ABSTRACT
               After an examination of the status of the use of
media in the foreign language curriculum, the potential impact of
video and computer-assisted language learning (CALL) is analyzed, and
their advantages and disadvantages are charted. The role of the
American Council for the Teaching of Foreign Languages (ACTFL)
Proficiency Guidelines with respect to video and CALL is also
discussed, and avenues are proposed for using video and CALL
appropriately in the classroom. A brief look is taken at upcoming
technology. The advantages brought about by the new media are more
than offset by the curricular problems they create. The positive
trends that will counteract potential problems include these: that
(1) the ACTFL Proficiency Guidelines will unify the curriculum; (2)
the media will take up their respective niches in the curriculum and
teachers will rely on them for specific tasks; (3) publishers will
continue to provide methodological information and expand it to
include curricular information; and (4) new technologies will add
more functioning power to video and CALL, eventually merging the two
into a powerful teaching tool. (CB)

2

# Integrating Video and CALL in the Curriculum: The Role of the ACTFL Guidelines

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## Introduction

The first part of this chapter examines the present state of the use of media in the foreign language curriculum. The potential impact of video and CALL is analyzed, and their advantages and disadvantages are charted. In the second part, the role of the *ACTFL Proficiency Guidelines* with respect to video and CALL is discussed. In the third section, entitled "Possibilities and Feasibilities," avenues are proposed for using video and CALL appropriately in the classroom. The chapter ends with a brief look at upcoming technology.

Beginning-level foreign language materials have changed considerably in the last few years. Gone are the days when a whole curriculum could be built on a text, a workbook, and an optional set of audiotapes. First-year courses have become a formidable, complex array of supporting materials and components designed to help teachers teach and students learn. Course content has changed as well; traditional orientations have given way to more practical or pragmatic approaches. But while curricular changes could have been foreseen, the explosion in the number of ancillaries composing first-year courses has come as a surprise to many.

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2

To illustrate the magnitude of the change, one only needs to examine the descriptions of new first-year language programs that publishers send to the profession. The following is a list of materials compiled from various brochures. It represents what publishers today consider adequate for beginning language courses.

- *The textbook.* Still the mainstay of publishers, it has evolved as well. It is now an imposing volume with a variety of activities that teach grammar, culture, reading, writing, listening, and phonetics.
- *The instructor's annotated edition.* The IAE offers variations on the text exercises, additional explanations, and cultural information.
- *The teacher's guide.* In addition to providing general pedagogical information about the approach used in the text, the teacher's guide often gives useful hints for preparing tests and lesson plans.
- *The workbook.* The modern workbook is divided into two distinct sections. One contains activities linked to the audiotape program, while a second directs writing activities.
- *The audiotape program.* The tape program has grown more elaborate and now usually includes songs. It is the principal means of providing the student additional listening comprehension activities.
- *The test bank.* Often quite elaborate, the test bank provides the teacher with several versions of quizzes and exams. Modern test banks frequently include items for oral interviews.
- *The tape script and answer key.* More and more publishers see the value in publishing a tape script for teachers to use as a reference to avoid having to listen to the tapes in preparing lesson plans. The answer key, which may be published separately, provides answers to textbook or workbook exercises, or both. Teachers routinely have given students access to it to self-check workbook assignments.
- *The reader.* Many first-year packages now include a reader. Reading selections are chosen to be timely, cultural, and interesting.
- *The CALL program.* Growing rapidly in popularity, the CALL (Computer Assisted Language Learning) program has been implemented in two distinct program types: "specific" and "generic." The "specific" coordinates activities closely with the text; the "generic" makes available CALL activities of a general nature.
- *The video program.* The latest entry into the ancillary market is one or more videotapes about culture. The content of the videotapes is generally "generic," being adapted from foreign language broadcasts.
- *The video guide.* A new publication, its purpose is to suggest activities based on the videotapes.
- *The teacher's kit.* The teacher's kit is a collection of transparencies, maps, slides, and realia designed to make the teacher's presentations more lively.
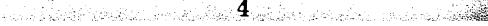
## How Did We Get Here?

The beginning-level language program has become a very complex set of interrelated materials. Some say it has become unwieldy, others claim that teachers have relinquished control and that publishers are providing too many superfluous materials. There are obviously two sides to the story. Teachers are beginning to realize that there is a multiplicity of ways to present foreign language materials. They request, along with the traditional textbooks, all kinds of helpful adjuncts to enliven class time—overhead transparencies, slides, audiotapes and videotapes, and diskettes for computer-assisted instruction whose motivation is clearly to make the materials more interesting, more relevant, and more "alive" to the students. Teachers also request supplements to make teaching easier and to save time—test banks, pedagogical guides, and answer keys are now essential elements of the foreign language course.

Publishers are motivated differently. They hear teachers' requests and, after some time for market research, usually provide what is requested. While most of the supplementary materials are expensive to produce, publishers make them available because, they learn from market research, there will be a net gain in sales of books—their principal products—and profit. Some publishers have even provided some ancillary materials free as a strategy to spur sales of texts. For example, one publisher offers complimentary videocassettes if a certain number of textbooks is ordered by an institution in a given year. Another, on the same basis, provides a teacher's kit that includes transparencies, maps, realia, and helpful teaching hints.

There are therefore two divergent viewpoints: instructors want more and more materials to make teaching easier and more interesting, and publishers want to sell more books. The result is a curriculum overendowed with materials lacking an organizing principle—a sort of "bloated curriculitis." While the disease is rarely fatal, one runs the risk of complications, one of the more dangerous of which is the urge to take a first-year, two-semester course and spread it across a three- or even four-semester sequence. The rationale is generally given as follows: (a) "There is just too much material to cover in one year;" (b) "Since it would be a shame to take out any of the material, we will cover it all," but (c) "to do it justice, we will cover it thoroughly over more time." After all, the reasoning goes, it is better to do things more thoroughly than more lightly. The problem with all this is that there are perfectly good pedagogical reasons *not* to stretch out a one-year course, but to finish it in one year. For those classes meeting three times a week, a syllabus with more modest goals should be adopted. First-year and second-year courses ought to have different goals, a different organization, and perhaps even entirely different approaches.

