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From Telecourse to Courseware in Intercultural Communications

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Prior to the final production of technology-mediated course materials, a developer responds to new information which modifies existing delivery and design concepts. In the development of intercultural communications course materials it is important to incorporate a flexible design to accommodate the range of topics in the subject area, to reflect changes in delivery technology and to allow for continuous modification of the data base. One method of incorporating this flexibility is by developing materials in a computer-based-multimedia format, and by researching the needs and ideas of potential users. One part of the intercultural communication courseware package is topics in business and management, which we will discuss here as an example of the development of design elements in the total package. Flexibility in design may be incorporated on several levels of an application, from concept to use.

BACKGROUND

The quest for a flexible learning vehicle in intercultural commun-ications begins with suggestions from the American Association of State Colleges and Universities (AASCU) with the 1985 publication *Guidelines: Incorporating an International Dimension in Colleges and Universities*. We were introduced to these guidelines in April of 1987 at a conference in Atlanta, International Business and Higher Education: Imperatives for Collaboration, sponsored by the AASCU and the International Intercultural Studies Program (IISP) of the University System of Georgia. The *Guidelines* incorporates directives in five areas: Administrative Leadership, Curriculum Development, Faculty Development, Student Awareness and Resources. In the Curriculum area the *Guidelines* (AASCU 1985) states that an international dimension should provide students with:

* A recognition of awareness that one's view of the world is not universally shared and that others' views of the world are profoundly different from one's own;

* An awareness of the diversity of cultures, ideas, and practices found in societies around the world and how these compare; and some recognition of how the ideas and practices of one's own culture might be viewed by individuals in other societies;
* An awareness of prevailing world conditions and trends (e.g., population growth, migrations, economic conditions, resources and physical environments, political developments, science and technology, law, health, intranation conflicts);
* An awareness of how the world's systems are interdependent and how local economic and social patterns have global impact beyond their effect on individuals' lives;
* An understanding of how developments in other countries may be relevant to one's profession or business;
* A knowledge of various social movements that have created and are creating goals and values that transcend national cultures and ideologies; and
* A knowledge of ethical questions and issues that derive from an increased capacity to sense, predict, and manipulate global conditions.

Business Guidelines

At the same 1987 Atlanta meeting, Richard B. Schaffer, Director of the International Business Studies Department at Appalachian State University, outlined in a paper (Schaffer 1987) some of the suggestions of the Report of the Southern Governors' Association Advisory Council on International Education, entitled "Cornerstone of Competition":

* All business school curricula at the graduate and undergraduate levels include required courses in international trade.
* State Advisory Councils develop - for all education levels - curriculum requirements necessary for participation in a world economy…
* Forums be organized in the states and on a regional basis that would bring together state government leaders as well as economic development and education officials to coordinate strategy for economic development and education…

These guidelines were initial in the development of the courseware package. Once committed, the designers needed feedback to direct further development.

FORMATIVE EVALUATION IN DEVELOPMENT

In their book on research methods in the media, Williams, Rice and Rogers define formative evaluation as research which occurs during the developmental stages of a project, as compared to summative evaluation, which is performed after project completion (Williams *et al*. 1988). When issues of quality, practicality and cost are assessed in program development, formative evaluation is necessary.

The authors outline four steps in formative evaluation: define objectives, select the scope of the research, select data-gathering method, and analyze results and provide feedback. The objectives of the evaluation were to assess the trends in the delivery of educational software and determine the most effective ways to design flexible courseware. For data-gathering methods we used several different tools: questionnaires, formal presentations at scholarly and curriculum development meetings, inquiries at intercultural communications workshops, and informal conversations. These methods broadened the scope of development by providing a breadth of feedback from a range of individuals in several academic fields and professional occupations.

In the spring and summer of 1987 questionnaires were sent to participants in the AASCU-IISP Atlanta conference and the Sixth Annual Conference on Languages and Communication for World Business and the Professions, held in Ann Arbor, Michigan in May. Out of approximately 60 questionnaires sent to university representatives, 19 responses were received with 11 respondents listing at least one existing course in their curriculum which corresponded to the proposed first part of the courseware package. Table 1 on the next page lists courses given in the responses.

Outlines of the course were presented at International University Consortium curriculum meetings with more critical feedback. Informally, discussions concerning course design were held with professionals across the United States. Its presentation at the International Conference on Cross-Cultural Communication in San Antonio in March of 1989 (Stevenson and Miller 1989) and at the Seventh International Conference on Technology and Education in Brussels, Belgium, in April of 1990 (Stevenson and Miller 1990) brought the concept to groups of international reviewers.

