□ EDITOR'S FOCUS

JUMP ON THE TECHNOLOGY BAND-WAGON BUT TAILOR TECHNOLOGY TO YOUR PEDAGOGY

When it comes to jumping on the technology bandwagon, you and I as foreign language teachers suffer the same plight as the mosquito who jumped into a nudist camp, surveyed the cornucopia of plenty, and declared, "Gee, I don't know *where* to begin!"

Unlike numerous bandwagons of the past those social and cultural mass movements that come and go in American culture—the current technology bandwagon ushered in an unprecedented age in the post-industrial world, namely the Age of Information.

In the Age of Information, life and learning are taking place electronically, and more of what we know, store, and recall comes to us from electronic sources. As a result, depending upon our location and inclination, we, as foreign language professionals, have at our disposal a cornucopia of "hand-me-down" technologies to help us make the teaching and learning of languages effective.

Originally developed for commercial and consumer markets, the existing and emerging information technologies are being aggressively marketed by vendors who would have us believe that technology is the means whereby we can provide our students with the next best thing to first-hand, direct experience with foreign cultures; we are being told that by jumping on the technology bandwagon we could—if only we wanted to—make the learning of languages and cultures as real as it can be outside the target language countries.

Perhaps, we have good reason for not wanting to change our traditional, conventional methods of teaching in order to jump on the technology bandwagon. After all, we have inserted a film here, a video there, and a computer program wherever else, and for the most part, even *that* use of technology has been more trouble than it's worth.

In a sense, we cannot really be blamed for not wanting to change our traditional methods of teaching. We do, after all, have a vested interest in such methods; we began learning them at the age of five from the first teacher who taught us. What is wrong with teaching the way we were taught? Who among us doesn't suspect that unlearning may be difficult, and learning new methods and approaches is just something else in addition to everything else?

Who can blame us for not wanting to suffer the equivalent of technological rape by being forced against our will to use technology? Who among us rushes enthusiastically and willingly into rethinking and re-doing what we have always done?

Even those of us who embrace the idea of using technology, find ourselves all too often bogged down with the daily chores of class management. Where is the time and who is going to reward us for using technology in our pedagogy? How many of us are being rewarded for integrating technology into our pedagogy as opposed to being rewarded for publication in prestigious journals?

Regardless of our personal inclinations and whether we like it or not, the technology bandwagon is rolling around the globe, and those on it are creating a time when the world will be so hooked into technology at home, at school, and at work that anyone unwilling or unable to jump on *this* bandwagon will be victimized or held hostage by it.

Is the Department of Education justified in pointing its collective finger at us? Are we holding students hostage by offering them schooling based, by and large, on print media, when 98% of them come to us already addicted to electronic learning thanks to thousands of hours of television viewing?

Is Albert Shanker of the American Federation of Teachers justified in his assessment? Are we victimizing our students by offering them traditional teaching and learning methods, when 80% of them cannot be reached by nor do they respond to such methods?

Is the giant American corporate enterprise filling a void? Has the failure of our colleges and universities to remain current with the changing learning needs of people given it carte blanche to establish a rapidly growing "shadow educational system" in which hundreds of major corporations are now granting bachelors, masters, and doctorates?

If these events are not tell-tale signs of higher education's and our impending obsolescence, what are they?

Given the current state of affairs, it no longer seems to be a question of *if* we jump on the technology bandwagon, but rather *when* and *how*.

As to *when* we should jump on the technology bandwagon, our enthusiastic colleagues suffering from "techno-lust" and those pushy hardware/software vendors would undoubtedly chide us for not having jumped yesterday. As to *how* we should jump on the technology bandwagon, permit me to suggest that we do it by tailoring technology to our pedagogy.

Tailoring technology to pedagogy results in effective teaching and learning provided there is 1) clear understanding of the rationale for such tailoring, and 2) careful integration of appropriate technologies into the teaching and learning processes.

We may have no choice but to jump on the technology bandwagon, but we do have a choice in whether we tailor technology to solve our pedagogical problems or let technology—or lack of it—tailor our pedagogy.

Rationale for Tailoring Technology to Pedagogy

The rationale for tailoring technology to

pedagogy is at once obvious and unfortunate. Because the technologies available to us in education are "hand-me-downs" from the commercial and consumer markets, that is, originally designed for entertainment and information purposes, obviously some tailoring or adaptation is necessary if they are to be used in pedagogical applications for instructional purposes.

Those of us who use technology, unfortunately, all too often find that the off-the-shelf courseware—the program or materials designed to make the hardware work—in terms of content and treatment is inappropriate for our pedagogy. All too often, courseware content and treatment are determined by factors relating to the technology and profits—such as memory capacity and what the technology can do—rather than by a careful analysis of the subject being taught, learning objectives to be achieved, and learner characteristics and needs.

For example, I recently previewed an a-v program on the non-verbal aspects of French language communication. Not only was the topic presented in poorly related sequences with vital information missing, but the overall viewpoint was extremely narrow. The producers of the program were completely oblivious to student needs when they edited together old film footage of poor quality, transferred it to videotape, and rushed it into the marketplace in order to exploit the current interest in the use of video as instructional tool. Like many of the writers of computer software, video producers, too, are often individuals without any training in education; many have no classroom experience at all. And, although they devise elegant computer programs and visually compelling videotapes, as teaching materials, these often turn out to be a dismal waste of time.