4

## A First Proposed Solution

The first solution to the dilemma is obvious, and has been proposed by several writers: teachers must make choices, reorder text material, and adapt and supplement the materials to fit a predetermined, well-defined curriculum. (Guntermann and Phillips, 7; Flynn, 5; Muyskens, 16; Bragger, 4; Ariew, 2; Valdman, 21). For instance, Bragger states that the lesson plan "may mean a certain reordering of the sequence of presentation in the textbook itself" (4, p. 94). Muyskens is even more specific: "Although the task of textbook adaptation and supplementation is time-consuming, prospective teachers can realize that their job is 'to provide what the textbook fails to provide.' If the text does not meet program goals entirely, teachers need to adapt it themselves" (17, p. 191). In addition, Muyskens suggests that "adapting and supplementing texts should . . . play a role in the training of preservice teachers and TAs" (p. 191).

The clamor for activist, involved teachers, while understandable, is not very realistic, given the time constraints in the average teacher's schedule. Generally speaking, the large number of classes to be taught in the secondary school environment, the research requirements in the college and university environments, and graduate courses that Teaching Assistants (TAs) must take all preclude a vigorous involvement in curricular design. There are many teachers who, by dint of dedication, willpower, or individualism, do in fact shape their own curriculum; others will relegate such onerous tasks to the textbook itself. In short, for many the word "curriculum" is synonymous with "textbook."

Time, or a lack of it, is not the only element in the equation. There is at least one group that is generally not trained to make informed curricular choices: the TAs in the college or university environment. Some are interested and capable of handling curricular design, but most do not have the necessary background, experience, or interest. For them too, the textbook represents the curriculum. And since making choices, reordering, and supplementing the syllabus are troublesome processes, they are generally not undertaken. The TA who would initiate change runs several risks in making independent curricular modifications, for if a particular grammatical or cultural point is ignored in class (or given excessive breadth or depth), that circumstance is likely to show up in departmentally administered exams or quizzes. In short, instead of helping students by focusing on what's important, the TA can hurt them by lowering their exam grades.

Curricular modifications, selection of materials, adaptation, and supplementation are useful and worthwhile tasks, but they tend to be time-consuming and difficult to carry out. They also run counter to teachers' feelings about foreign language study. Most teachers will assume that: (a) One can't get enough of a good thing. Since foreign language learning is a good thing, one should not reduce it in any way. (b) Publishers and textbook authors know best. Since they know best, there must be a good

5

reason for the wealth of material, and therefore teachers should cover it all.

### A Second Proposed Solution

Beginning language courses should be designed in a less fragmented, more integrated manner. Instead of continually *adding* ancillaries, the various media should *replace* portions of the course, based on the capabilities of the media. Some movement in this direction is becoming apparent as some publishers consider "short courses" that reduce the size or scope of the textbook while retaining most of the ancillary media. The movement is proceeding cautiously, because publishers want to provide a full measure of materials. The direction is the right one, however, because for the first time media are not considered appendices to the curriculum; they have assumed more than a minor role in the teaching environment.

### The Role of the Media

What role do the media play and how can they be used to best advantage? It is foolish to assume that the mere use of videotapes in the French or Spanish class will solve all pedagogical problems. More likely, using videotapes will create new problems (in equipment selection and maintenance, for example), solve some (provide motivation and opportunities for listening to real language), and do nothing for other aspects of teaching (will not address speaking skills specifically, nor provide for individual attention, for example).

Relying on modern media to support instruction requires knowing, first, precisely what they can and cannot do in foreign language instruction. Their capabilities and potentials must be analyzed and used appropriately instead of or along with the traditional audiotapes, books, blackboard, etc. All media must be assumed to form an integral part of a curriculum and to carry a primary instructional load according to their potential to explain, illustrate, and teach. Media should not be used in a "reinforcing," "additional," "adjunct," or "remedial" way, but as mainstream teaching tools.

Holmes (10, p. 104) has addressed the need to demonstrate to teachers and students the primary rather than the supplemental role media can play, a circumstance underscored by ascribing to CALL a limited though compulsory place in the curriculum.

What of the other technologies and other media on the horizon, such as video, interactive video, CALL with artificial intelligence and the compact-disk storage medium? If CALL is to be a model for their development, they will also run the risk of being relegated to the status of

ancillaries, or "frills" as Holmes calls them. If their value in teaching foreign languages is to be recognized, then classroom activities will need to be reorganized to make room for them.

## What Do the New Media Bring to the Class?

A first reaction to the capabilities of well-designed CALL materials is that they can do everything: interactions are lively; there is sound, color, movement; help is available when help is needed; there is instant correction. The list goes on. Similarly, at first encounter, one might think that video can solve all teaching problems. Well-chosen video programs from abroad are interesting, realistic and natural, motivating and exciting. Both CALL and video offer certain capabilities that are otherwise either difficult or impossible to introduce into the average classroom. The second reaction is to make plans to add the materials to the curriculum. The third is to wonder to what extent the materials might someday replace the teacher. All three reactions, while understandable, are not well considered.

It is true that both CALL and video add exciting dimensions to learning languages. It is not true, however, that they can support by themselves even a significant portion of the instructional load. Both have very definite limitations in their capacity to instruct students. For instance, oral skills cannot be addressed adequately with CALL, nor can written skills be targeted with video.

To add new elements to language courses, rather than to replace existing elements, leads to inflated curricula and all attendant problems.

Finally, the issue of teacher obsolescence is ludicrous, unless mechanical clones of humans with native linguistic abilities are made available in the near future. The teacher cannot be replaced by a textbook; similarly, teaching tools with limited capabilities just cannot replace a teacher.

Teachers' fears of obsolescence do have a basis in fact. The media do provide attractive and effective capabilities that, superficially at least, raise fears in some people's minds. Which teacher would be foolish enough to compete in attractiveness of presentation and realism with any competent video material? The video would win hands down. What classroom game could compete with the best of CALL games? The adrenaline-charged CALL activity would also win easily. The facts are clearly reconcilable. Affectively, both video and CALL are very powerful, and within the bounds of their limitations they can present some materials more effectively than teachers. On the other hand, equally important to recognize is that video and CALL alone are quite limited in their abilities to teach foreign languages.