TABLE 1

COURSE TITLES WITH INTERCULTURAL COMMUNICATION BUSINESS CONTENT

Undergraduate

Business German
Spanish/French/German Language of International Business (three courses)
The Cultural Environment of International Business
Culture and International Business
International Marketing
Managing World Business Communication
International Business Communication
Comparative Management
Organizational Management

Graduate

Cross-Cultural Communication
Advanced Cross-Cultural Communication
Different Value Orientation

The questionnaire results and comments from presentations and professionals informed us that the course needed to be highly flexible and people focused, as compared to being overly technical and business focused. We realized that the courseware should be both conceptually and operationally flexible.

Addressing Needs in Design

In 1988 the first author attended a state of the art seminar at the Summer Institute for Intercultural Communication, under Dean Barnlund and George Renwick, in which nine attendants were asked to score ten questions in terms of how well they felt they met certain professional criteria for intercultural communication professionals. The questions were ranked from most confident to least confident meeting criteria. The participants, most of whom were professional intercultural communications specialists,

felt the least confident about the application of theory and being well-read in research. This indicated that a courseware application package should directly assist the professional in gaining confidence and facility in using the literature in intercultural communications. Table 2 lists the questions and their rankings.

TABLE 2
CONFIDENCE IN PROFESSIONAL INTERCULTURAL ABILITIES (N=9)

Scale:
No Confidence 0 1 2 3 4 5 6 7 8 9 10 Complete Confidence

Rank	Questionnaire Item	Score	Range
1	Know and admit our own bias and limits	7.3	5-9
2	Have guts to make mistakes; risk and be accountable	7.1	5-9
3	Seek and know so as to seek and know	6.9	1-9
4	Know real needs of clients (students, participants…) and have empathy for them	6.8	3-10
5	Live with (thrive on) ambiguity	6.3	2-9
6	Coherently communicate our insight	6.3	4-8
7	Integrate personal and professional; model this integration	6.2	4-8
8	Discern subtleties and able to use them	5.7	3-8
9	Well-read in theory, able to apply it and help others comprehend and apply it	4.3	1-8
10	Well-read in relevant research	4.0	1-8
	Group Average	6.1	

In business and management topics the needs of scanning the literature and updating materials are paramount. Moran and Stripp (1991: 90) outline these needs when they say "First, the negotiator should conduct an initial research of relevant literature concerning the target culture and, if possible, extensive interviews of individuals who have negotiating experience with the target culture, " and that "The

framework is a dynamic model and, as interaction occurs, the negotiator should continually add personal observations and adjust the propositions accordingly." Computer-based-multimedia can address some of these needs, but then also might other media, such as regular text and notepads. The value of a computer-based application is that it allows for relatively quick access to large amounts of information in a medium which allows for a high degree of interactivity between user and materials. As well stated by Kearsley (1986), interactivity is the key to computer-based applications, and is a central reason in this project for the shift from the traditional telecourse package to one which incorporates the computer .

From Telecourse to Courseware

In 1989 the development idea for the materials was the standard telecourse package, which generally included video programs, text, study guide and faculty manual. At that point in time we decided to use computer-based text material for the study guide and faculty manual to allow an instructor to select course materials for personal design. By 1991 the developers had realized several trends over the past few years in the use of technology-mediated materials in the traditional and distance learning classrooms which would influence the development of the courseware. At least three major trends warranted attention: increases in the number of videocassette recorders and computers in the home, increased use and number of computers in traditional and distance learning classrooms, and the need for greater portability of software, primarily because of the increased cross-cultural use of courseware materials (Collis and De Diana 1990).

Traditional classroom instruction has increasingly incorporated computer-assisted instruction, thereby expanding learning opportunities and the need to design learning materials to accommodate this increased incorporation. The environment in which distance education is conducted has also been changing in the last few years. In 1980, for instance, "telecourses" were developed on the assumption that video programs would be broadcast to students who would view the programs over public TV or cable TV. Even though the student was studying in isolation, the limitations of broadcast scheduling controlled the sequence and pace of study. More recently, there has been a move away from reliance on broadcast television and toward videocassette distribution, giving students greater control over the sequence and pace of study. The Annenberg/CPB Project has also discovered that many of its video productions are used in traditional classrooms.

Currently, there is another change occurring, as institutions begin to use computer conferencing and computer managed instruction as part of distance education. Computers are being used for communication, but also to deliver courseware. To illustrate the growing importance of computers in distance education, at a recent

national distance education research symposium, 25% of the papers presented dealt directly with computers.

