and software permitting students to "fly over" the terrain from Dan to Beersheba and hover over Mt. Hermon, the Sea of Galilee, the King's Highway, Masada, Qumran and other biblical sites.

Advances in hardware and software are improving the production, digitizing, transmission and use of these resources, and increasing both demand and supply. When I asked a leader at the cutting edge of computer technology to predict ten years ahead, he looked at me as if I had taken leave of my senses. He is willing to look only two or three years ahead.

Disintermediation is the current term for the explosion of information. To understand the disintermediation quandary, search for "religion" or "Christianity" on an Internet browser. You will uncover a jumbled mess of thousands of sites with no order and no sense.

Until now, editors/publishers, librarians and teachers have been the gatekeepers and mediators of scholarly religious material. They have determined what is worth publishing, what should be preserved and what is used. We would not be able to use information as effectively without them.

But today all three professional groups risk extinction, at least in their current guise, unless they adapt quickly to the new context. Who needs an editor or publisher when anyone can digitize anything and make it available to everyone who has access to a computer? With the proliferation of Internet e-books and e-journals, publishers are developing e-strategies to preserve their role in authenticating scholarly work. Teachers too must develop new pedagogical and technical skills for research and teaching.

Most of us learned in school by reading books from cover to cover. Our son still reads books to our granddaughter, which she repeats from cover to cover even though she can't yet read. But then she runs to the computer and clicks through a hypertext-based learning program—singing songs, taking actions, answering questions, being corrected, and learning as fast as she can. She is five years old. First grade students are already familiar with these modes of learning—and expect to use them.

To meet these students' learning styles teachers are using PowerPoint and other software in presentations. Media and hypertext links are available to students of all ages 24 hours a day. At United Theological Seminary in Dayton, a CD-ROM program explains the use of "Lord" in the translation of Hebrew words. Scott Cormode maintains a site about a fictional congregation named Almond Springs, which engages students and pastors in the lively challenges of pastoral ministry (see the article on page 16). Luther Seminary provides an interactive tutorial for entering students so they can arrive on campus with the knowledge of the Bible presupposed in graduate courses (www.bibletutor.com).

Teachers and students communicate instantly on area networks and over the Internet. Classes engage in online discussions and review sessions. Teachers respond to queries regarding interpretations and applications of course materials. Students collaborate between class sessions on listservs and Internet conferences, and engage theologians and pastors in discussion via interactive video conferencing. Software packages like WebCT (http://www.webct.com/) and Blackboard 5 Course Management (http://www.blackboard.com/) enable teachers to integrate diverse resources and teaching strategies into their courses.

Add to these examples the amount of information available at the student's desk and in the classroom, and one begins to understand the changes in the teacher's role. The teacher is no longer the primary repository of information—computers can store, sort, retrieve and display information more quickly and efficiently. Some observers predict that as a result of these new resources, teaching in the U.S. will soon resemble Oxbridge-style tutorials, long used in Britain, more than German university lectures.

As teachers struggle to adjust, so do institutions. New technologies create the possibility of virtual schools without walls, without boundaries. William Bennett is founding a company to provide a virtual curriculum for K-12. The University of

Phoenix offers undergraduate degrees online. Duke University has an international online MBA program. Theological schools are right behind—the Association of Theological Schools is busy developing procedures and standards for accrediting distance education programs.

The pressure to create "virtual seminaries" is enormous:

- Many theological students already reside "at a distance." Residential, full-time students without a job or parish assignment are increasingly rare. Seminaries offer evening classes, weekend modular courses and occasional meetings in smaller cohorts in church basements. Many teachers are already traveling to provide off-campus seminars; enabling teachers to contact students without wasteful travel time seems attractive.

- Schools see the possibility of increasing revenue without having to provide new classrooms, dormitories, faculty positions and other resources.

- Distance education attracts new candidates to the ministry by making it possible for those with jobs and families to complete courses anytime, anywhere.