7

## Pluses and Minuses

What, more precisely, can video and CALL accomplish? The paragraphs below tally the pluses and minuses. Unfortunately, any inventory that can be established at this time will be incomplete since the widespread use of the two media is so recent that their potential for teaching has not been clearly established nor well defined. The process of discovering the capabilities of video and CALL with respect to foreign language teaching is an ongoing one; however, there are some things that can be stated categorically.

## Video Advantages

Realism Essentially a photographic medium, video brings people and places to foreign language classrooms. Paris, Madrid, or Bonn can be shown right in the classroom. Few activities have as much visual impact or realism as video screenings.

Motion The realism is enhanced even more because of motion; scenes, actions, and processes can be illustrated with video.

Color Although not of the highest fidelity, video color is quite believable and motivational.

Flexibility Video can be used in small groups or for individual work. Most viewing equipment is now relatively inexpensive and easily available.

## Video Disadvantages

Linear Unless coupled with a computer, video is mainly a linear medium. One normally starts it and lets it go on. It is difficult to repeat segments of video.

No interactivity Video is a one-way medium. Unless the computer is brought to bear, video by itself is not interactive; students cannot have any "input."

No abstractions Abstract subjects take a great deal of time to explain on video. The medium's strengths lie in showing things with images, not in arguing complex ideas.

Low resolution Although studio-quality vid— can approach photographic clarity, most videocassette material is of L. ..a lower resolution. Small details are difficult to detect. Very little text may be used on video materials.

High production costs Most teachers prefer to use materials prepared by others rather than videotape their own because of the high production costs. Of course, "home movie" quality is relatively inexpensive to produce, but its use in the foreign language classroom is of dubious value (Bork, 3, p. 179).

8

## CALL Advantages

| | |
|---|---|
| Interactivity | Students can control the path of the material, and at the same time the program can respond by providing appropriate material to students. |
| Answer judging | Answer judging is a corollary of interactive processing; it describes the computer's ability to judge a student's input and either mark it up or give specific diagnostics on its accuracy. The computer can judge the correctness of word input, selections (as in multiple choice items), or location (the student may be asked to point to a location on the screen). |
| Graphics and sounds | Although not of the highest resolution or quality, both graphics in color and sounds (sound effects and melodies) are available in present-day CALL hardware. Both add an appreciable motivational factor to materials. In addition, emphases, boxes, and different font sizes and types are available. |
| Timing | The computer is capable of presenting textual and graphic material as a function of time. The display rate of text may be varied on CALL and also the text may be "paused" and revealed in segments. Similarly, graphics may be revealed slowly or at the student's request. None of these features is available in texts. |
| Animation | Low-grade animation (a corollary of timing text and graphics) is available and can be used quite effectively in CALL presentations to show for example processes, verb paradigms, and word order. |
| Control of other media | The computer can control other media—at the present time videodisc, videocassette players, audiodisc, and audiocassette players—thus allowing for very complex CALL presentations. |

## CALL Disadvantages

| | |
|---|---|
| No voice | Although the computer can control other media, it does not presently have an acceptable voice synthesis capability for teaching foreign languages. CALL software can only be designed with text and graphics—no voice. The computer does not understand human voices at this time either. No foreign language CALL software can include audio input. |
| Low realism/low resolution | Even the best of computer graphics on commonly available microcomputers cannot approach the detail of a photograph. It is also hard to display more than a paragraph or two on the screen. |
| No "free expression" | CALL answer judging presently can handle a word, a phrase, and perhaps a sentence. Very long or very complex sentences, especially if they are "free form," are impossible to judge given the present limitations of hardware and software. |
| High implementation costs | Because it is a personal medium, CALL requires that several computers be made available (or several hundred depending on the size of the institution). There are benefits however to having two or three students use a microcomputer together; they tend to teach and help each other. |

9

| High production costs | Production costs for CALL are very high. It is not unusual to encounter 400 hours of development for 1 hour of instruction. Teacher-produced CALL, like its video counterpart, is of dubious value. |
|---|---|

## Summary of Capabilities

It can be stated quite forcefully at this point that neither CALL nor video has the capability to engage students in free-form conversational exchanges. Moreover, video cannot correct a written input; for that matter, video cannot accept any input at all unless it is coupled with a computer. Computers cannot produce very understandable voices (especially in foreign languages); they cannot display images of photographic quality unless coupled with a videodisk. CALL materials can accept student input, but have a great deal of difficulty making "sense" of it when it is longer than a few words. Both media, praised highly as the panacea for all foreign language teaching and learning, are, after all, limited. They are most effective when used intelligently within the scope of a progressive and multidimensional language curriculum.

Having realized that the great advances in "modern technology" merely provide new and somewhat limited tools to the foreign language curriculum, the following very radical tenet may now be proposed: *The whole of the foreign language curriculum consists of tools.* All of the components described at the beginning of this chapter are tools—even the textbooks are tools, even chalkboards, audiotapes, and classrooms, as are chairs, overhead projectors, videodiscs, maps, realia, and so on. Moreover, it would be difficult to organize a foreign language course around the teacher alone. Tools are essential. If CALL and video offer some new capabilities to teaching, they should be welcomed as new options, but their usefulness should be known in detail, according to the tasks the tools should confront.

## Special Affinities

*Video.* Are there any teaching tasks that can especially benefit from the application of the new media? Are there specific skills and media that have an affinity for one another? One thing is sure: neither of the new media addresses speaking. Students could not improve their speaking skills by using video, except indirectly, by having heard foreign language material. Nor does video lend itself to improving writing skills since there is no opportunity for input. Video cannot address reading, since resolution is generally too low to display much textual material. On the other hand, video's forte is in showing action and images along with sound. Video therefore has the strongest potential in teaching listening.

Using video to teach listening skills is quite an effective combination.

