Section I:

Technology & the Teacher
Redefining Roles
Technology and the Teacher - Redefining Roles

Eight Major Trends of Technologies in Education

1. A shift from whole class to small group instruction.
2. A shift from lecture and recitation to coaching.
3. A shift from working with better students to working with weaker students.
4. A shift toward more engaged students.
5. A shift from assessment based on test performance to assessment based on products, progress, and effort.
6. A shift from competitive to a cooperative social structure.
7. A shift from students all learning the same things to learning different things.
8. A shift from the primacy of verbal thinking to the integration of visual and verbal thinking.


Introduction

The ability to communicate with other beings is central to human nature. Throughout the ages, humans have been able to share information, interests, needs, and values over time and space and thus have influenced others by their actions.
and their words. In recent years existing and emerging technologies have brought the world closer and have erased many of the existing borders.

The boundaries of time and space are nowadays instantly crossed as we find ourselves directly interacting with others at home and abroad. Such technology as televisions, telephones, and computers have expanded everyone’s ability to process large quantities of information and to communicate with one another more effectively.

**Goal of Foreign Languages**

Similarly, the main goal of the study of foreign languages is to develop proficiency. Proficiency is defined as the ability to communicate orally and in writing.

**Relationship of Communication and Culture**

However, communication in a foreign language is not limited to the sole transmission of words. When communicating in a foreign language, information, ideas, values, beliefs, and new insights are gained in ways which cannot be accessed solely in English. Consequently, the knowledge of the language is essential not only to convey a message but also to understand the culture. Indeed, the two are truly inseparable; “culture and language are complementary components of communication” (Osuna and Meskill, p. 72).

Knowledge of the culture (independent from knowledge of the language) may yield some invaluable insights into the way people live, think, and act but this knowledge does not provide the interaction needed to truly understand the people. Therefore, knowing “what to say, when to say it, how to say it, and to whom to say it” is the second major goal of foreign language learning.

*Communication is essential for adjusting to the dynamic changes in our world today, yet you can’t communicate if you can’t speak the language and understand the culture.*

(Harry Barnes, Former US Ambassador)
This interdependence is reflected in the National Standards for Foreign Language Learning - Preparing for the 21st Century, which states that:

*Because language is the primary vehicle for expressing cultural perspectives and participating in social practices, the study of a language provides opportunities for students to develop insights in a culture that are available in no other way.*

The Standards for Foreign Language Learning, p. 43

**Communication, Culture, and Technology**

Thus, the focuses of communication and culture in the foreign language program are enhanced by modern technologies. Foreign language teachers can incorporate technology as a means to develop communication skills and to expand the students’ learning experiences beyond the confines of the classroom (Technology in the Curriculum - Foreign Languages. California State Department of Education, p. 8).

The challenge for foreign language teachers is to create an environment which involves students in authentic, culturally-appropriate, and meaningful experiences designed to stimulate the development of proficiency. In doing so, technology serves as a learning and teaching tool which supports and enhances the curriculum.

**Technology for the Foreign Language Class**

Traditionally, foreign language teachers have resorted to a variety of technologies such as audio and video tapes, language labs, radio and television broadcasts, films, slides, filmstrips, and overhead materials to facilitate learning in their classrooms. More recent technologies are now available to enhance foreign language instruction. These technologies include distance learning, satellite broadcasts, computers, the Internet, CD-ROMS, video-conferencing through the information highway and CU SeeMe. Students can organize multimedia presentations which incorporate text, graphics, sound, and video; they can interact with laserdiscs; they can communicate through electronic mail; they can create databases and spreadsheets; and they can access desktop publishing to generate graphics and text.
Such technologies open the classroom to the outside world, provide unlimited access to a variety of resources, and allow students to communicate orally and in writing with other speakers of the language.

Challenges for Educators
These same technologies often present educators with a new set of challenges as they examine their role and the role of technology within their classroom. In their article “How Can Technology Be Used to Promote Language Learning?” Feyten and Nutta list two of the issues facing educators today:

- Psychological barriers
- Management, availability, finances, and space

Psychological Barriers
Psychological barriers are defined as “changing deep-rooted pedagogical beliefs shared by practitioners, dispelling educators’ fear of losing authority and control and accommodating the rapid pace of change in computer development” (Claeys & Feyten, 1997). Teachers are often resistant to experience new technologies. They feel that they need extensive training and that their students are more technologically adept than they are. (The adoption and requirement of computer competencies for NC teachers are expected to ease their hesitancy and to provide some of the necessary training.)

Furthermore, teachers question their role in a technology-oriented classroom, and they are not always comfortable with switching from teacher-driven classes to student-driven classes where teachers serve as facilitators and resources.