- Many seminaries are urged by their denominations to provide continuing education and lifelong learning opportunities for clergy. The new technologies and resources provide additional opportunities for this kind of service to alumni and other clergy.

- Theological schools are increasingly "schools for the laity." Roman Catholic schools that previously educated only candidates for the priesthood are now educating laypeople to be pastoral associates and other parish leaders. Protestant seminaries have master's degree programs for laypeople seeking more sophisticated and rigorous theological education. The new technologies provide new ways for theological faculties to become "doctors of the church."

- New information technologies mark a new stage of democratization. We can replace the powerful image of Abraham Lincoln reading a book by fireplace

light with the picture of a single, working mother sitting at a computer in the local public library. She's studying at one of our best theological schools via Internet.

- Theological schools can help make theological resources and education available to churches. The release of materials into the public domain marks the beginning of a new and wonderful ecumenicity.

Despite these reasonable inducements, schools entering this uncharted territory face some pitfalls. New technology is very expensive, so financially strapped schools must measure the risk of investing. In a climate of rapid change, it is difficult to project costs. As one consultant advised: "The church's schools cannot afford to keep up with the latest technology like that used by MTV, so it will always appear a bit stodgy." Efficient use of second-tier, tested technology seems prudent. A constant danger is that schools will train faculty and excite students regarding a certain kind of technology, only to discover that the school cannot afford the resources to sustain the work.

The greatest costs in education come from bringing people face-to-face and paying faculty salaries. Some schools are attempting to cut this cost by replacing full-time faculty with adjunct professors. But a combination of canned or wired programs and dispersed part-time adjuncts can weaken or even decimate the ranks of theological faculties.

To use the new technologies for teaching and learning, faculty members must have the basic knowledge—which adds another task to their busy schedules. Schools must realize that some other priority or time commitment will have to give way for this new learning to take place. What will it be?

The search for new markets at a distance, while enticing, may be misguided. One dean was enthusiastic because his midwestern school could suddenly reach a market stretching from the Mississippi River to the West Coast. He saw the area as an untapped market, since the denomination had no school in the region. But his "discovered" market can now be reached by any theological school in the world as well as his. Also, in paying attention to a new market a school can become alienated from its traditional constituency.

Distance education changes the character of interpersonal relations between students and with faculty in ways that may be troubling. Theological schools are relatively homogeneous, but dispersed smaller cohorts tend to be even more homogeneous, thereby reducing the operative diversity in theological education. Of course, the personal isolation of a student in front of his or her computer represents homogeneity in the extreme. Meanwhile, many schools want to emphasize close interpersonal relationships with faculty mentors and student peers as part of formation for ministry. It is difficult enough to find time for these relationships on a full-time, residential campus. How will students do this from a distance?

Some theological schools are making significant investments in new information technology. Lilly Endowment Inc. recently awarded 72 theological schools a total of $25 million for information technology. Faculty and students need adequate computers and software. Schools also need "local area networks (LANs) to link classrooms, offices, dormitories, libraries, media centers and, in some cases, faculty homes. Schools must provide connections to the Internet through T-1 connections (fast and expensive) or telephone modems (less expensive but frustratingly slow). Schools are retrofitting classrooms with computers, computer jacks, digital projectors for computer generated images, white boards and scanners that digitize images and notes, and interactive teleconferencing facilities that permit individuals and groups to engage in discussion from distant locations.

To make it all work, schools need technicians and computer instructors—people who are in demand and highly paid in the secular world. The Minnesota Consortium of Theological Schools pooled its resources to hire one instructional technologist who works like a circuit rider, visiting each school one day a week.

Effective use of new technologies demands a a steep learning curve in both pedagogy and technology. Schools create "white elephants" if they don't teach faculty and students effective use of the new technologies and resources. Wise deans spend as much on training as they do on hardware, and they don't let the hardware get "out in front of" the training.

A theological school must first tend to the pedagogical and theological challenges and potentials. Once it is certain of its mission and confident of the commitments and abilities of its faculty and students, it can shape the technology to its purposes, rather than being distracted or even derailed by the technology.