10

To view images while listening to a soundtrack is by far more interesting to a student than listening to an audio track alone—there is a semblance of reality, an immediacy and an intimacy that can hardly be matched with any other type of presentation. Fortunately too, listening skills can be practiced in small to medium-sized groups, which is precisely the type of learning situation video affords.

Cultural information can also be presented very effectively via video. In this mode, video's images are used as the primary vehicle of information while the audio track carries the message. The foreign culture can be shown with considerable impact, since it can be portrayed through actions, events, sites, vistas, locales, peoples, and sounds. It is hard to imagine providing a more focused or more realistic presentation than through authentic foreign video.

*CALL.*  CALL, on the other hand, without additional hardware to generate speech, does little for listening skills. Similarly, CALL does not directly affect speaking; there are no opportunities for voice input. While CALL can be very useful to teach writing skills, there is an upper limit to its capabilities: the machine (the software) has trouble dealing with more than a few words of student input at a time (Wyatt, 22, p. 395). However, CALL does provide an opportunity to make a valuable contribution in teaching reading.

Pairing CALL with reading skills has been the subject of a series of articles (Aoki, 1; Holmes, 11; Pederson, 17; Phillips, 18). In another, Pusack (19, p. 416) argues that computer-assisted testing of reading proficiency, compared to other language skills, is promising because computers are very good at the display of text—much better than they are at understanding language—and since reading skills involve discriminations that lend themselves to algorithmic analysis, the harrowing problems of language analysis can be avoided. Therefore, the tremendous memory and analytical powers of the machine are harnessed to the task of determining individual students' reading ability. For reading skills, the power of the computer can be used (1) to display textual and graphic materials, (2) to monitor student progress through the material by keeping track of strengths and weaknesses, (3) to present interactive material at an appropriate level of difficulty.

### An Intermediate Conclusion

At this point, it is possible to make some statements about the two media under scrutiny. When video and CALL are evaluated on the basis of their capabilities, it becomes clear that both media are of limited value in teaching foreign languages; that is, neither can, by itself, carry the burden of teaching all four (or five) skills. It is therefore impossible to conceive of a complete language program based exclusively on either medium. Just as it is difficult to conceive of a complete foreign language curriculum based

11

on audiotapes alone, videotapes will not be sufficient to teach a language. One could conceive of a single-track program, such as a language program for listening comprehension based on videotapes, but a complete language course is probably out of the question. Similarly, CALL, because of its inherent limitations, cannot carry the burden of the whole teaching program no matter the skill sought.

The same statement can be made about foreign language textbooks. Because of the text's inherent limitations (no audio, no action, low realism, no interaction, etc.), it is equally difficult to conceive of a complete foreign language program based on a textbook alone. Taking one step further, by itself a textbook is not a particularly good medium with which to teach foreign languages. The textbook benefits from centuries of development and use and, of course, it does have many excellent characteristics: (1) much information can be presented quickly, (2) graphics, including line art, sketches, and drawings, can be used and combined with text, (3) photographs in black and white or color can be used in presentations, (4) emphases with color, type styles, type sizes, and boxes can be used to point out important language features. All these capabilities, while useful, cannot guarantee the successful transmission of all foreign language skills. Much more is needed.

|  | Video | Call | Textbook |
|---|---|---|---|
| Listening | + | — | — |
| Speaking | — | — | — |
| Reading | —(?) | + | + |
| Writing | — | +(?) | + |

Figure 1. Strengths and Weaknesses of Three Media in Relation to the Four Skills

Since none of the media, including the text, can provide all the components required to learn a second language (See Figure 1), the foreign language course should be structured around various media, taking into account their strengths in presenting or testing specific skills. One should conceive of a curriculum as made up of a large number of ancillaries (including the text), each of which is selected and used according to its capabilities vis à vis the skills being taught. Video should figure prominently when listening skills are targeted, while the text, the workbook, and perhaps a CALL unit should be brought to bear when writing skills are addressed. When reading skills or culture are discussed, the text, video, and CALL could be used as appropriate teaching media. No medium can be identified specifically for speaking skills. At this time, speaking can only be addressed by teachers making use of their experience and the examples, hints, and suggestions pedagogical guides and teachers' editions of textbooks typically provide.

In short, new media cloud the curricular issues. None can be shown to aid or encompass all teaching skills. Teachers are faced therefore with having to pick and choose from among media with various capabilities and limitations. Publishers, to whom teachers generally turn for curricular help, have not made the task easier; they provide more and more material without addressing the problem of how to integrate it into one coherent and workable course. Are we back to square one?

Not quite—there have been advances and there is some cause for optimism.

### Causes for Optimism

Higgs wrote:

> I believe almost any target language data—even something as mundane as learning colors or how to count—can capture and hold students' interest, provided that it is presented in a way that directly involves the students and encourages their active participation in the presentation itself. (9, p. 200)

A first cause for optimism: the new media are likely to make an impact on foreign language teaching because they involve students and ask for their participation in the foreign language material.

A second cause for optimism: new teaching materials will have to address the issue of integration. It is inconceivable to keep adding ancillaries to the curriculum without absorbing media into the domain of textbook presentations. To that end, CALL materials are a logical substitute for some or all of the traditional workbook. Similarly, video presentations will be used to illustrate textbook dialogues and will substitute for some or all of the audiotape program. Readers will soon be published simultaneously in book and in CALL form.

A third cause for optimism, the *ACTFL Proficiency Guidelines* will certainly play a role in shaping the curriculum in the immediate future. The role of the *Guidelines* and how they may help integrate media into the curriculum is the subject of the next section.

### The ACTFL Proficiency Guidelines

It is not within the scope of this chapter to provide a thorough historical narrative on the *Guidelines*. Liskin-Gasparro (13), for one, has accomplished the task admirably. Suffice it to state that the *Guidelines* are a series of descriptions of levels of proficiency for the four skills commonly taught in foreign language courses. According to Liskin-Gasparro, the *Guidelines* "can be used to structure a foreign language program" (p. 11). They describe four main proficiency levels from a "novice" (a person with

13

no functional knowledge of the language), to a "superior" (a person who demonstrates a great deal of functionality in the language). In addition, there are also low, mid, and high sublevel descriptions for some levels.