Teachers As Facilitators
As facilitators, teachers match the power of technology with the needs of the learners to ensure that technology is used to support the program goals and not the other way around. In doing so, teachers select the specific technology which best addresses the selected purpose. Therefore, teachers need to be aware of “how technologies work, what purpose they serve, and how they can best be used” (Furstenberg, p 22).
In addition, they must also “learn to use these materials appropriately” (Furstenberg, p. 22). Is it better to use multimedia to assess students’ understanding through fill-in-the-blank statements or would a video be better suited for this activity? Furstenberg recommends that all these issues be addressed prior to incorporating technology in the foreign language class.

Issues to Consider
Foreign language teachers often find that all schools and classrooms are not equipped in the same manner. Issues of availability, space, adaptability, and adequate funding have to be addressed regularly.

Availability and Space
Some schools may have state-of-the-art technology while others are struggling to furnish the bare necessities. Teachers at the elementary level hardly ever have their own classrooms. They “float” from one room to another to provide instruction for 20 to 30 minutes, two or three times a week.

Adaptability
In addition to the constraints of time and availability, teachers are expected to continue using hardware and software even after these technologies have become outdated (Eyler, 1997). The teachers’ creativity determines how they can adapt their antiquated equipment to meet their students’ needs as well as their own needs.

Need and Funding
Finally, while local and school plans largely outline the technology expansion, provisions are not automatically inclusive of foreign language needs. Therefore, it is necessary for language teachers to inform continuously and persistently others of their needs and to justify these needs for more advanced technologies.

The Role of Technology
Technology in the Curriculum - Foreign Languages, published by the California Department of Education, outlines the following potential roles for technology in the foreign language class:
Instructor
As Instructor - Technology can be used to help students develop proficiency in communication and master necessary grammatical structures, vocabulary items, and other skill components when necessary. It may be used to present information or to guide students through communicative practice. In foreign language learning it is often necessary to present the look and essence of people, places and things common to an entirely new culture. These aspects of a new culture cannot be easily presented through demonstrations done by the unaided teacher. Technology can often present the aspects of the culture quickly and efficiently and with a lasting impact on the student. (p. 16)

Learning Partner
As Learning Partner - Technology can provide cues and other for interaction. It becomes a communicative partner for the student. Stimuli might be printed messages, questions, or commands on a computer. Graphic or pictorial cues may be presented on a computer or video recordings. Various devices, interfaced with one another, might present the student with voice messages, questions, commands, or rejoinders in combination audio, video, or graphic formats. The students can initiate or respond to language, and the device can comment or answer back. A well-designed electronic learning partner has the helpful qualities of being indefatigable, non-critical, and non-threatening. (p.16)

Facilitator
As Facilitator - Technology can serve mainly as a means by which students can speak or write. The students may use a word processor to create a story, essay, or speech in the foreign language. Classmates may use a VCR to create a drama or to record a discussion in the foreign language. They may exchange self-recorded audiocassettes or video-cassettes with other students and native speakers. Students may use telecommunication devices to confer and to discuss with peers in other countries. When acting as a facilitator, technology serves as a means of transmission for student-initiated messages and interaction. (p.16)

Data Source
Data Source - Technology can provide students and teachers access to information, written, pictorial, or auditory, which can serve as raw material for communicative exchanges or cultural experiences. (p. 17)
A Shelby City elementary French teacher states that her Internet connection and e-mail exchanges with a counterpart in France have helped her grow personally and professionally. These exchanges have provided her with many insights into the French culture. In addition, through these communications she has gained an “instant” resource to answer her questions pertaining to the French language and culture and she has won a friend with whom she can exchange views on education, children, and family.

Assessor

As Assessor - Technology can serve to evaluate foreign language performance. Electronic devices can provide visual and oral material for which students are expected to respond, demonstrating their ability to comprehend or produce language. Technology can evaluate the accuracy of certain kinds of student responses. It can also serve to record language production and interactions for later evaluation by the teacher. (p. 17)

Technology and Special Needs Students

Technology is an especially effective medium to use with special needs students because it incorporates more than one modality for learning. Interactive computer software present a multisensory format in which the students hear (auditory modality), see a screen (visual modality), and use the keyboard (kinesthetic modality) to type in responses.

Is Technology the Answer?

Whether technology is used as an instructor, a learning partner, a facilitator, a data source, or an assessor, it cannot take the place of the instructor, the textbook, and the pencil. Technology does not reduce class size nor does it address the needs of all students all of time. However, in a program governed by sound pedagogy and clearly-identified goals within a well-developed curriculum, technology promotes meaningful interactions, makes the language available to all students, and empowers students and teachers alike.