These trends suggest that distance education is moving toward a "courseware" environment where well-designed, multi-media instructional materials are used in a variety of settings.

Another factor in the trend toward greater incorporation of the computer in classroom and distance learning is the increased relationship between software used in academe and that used in the professional world. Many software applications used in instruction are carried into the world of business, and the links between software produced for education are growing with those produced for business.

In short, these trends point toward two areas of courseware development that are linked by the concept of flexibility: greater program interactivity, to more closely simulate the interaction between human beings, and greater program adaptability, so that the information can be updated and made more cross-culturally portable (Kearsley 1990).

Program flexibility can be incorporated on at least three development levels: conceptual, navigational and operational. On the conceptual level, the flexibility is reflected in the ability of the courseware idea to incorporate new information and adapt to new environments. Navigational flexibility allows for multiple access and channels, while operational flexibility supports an interface that allows for a high degree of interaction. Flexibility is incorporated on all three levels in this courseware package.

DESCRIPTION

The courseware package concept is analogous to a system which accepts new information from its environment to maintain adaptability and flexibility. The concentric circles in Figure 1 on the next page represent a conceptual model of the courseware idea. Navigationally, the program


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Figure 1. Concept Design

opens with the Introduction, allowing the user to go into Case Studies, Simulations or New Cases, but conceptually New Cases, which is a set of case studies which the user enters and updates at will, is shown on the boundary of the system because it changes directly as a result of receiving new information. Case Studies is a collection of intercultural interactions from texts and interviews. Simulations is a set of interactive simulations in intercultural communications. Book Notes is text backgrounds for Case Studies, Simulations or New Cases. Similarly, Analytical Tools is a set of questionnaires and other research oriented tools which allow the user a range of approaches to studying intercultural communications and provide background to Case Studies, Simulations or New Cases. Test banks may also be stored here by instructors. Text Explanations explains specific high-lighted terms in the Notes and Tools sections. Bibliographic References lists authors and works which provide additional sources of information for the user.

Figure 2 is an illustration of the pathways by which a user navigates through the courseware. After the Introduction window the user can open either the Case Studies or New Cases stacks, or go directly to Simulations. Through these the user can move to either Book Notes or Analytical Tools, from there to the Text Explanations and Bibliographic References. The new user may wish to follow the pathway of Case Studies to Book Notes; an experienced user could, from the Introduction, go directly to Simulations or New Cases, where personal interviews, readings, contacts, and the like could be entered or retrieved. Flexibility here is reflected in the ability of the user to rapidly access or by-pass sections of the program.

Figure 3 on the next page is an example of a window on the operational, i.e., user, level of the courseware. In the Introduction window the user can select the direction in which he or she wants to go. Note that "buttons" allow access to the navigable stacks from this window. This level of development is also flexible, especially in the ability of the user to create new windows for New Cases and develop new banks of information.

DISCUSSION

Allowing a user, whether instructor, student, or professional, to redesign, reintegrate and update courseware components enhances course relevance and timeliness. However, computer-based-multimedia requires appropriate hardware and

for some colleges and individuals this could prove expensive. Nonetheless, the trends in technology-mediated course-ware incorporation in academic and professional experiences suggest that

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Figure 2. Navigation Pathways

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Figure 3. Introduction Window

accommodations may be made in the near future to support investments in educational technology.

Hardware and software, though very important to the development of a usable and marketable courseware package, are not necessarily the essential core of a learning tool. The message and its content are what make the heart of a course, and no amount of high technology can change the absence of a well thought-out and evaluated concept. Three issues come to mind when discussing continuing course development: the purpose and objectives of the course, the content and presentation, and the audience. The audience is no longer a necessarily passive receiver of materials but, especially in the light of interactive multimedia , an active partner in course development. This is a trend in education that is growing and should be given serious consideration in the development of any future course materials. From the perspectives of content and presentation, intercultural communications is an area of growing interest in both national and international arenas. Topics in Business and Management is the first part of a proposed series tentatively entitled *Intercultural Communications*. The package is expected to be completed by Fall, 1992.

The bottom line in the production of *Intercultural Communications* is whether the final product helps to address the needs stated in the 1985 AASCU publication on incorporating an international dimension in colleges. The document lists many suggestions, the majority of which would be addressed by the courseware package. But of the suggestions, the one stating a need for "A knowledge of ethical questions and issues that derive from an increased capacity to sense, predict, and manipulate global conditions" draws attention because of the use of the word "questions," for as we develop tools to enhance the learning capabilities of our fellow humans, surely the questions we raise about ourselves and our interactions will surely outnumber the answers we give to one another.

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