All who have commented on the *Guidelines* have made the following statements at one time or another: (1) They are *not* goal statements. Although goal statements for specific curricula or courses may be defined on the basis of the ACTFL descriptions, the descriptions themselves are not goals. (2) They are *not* tests. They are not proficiency tests, or achieve-ment tests, or any other kind of test. They may be the starting point for formulating a test, however; one test derived from them that has received a certain amount of attention recently is the Oral Proficiency Interview, which, when given by a certified tester, provides an accurate gauge of oral linguistic ability. (3) They are *not* a methodology. Although the descrip-tions suggest a focal point around which a curriculum may be structured, they do not provide any clue to how a curriculum is to be guided toward its goals (which, as stated above, are not defined by the *Guidelines*).

There is *no* methodological description to go with them, and no hint of how to achieve the levels of proficiency described therein. It has been maintained that no methodology is necessary, since none would ulti-mately be effective. Some have also maintained that a new method is implied by the *Guidelines,* a method termed "eclectic"—an apparent con-tradiction in terms (Higgs, 8, p. 4).

The purpose of this foray into the subtleties of the *Guidelines* is to determine to what extent they are helpful in integrating media in the for-eign language curriculum. Of the four traditional skills, only three are addressed by the new media. Since none of the new media is able to engender oral production directly, the ACTFL description for speaking will not be considered. However, the remaining descriptions (listening, reading, and writing) will be examined to see what skill areas are addressed specifically by the media and at what skill level the media are likely to make an impact.

## Listening

Video in all its forms (satellite reception, videodisc, videocassette) is the medium most likely to make an impact on students' listening skills. The capabilities of the medium (immediacy, realism, color) make it ideal for such use. CALL, on the other hand, is ill-suited for work in listening since, without additional expensive hardware, the medium cannot provide any audio. The problem addressed herein, however, is not to discern affinities between media and skills (a topic treated above), but to consider the "fit"

of media with the *Guidelines*. The descriptors for listening are summarized below for quick reference.

| | |
|---|---|
| Novice—Low | No practical understanding of the spoken language. |
| Novice—Mid | Understands some memorized words within predictable areas of need. Rarely understands more than two or three words at a time, requests repetitions often, confuses words that sound similar. |
| Novice—High | Understands memorized utterances and some longer utterances referring to daily needs. Comprehends simple questions/statements about family members, age, address, weather, time, daily activities. Requires repetitions. |
| Intermediate—Low | Understands utterances about basic survival needs, minimum courtesy and travel requirements. Misunderstandings arise frequently from lack of vocabulary or from faulty processing of syntactic information. |
| Intermediate—Mid | Understands topics beyond basic survival needs such as personal history and leisure-time activities. Some inflection and basic constructions are understood. |
| Intermediate—High | Increasingly able to understand topics beyond immediate survival needs. Shows some spontaneity in understanding, but speed and consistency of understanding are uneven. Asks for many repetitions. |
| Advanced | Sufficient comprehension to understand conversations about routine social conventions and limited school or work requirements. Understands face-to-face speech delivered at a normal rate with some repetition and rewording. Discusses current events, can handle descriptions, can deal with past, present, and future time. |
| Advanced Plus | Often shows remarkable ability and ease of understanding, but comprehension may break down under tension or pressure. Some weaknesses are evident because of lack of vocabulary or grammar. Makes inferences. |
| Superior | Understands the essentials of all speech in standard dialects, including technical discussions. Rarely asks for rephrasing or explanations. Follows the essentials of conversations between educated native speakers. May not understand native speakers if they speak very fast or use slang or unfamiliar dialects. |
| Distinguished | Able to understand all forms and styles of speech pertinent to personal, social, and professional needs tailored to different audiences. |

*Level of Use.* It is conceivable to provide materials on video that could address each and every level of those described above. Students at the lower functional levels can be provided with specially selected or edited materials, while in the upper range of proficiency, unedited material can be used.

Only one major problem remains in using video materials. How does one determine what video materials are adequate for a given level? The materials must be chosen carefully, since they need to be at or slightly

above the students' expected level of listening ability (Krashen's input hypothesis—see Krashen and Terrell, 12; Higgs, 9). Materials that are too advanced cannot be used, since they will frustrate students (Ur, 20, p. 27). If students only comprehend 5 percent of what is said, there is a certain possibility that they will "tune out," and, consequently, the video experi-ence will be a waste of time—even more so if the images do not carry enough interest to maintain attention by themselves. On the other hand, materials that are too easy, too childish, or too obviously fashioned for the American student will tend to short-circuit the motivational energies gen-erated by the medium. Students will tune them out too, just as they often do when watching "educational" programs.

   Unfortunately, the *Guidelines* do not address the adequacy of materi-als for a particular level of listening proficiency. There is no "comprehensibility index" that could be used to gauge the level of video materials (or other listening skill materials). Unless they are able to measure the difficulty of video materials, teachers are forced to guess about the usefulness of video, or worse are guided only by publishers' representatives anxious to make a sale.

## Reading

Video can have little impact on reading skills. Resolution is not high enough, nor is interactivity possible without adding costly equipment. CALL, on the other hand, offers resolution that is somewhat more accept-able; it also offers interaction capabilities that are vital in exercises to develop reading skills. The following is a summarized form of the *Guide-lines* for reading proficiency.

| | |
|---|---|
| Novice—Low | No functional reading ability in the language. |
| Novice—Mid | Interprets highly contextualized words or cognates within predict-able areas. Vocabulary is limited to simple elementary needs such as names, addresses, dates, street signs, building names. |
| Novice—High | Interprets set expressions in areas of immediate need. Can read stan-dardized messages, phrases, or expressions. Details are overlooked or misunderstood. |
| Intermediate—Low | Reads the simplest connected material dealing with basic survival and social needs. Can read messages, greetings, statements of social amenities using the highest-frequency grammatical patterns. |
| Intermediate—Mid | Understands simple written discourse for informative or social pur-poses. Can read announcements, popular advertising, notes containing biographical information or narrations of events. Rereads material several times before understanding. |