This is not to say that *all* off-the-shelf technology-software packages are inappropriate for our pedagogy. With only rare exceptions, however, such technology-courseware packages will have to be tailored before being carefully integrated into the teaching and learning processes.

How we tailor the technology-courseware packages and how we carefully integrate them into teaching and learning depend on how well we understand and practice what pedagogy is all about.

Integration of Appropriately Tailored Technologies

Pedagogy can be defined as the art of sensitively and innovatively controlling conditions of learning that can be controlled, acceptingunderstanding-working with those conditions of learning that cannot be controlled, and recognizing that as practitioners of pedagogy we must engage in a continuing inquiry into our own patterns of beliefs and actions, for it is our beliefs that determine how we practice the art of pedagogy in our classrooms. If you and I as foreign language teachers do not believe that technology can help us control conditions of learning amenable to change and cope with those conditions that cannot be changed, then we will neither tailor technology to our pedagogy nor use it in our classrooms. If, for the sake of this editorial, we all believe in tailoring and using technology, how do we begin?

We begin by analyzing the important elements in any learning situation, namely characteristics and needs of students, the learning tasks or objectives, the instructional methods, the practical restraints of the learning environment, the availability of technology-courseware packages, and the teacher.

There is abundant research evidence (the work of Entwistle and Hounsell, Snow, Raaheim and Wankowski to mention a few) that students in our classes differ markedly in personality, temperament, attitudes, motivations, and life experiences they bring to the classroom, and that effective pedagogy in higher education takes into account such differences. Although student characteristics and the experiences they bring to the classroom, for the most part, cannot be changed, they do influence the instructional methods we use and the technologies that can help us apply such methods more effectively.

For example, undoubtedly, you, too, have experienced classes like one of my Italian classes, populated by students whom psychologists would characterize as having high affiliation needs. As we know, such students not only want but they need to be part of a group; their need for social interaction stimulates and maintains their motivation to learn the target language. This predominant and overriding student characteristic influences and limits both my choice of instructional methods and how I tailor the technologies that can help such students learn effectively.

Students who learn best in groups will not respond as well, or at all, to one-directional instructional methods like the lecture or onedirectional technologies like pre-packaged audio, video, or computer programs which they are told to go use on their own, somewhere in language learning laboratories like the ones I administer at the University of Georgia.

With students who have high affiliation needs, it is more effective for me as teacher to use instructional methods that encourage group discussion and sharing of personal experience and to tailor audio, video, and computer technologies by letting such students, for example, use these technology as a group, on their own, to create their own audio exercises, their own video productions, and their own computer programs. Such students **learn by doing as a group.** Whether I like it or not, with such students my pedagogy of necessity must be that of guide and coach, and the technologies must be tailored to be part of group activities.

One of my French classes, on the other hand, is composed of students who are self-directed, independent, discovery learning types, who are motivated, in part, by the fact that they can come to the language laboratory and work alone, independently with the one-directional, prepackaged audio, video, and computer programs. An instructional method that works well with such self-directed learners is the amplified lecture. In it, demonstrations and explanations of concepts are amplified by using carefully chosen and integrated technologies. For example, even an out-dated, poorly sequenced, narrow-inscope videotape on French non-verbal communication dynamics can be effectively tailored to be part of a contrast/comparison module with a much better-produced, up-to-date version in order to demonstrate both the timelessness and the evolution of non-verbal communication in French culture.

Before you and I can make any decisions about tailoring technology to our pedagogy, we need to

be aware of the practical constraints of our learning environment and the availability of technologies in our particular setting.

Most classrooms at many universities were built with the lecture method in mind: teacher up front and 40 chairs bolted to the floor. Not all schools have language learning laboratories equipped with state-of-the-art technology and qualified educators with technical expertise to help us tailor technology to our pedagogy. Very few schools value and reward the tailoring and integrating of technology into pedagogy as they do publishing in prestigious journals.

All of which brings us to the most important element in any learning situation, namely you and me as teachers. If we, as foreign language teachers, believe that we are engaged in the most important work in the world, that is, the care and feeding of the mind, then we will control those conditions of learning that can be controlled, work with those that cannot, and use any and all technologies available to us to make it impossible for learning not to occur.

It means more work for us, not less; it means few professional or monetary rewards, if any; but, it also means that we are engaged in what Chancellor Grady Bogue of Louisiana State University at Shreveport calls "precious work."

"Classrooms, laboratories, playing fields, and rehearsal halls," he stated in a recent speech, "these are sites of precious work. We need to celebrate the nobility of teaching as the most completely constructive force in our nation. Teaching is a journey of the heart, an opportunity to touch a life forever. It is an unselfish investment in the dignity and potential of one's students...Rightly done, teaching is precious work. It is, however, the one human endeavor most damaging in its consequences when done without care or competence. To carry a student in harm's way because of either ignorance or arrogance-because we do not know or do not care-is an act far worse than bungled surgery. Our mistakes will not bleed. Instead, they carry hidden scars whose mean and tragic consequences may not be seen until years have passed and remedy is painful and impossible...the beauty and power of a loving teacher-that is the greatest good in society."

Let's jump on the technology bandwagon, but let us not allow technology to tailor our precious work; instead, let our precious work determine if, when, and how we will use technology as an investment in the dignity and potential of our students.

Suzanne E. Lindenau Editor-in-Chief