16

| Intermediate—High | Understands a simple paragraph for personal communication, information, or recreational purposes. Can locate and derive main ideas of the introductory/summary paragraphs. |
| --- | --- |
| Advanced | Reads simple authentic printed material on familiar subjects containing narration and description. There are some misunderstandings in reading; able to read facts but cannot draw inferences. |
| Advanced Plus | Understands most factual information in nontechnical prose. Follows sequence of events and reacts to the information. Locates and interprets main ideas. Guesses sensibly at new words. Reacts personally to material but does not detect subjective attitudes, values, or judgments in the writings. |
| Superior | Reads standard newspaper items and recreational literature addressed to the general reader at a normal rate of speed. Rarely misreads; almost always produces correct interpretation; able to read between the lines, but may be unable to appreciate nuance or stylistics. |
| Distinguished | Able to read fluently and accurately most styles and forms of the language pertinent to academic and professional needs. Able to relate inferences in the text to real-world knowledge and understand almost all sociolinguistic and cultural references. |

*Level of Use.* As with video, it is conceivable that CALL provide materials for all levels of the reading skill. The medium itself does not present any limitations in delivering reading selections. Simple to very complex readings may be presented via CALL; however, the *Guidelines* do not address specifically how to judge the "readability level" of reading passages. The choice of material, its length and apparent readability are left completely to the instructor (or to the textbook authors).

Several types of presentations are possible, however, and benefit from the capabilities of CALL to improve on textbook or reader presentations. For instance, reading passages may be scrol'ed at varying rates or they may be held on the screen for a predetermined time. Passages may be illustrated with color graphics. Students may be given access to various levels of help—lexical, morphological, syntactic, or cultural information—and periodic comprehension checks. Such checks can take the form of cloze passages, reordering exercises, word-family activities, etc. Based on their results, students may be presented with more information about the passage, or they may be given the same information in a less complex form.

Since both listening and reading are receptive skills, it is not very difficult to believe that video and CALL can deliver material for all levels of proficiency described by the *Guidelines.* The media are the transmission vehicle for the material. Having selected a medium whose capabilities are congruous with the information to be presented, success is assured. In the case of CALL, however, the medium is not limited to presenting material (as with video; it is also possible to check on students' progress and to tailor further presentations dynamically on the basis of the results of evaluations. This is a new problem, one that warrants further comments.

CALL as an input medium has certain peculiar characteristics. When

used to check on student progress and to evaluate results, its limitations become evident: input longer than a few words is difficult to evaluate, especially if the input is "free form." Activities such as true–false and multiple-choice exercises are easy to judge. For example, Grellet (6, pp. 39–40) suggests the use of partially complete material in which students decide which of three vocabulary possibilities complete the passage best. An activity of this type is implemented relatively easily on CALL, as are other activities, such as cloze passages, vocabulary drills, and reordering sentences and ideas. However, some activities are nearly impossible to transfer to the medium. For example, Meyer and Tetrault (16) propose the following predicting task:

> Based on the title and the first and final paragraphs, what kinds of information do you expect to find in the rest of the article? Answer in as much detail as possible. Then scan the attached text to check your predictions. [A text follows.]

Since the activity is based on a "free form" answer of sentence length, that is, an answer in the student's own words and without a predictable linguistic structure, implementing this activity on CALL is almost impossible, unless, of course, the computer is used simply to present the problem—something that could be done on paper just as well—instead of to check the student's answer.

When used as a medium of presentation, CALL is viable for all reading proficiency levels. When used as an input medium to check student answers, its efficacy falls dramatically. Nevertheless, it is not possible to specify a particular level at which CALL is no longer useful for checking reading skills. The capabilities drop off according to whether the answer to be judged is free form or not, meaning that CALL is somewhat useful for checking answers at all levels, but that not all types of answers can be judged easily.

## Writing

CALL offers some capabilities to teach writing. As with reading, however, the capabilities of CALL drop off rapidly whenever free form student input is required. The following abbreviated descriptors from the *Guidelines* will be used to demonstrate to what extent the medium is able to carry some of the teaching load for writing.

| | |
|---|---|
| Novice—Low | No functional ability in writing in the foreign language. |
| Novice—Mid | No practical communicative writing skills. Able to transcribe or copy. |

| | |
|---|---|
| Novice—High | Able to write simple fixed expressions and memorized material. Can write names, numbers, dates, addresses, and other simple biographic information with frequent misspellings and inaccuracies. |
| Intermediate—Low | Meets limited practical needs: can write short messages such as questions, notes, postcards, phone messages. Can take simple notes and can create statements within the scope of a limited language experience. Writing tends to be a loosely organized collection of sentence fragments. |
| Intermediate—Mid | Meets some survival needs and limited social demands. Composes short paragraphs or takes simple notes on very familiar topics. Discusses likes and dislikes, daily routines, everyday events, and the like. Makes frequent errors. |
| Intermediate—High | Meets most survival needs and limited social demands. Can create sentences and short paragraphs relating to most survival needs (food, lodging, transportation, immediate surroundings). Can produce present and future time and some past verb forms. Shows good control of elementary vocabulary and some control of basic syntax. Writing is comprehensible to native speakers used to dealing with foreigners. |
| Advanced | Able to write routine correspondence on everyday topics using both description and narration. Makes common errors in spelling and punctuation, but shows some control of the morphology of the language and of the most often used syntactic structures. Has difficulty producing complex sentences accurately. |
| Advanced Plus | Shows ability to write about most common topics with some precision and some detail. Can describe or narrate experiences and explain points of view simply. Often shows remarkable fluency and ease of expression. Some misuse of vocabulary is evident. Shows a limited ability to use circumlocution. Writing is understandable to native speakers not used to reading material written by nonnatives. |
| Superior | Able to use the written language effectively in most formal and informal practical, social, and professional topics. Can write most correspondence, short research papers, statements of position. Can express hypotheses, conjectures, and present arguments. Uses complex and compound sentences to express ideas clearly and coherently. Errors, though sometimes made, rarely disturb the native speaker. |

It is undoubtedly in the area of writing that CALL appeared to have attracted the most attention, generated the most activity, and initially had the most adherents. There are uncounted software packages that "teach" some aspect of writing. Most is limited to a rather mechanical drill and practice mode that "teaches" relatively little, but provides ample practice on grammatical points. The majority of this type of material may be termed "prelinguistic"—focusing on prewriting stages. There is, however, some software that goes beyond mechanical drills and provides activities aimed at developing writing fluency. For instance, materials are available

that include sentence combining, sentence unscrambling, ordering of sentences into paragraphs, and cloze passages. All of these activities can be helpful in acquiring writing skills.

*Level of Use.*   As an input medium, however, it is clear that CALL has limitations. For example, are there proficiency levels at which CALL would be beneficial, and are there others at which it would be ineffective? It is possible to make such an assessment referring to the abridged *Guidelines* above. Magnan (14, pp. 125–127) provides a list of tasks for the first three levels. The novice-level tasks are broken down into seven categories:

| | |
|---|---|
| 1. Identifying | Given a picture of a room, students identify the typical items it contains. |
| 2. Listing | Students prepare a list of items not contained in a photograph: items needed. |
| 3. Using memorized material | Using vocabulary that was studied and reviewed in previous activities, students complete a paragraph based on a picture provided. |
| 4. Beginning to create with language | Students write a telegram telling a friend what another student has, what the student doesn't have, what should be brought as a gift. |
| 5. Creating with language, under teacher's directions | Students write a paragraph describing a photograph by answering a series of questions. The answers, when given in the same order as the questions, will form a complete paragraph. |
| 6. Describing in present time | Students write a paragraph from a specific assignment. The assignment gives hints and suggestions on the structure of the finished product. |
| 7. Accuracy check | Students answer a set of questions on their work: Is there a progression in the sentences? Is there a topic sentence? Does the final sentence summarize the paragraph? Are connectives logical? Are spelling and punctuation accurate? |

Which of these tasks can be implemented on CALL?

1. *Identifying.* Identifying items in a photograph poses no problems. A graphic may be substituted for the photograph and students may be asked to identify and list as many items as possible. Answer judging can very easily check spelling and article agreement.

2. *Listing.* A listing of items *not* on a photograph or in a graphic does present programming problems. A very large number of possible or acceptable answers must be provided to implement the exercise. It can be argued that, since novice-level students do not have a very large vocabulary, most likely less than 500 nouns, all of the words could be entered as input. But even 500 nouns would tax the *memory capacity* of presently available machines. The list may more than double when one

also considers adding permutations (plurals and gender agreements, etc.). In addition, if students enter nouns that they know but that do not appear in the list, they will be frustrated. Still, this activity can be implemented with a judicious choice of high-use vocabulary and a sophisticated program. It is clear, however, that even a relatively simple novice-level activity is sometimes difficult to carry out.

3. *Using memorized material.* Since this activity does not rely on the recognition of an unlimited or open-ended amount of vocabulary and, since a paragraph is typically given as context to further limit students' choices, it is ideal for CALL implementation.

4. *Beginning to create with language: writing a telegram.* The use of an open-ended format makes this activity difficult (if not impossible) to carry out.

5. *Creating with language under teacher direction.* The activity involves free-form answers to free-form questions; thus, there are the predictable difficulties in implementation. Nevertheless, if the questions are selected judiciously and if one can assume a limited number of sentence types in the answer, the activity presents fewer problems and can be implemented, although with difficulty.

6. *Describing in the present time.* This unstructured activity is difficult if not impossible to implement on CALL.

7. *Accuracy check.* Although this activity is somewhat structured and therefore implementable, it is a continuation of the previous activity and makes most sense when done on paper, without the aid of the computer.

The activities described above are not definitive; they can be taken, however, as representative of the type of activities needed for novice-level writers. CALL's capabilities, while very useful for reading, only provide mixed results for writing. Some activities can be carried out easily, others require complex programs and even more complex linguistic data (which would tax the capabilities of present-day microcomputers), and other activities are too open-ended and are therefore not implementable, even on very large machines.

Magnan suggests the following activities for later novice- to intermediate-level tasks:

1. Working with memorized material   Students make sentences by choosing one item from each column. For example,

| I | study | watch TV |
| you | work | listen to the radio |
| she | play | visit friends |
| he | shop | do homework |

21

| | |
|---|---|
| 2. Working with memorized material to add cohesion to language | Students create paragraph-length discourse using the technique above. The items given in columns include such words and phrases as "in the morning," "later," "then," "while," "my friend," etc. |
| 3. Creating a cohesive description | Students describe their typical daily activities and those of their best friends. The directions provided give hints about a well-structured paragraph. |
| 4. Accuracy check | Students self-check the paragraph produced above using the same techniques as in the novice level (p. 126). |

Here again, some activities may be carried out on CALL while others may not. The first two, because they are fairly well-structured and do not require free-form answers, may be transformed easily into CALL activities and may benefit from the capabilities of the medium. Features that may be included in these activities are answer judging, providing helpful hints, and graphics. The third and fourth activities, by virtue of being open-ended, are not easily implementable and should be done on paper.

Some later novice- and intermediate-level tasks may also be carried out on CALL. Magnan suggests the following:

| | |
|---|---|
| 1. Listing | Students list things they did yesterday, using partial sentences. |
| 2. Creating series of statements | Students write statements describing what they did yesterday. The goal is to create simple narrations in the past. |
| 3. Building a paragraph | Students add clauses or amplify the statements written above. The goal is to describe and narrate in the past. |
| 4. Describing and narrating in the past | Students write a letter to a friend describing what they did last summer, giving some detail. |
| 5. Accuracy check | Same activity as in the novice level (p. 126-27). |

Activities become more free-form as one goes up on the proficiency scale; hence the number of activities that can be implemented on CALL becomes smaller. However, there is one activity that can possibly still be accomplished at the intermediate level, the first one suggested by Magnan, listing. Given a large enough linguistic corpus and checking of key words, one can imagine an activity designed to help students formulate a list of past events. The computer could check the items for accuracy as they are entered and make suggestions for new items when the student indicates that help is needed. The other three activities, however, cannot presently be done via CALL, except, of course, by using the computer as a word processor.

Implementing CALL for writing skills yields mixed results. Some activities seem transferable immediately, while others, especially at the higher

22

ranges of the proficiency levels, require either more processing power than available now or very sophisticated programs. Neither is available at this time without enormous expense in hardware and software. Whether or not improved CALL facilities with capabilities that can solve these problems will come about in the near future is addressed in the following section.

## Possibilities and Feasibilities _____

What can we look forward to with the new media? Several facts emerge from the preceding discussion:

1. Modern media, including video and CALL, will make an impact on the foreign language curriculum. They offer many useful capabilities that should and will be exploited in the classroom. Both media are here to stay; they will evolve and may eventually metamorphose into one medium, but they will survive as a pedagogical tool.
2. Neither medium is without problems. It can probably be argued that they add many problems relative to acquisition, maintenance, implementation, and integration of second-language skills, just to name a few; it is clear, however, that most of the problems are solvable.
3. Neither medium can, by itself, shoulder the responsibility for teaching even one specific skill. Each medium offers capabilities that are ideal for some types of presentations or activities, but there are severe limitations in the use of both CALL and video.
4. The use of the media brings about complications in the structure of the curriculum—new and complex machines introduced in the classrooms and laboratories. As a result, teachers are required to assume a greater involvement in curricular design and implementation. They are required to choose from among several possible modes of presentation, several media, and several teaching options.

In asking for more help in the classroom, teachers are getting more than they bargained for—a surplus of material and very little unifying structure. Where will the needed help come from? The *Guidelines* are likely to bring an organizing principle to the curriculum. More and more texts are being written with them in mind and, as a result, incorporate primary material that includes more communicative, better-defined, and more useful tasks. However, since the *Guidelines* do not address curriculum design specifically, much time may pass before those issues are resolved. A more immediate and more pragmatic means to solve curricular problems is needed.

One place where curricular matters can be addressed is in the Instructor's Annotated Edition (IAE) of the textbook. A few years ago, the IAE

provided only marginal annotations about optional sections of the grammar. More recently, the IAE has assumed a role in guiding the curriculum as well. More and more the IAE holds additional suggested or variant activities in addition to answers to selected exercises. New are suggestions on the use of materials and hints about appropriate methodologies, as well as references to other ancillaries and to the tape program. Carrying the trend a bit further, it is not unreasonable to assume that, as video and CALL make more of an impact on the curriculum, the future IAE will become the central document to orchestrate these media. For example, a marginal notation may refer the teacher to a videotape presentation of a dialogue, or to an overhead transparency for presentation of a grammar point, or even to a set of reading activities on CALL.

## Looking Ahead

To predict what new technologies will be available to the foreign language teacher in the distant future is the job of a science fiction writer. To predict what will be available in the near future (or five years from now), is not such a mystery. One has simply to look about and find out what technologies are being worked on *at this time*. Some will become commonly accepted; some will fail because they are either too costly, too difficult to handle, do not provide enough tangible benefits, or simply fail to interest enough people. The following two technological advances show some promise.

## The 3M Machine

The 3M machine is a logical enhancement of the microcomputers presently in use. Several groups (universities, large and small companies) are developing simultaneously what has been touted as the all-purpose academic workstation. The new machine is dubbed 3M because it will have 1 megabyte of random-access memory, display 1 million pixels on its screen, and run at 1 million instructions per second—thus, 3 millions, or 3M. The machine will have capabilities much greater than the ones presently in use that, in turn, will make possible greater complexity in programming, greater storage capacity, and much better display characteristics. If the price is kept within reason, it is likely to be used widely by faculty and students across a broad spectrum of disciplines. The availability of a large number of 3M machines should encourage software designers to produce a large number of materials and perhaps even make possible a modicum of standardization without stifling the creativity in design the 3M machine will make possible.    24

## CD ROM

Coupled with advances in microcomputer hardware, an equivalent advance in storage technology is in the making. The CD ROM (compact disc, read-only memory) presently under development is likely to affect strongly the way one looks at information. The CD ROM, a laser-based storage device similar to the high-fidelity compact audiodisc player, will erase the distinctions made about type of information and, at the same time, allow for much greater storage capacities. Presently one talks, as in this chapter, about computer data storage, video information storage, music storage, and graphics storage as separate kinds of information requiring separate kinds of storage devices. CD ROM technology will eliminate these distinctions and allow storage of any and all types of digitized information on the same plastic medium. For instance, a CD ROM has been used to hold on a single five-inch disk an encyclopedia (including text and graphics), music, and video information. When the user inquires about Beethoven, for example, the medium provides a display text, a graphic, and even a few bars of Beethoven's most famous symphonies.

The storage capacity of a typical CD ROM disk is phenomenal. A library of a million volumes, if it is transferred to CD ROM, could be compressed into the space occupied by one end of a teacher's desk! With such high densities for storage and with such flexibility for types of storage, CD ROM, provided it becomes accepted commonly, is bound to make its mark on foreign language teaching.

## A Short Conclusion _____

The advent of new technologies always provokes mixed reactions. On the one hand, they are exciting to work with; they add new dimensions to the class and spark students to higher levels of motivation and achievement. On the other, they are expensive to purchase and maintain, difficult to implement in real situations, and often the cause of much frustration. When problems created by an incomplete or unintegrated curriculum are added, the situation may become untenable. The advantages brought about by the new media are more than offset by the curricular problems they create. Teachers will perceive a loss in effectiveness when they must take time to select media, materials, and methodologies carefully, for they will spend more time planning than they will gain from the capabilities that the media bring. However, there are several positive trends that counteract this caveat: (1) The ACTFL Proficiency Guidelines will tend to unify the curriculum, as will the customary adjustments that are brought about when a new element is introduced. (2) The media will eventually take up their respective niches in the curriculum and teachers will rely on them for

specific tasks as a matter of course. (3) Publishers will continue to provide methodological information in the Instructor's Annotated Edition, but will expand it to include curricular information. (4) Finally, new technologies will add even more functionality in video and to CALL, eventually merging the two into a powerful teaching tool.

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