Intended to improve the quality of social studies teacher education coursework, this paper discusses the use of interactive videodisks in understanding cultural diversity. Beginning with a review of studies about using videodisks, the paper describes the strategies for content development derived from interviews with 15 subject matter experts and a review of the published literature. Learner characteristics were analyzed by means of a survey of 90 undergraduate students at the University of Minnesota College of Education and Human Services Professions. The survey contained sections related to tolerance and discrimination issues, content background, and demographic characteristics. Upon completion of learner analyses and content development, the development of objectives, flow charts, and specific content in the form of modules was carried out. The use of interactive videodisks allowed learner choice and self-pacing, active learning, feedback, and exposure to multi-sensory learning sources. The paper concludes with a description of field testing and research, and a summary of the value of videodisks in social studies teacher preparation. A list of references is included. (KWL)
SOCIAL STUDIES TEACHER EDUCATION:
THE ROLE OF INTERACTIVE VIDEODISC IN UNDERSTANDING
CULTURAL DIVERSITY

by

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Social studies teacher education is constantly seeking to improve the quality of its coursework. At the University of Minnesota Duluth, new technology is being developed for just such improvement.

**Background on the capabilities of interactive videodisc**

Interactive videodisc combines the capability of videotape and computer to offer a powerful new educational medium. There is the potential of storing 54,000 still frames on a single video disc. In addition, there are the possibilities of such features as user control, rapid recall of information, and different learner tracks to meet the needs of students with varying abilities and learning styles. Other features include audio instruction, stereo sound reproduction, and bilingual instruction.

Various researchers have begun to explore the effectiveness of interactive videodisc in education in different fields. Glenn (1983) has described the videodisc as a superb data bank with organized slides and segments of film from, for example, specific geographic regions. Remediation potential occurs in the provision of concrete examples related to abstract principles. Simulations provide opportunities for direct learner involvement in social studies' situations.

Branson and Foster (1978) have used principles of psychological research in outlining the attributes of effective teaching which can be provided on a videodisc. Learner initiative or mixed-initiatives, allows
stop on command of program, learner, or instructor. Feedback features provide alternative responses to student responses and permit a significant number of "if-then" alternatives. Record keeping includes the recording and storing of student responses.

Bunderson (1982) has outlined the potential of videodisc for different types of programs with the same disc materials. Some programs may be organized much as a book with a table of contents and a series of chapter-like segments. Other programs are conventional, with a beginning, middle, and end. Still others have a high degree of control based on learner input. Styles of videodiscs allow an open-ended approach which facilitates the use of disc materials in various combinations as they are randomly accessed on the disc.

Holmgren (1979) concluded in an experimental study related to military instruction, that when incorrect responses are given to questions, automatic remediation loops should occur. The need to have back-up hardware was also deemed important when failures occurred.

In another experimental study, Hon (1983) reported on the effectiveness of the CPR videodisc system. Fifty students took the CPR course from an accredited live instructor and fifty took the course from the CPR videodisc system. Both groups of students were evaluated by another instructor. Three times as many of the students who had the videodisc training passed as those who had taken the instructor-based training. In addition, all videodisc students took less time than any of the students in the regular class.
With this brief review, let us turn now to the uses of interactive in teacher education at the University of Minnesota, Duluth.

**Background on collegiate preparation for videodisc development**

A series of courses is being developed by the four centers in the College of Education and Human Service Professions. These centers include the Center for Curriculum Foundations, the Center for the Advancement of Learning Technologies, the Center for Advanced Programs and Outreach, and the Center for Clinical Education and Research. The courses being facilitated include Human Diversity, Research in Education and Human Service Professions, Human Development, and the Role of Technology in Education and Human Service Professions.

This interdependent organizational structure has lead to the development of the Videodisc Research Group. This group has representatives from several departments who bring diverse perspectives to instructional design and media treatment.

The more specific content of the videodisc series, related to the collegiate core curriculum, is as follows. The first series of seven discs is entitled "Creating Healthy Human Systems," and includes discs on understanding individual development (two discs), understanding groups, understanding families, understanding organizations and communities, understanding cultural diversity, understanding national and global societies. The second series of seven discs relates to "Research and Evaluation in Education and Human Service Professions." Topics which are a part of this disc
include basic concepts in descriptive and inferential statistics (three discs),
research design, test construction, program evaluation, and the analysis of
research in education and human service professions. The third series of seven
discs is being constructed focuses on the development of professional skills
across all of the human service professions. Topics here include
interpersonal skills such as perceiving and responding with empathy, warmth,
and concreteness; data collection and analysis skills; planning, implementation,
and evaluation skills; metacognition skills including reflecting on thought
processes and cognitive monitoring.

Content development related to discs on cultural diversity

Content for specific discs derives from subject matter experts and
a review of the published literature. In this paper, the focus will be
on the disc related to understanding cultural diversity.

A total of fifteen subject matter experts from education, psychology,
social work, and anthropology (with a balance between practitioners and
university faculty) were asked the following questions:

1) how do you define "cultural diversity?" 2) what framework or frameworks
do you use in understanding cultural diversity? 3) how can choices
be made as to cultures studied? 4) which readings are most important in
understanding cultural diversity? 5) what are (or should be) major
learning goals for students in an education core course related to
cultural diversity? 6) what knowledges, skills, values, and understandings
are needed as education and human service professionals work in a pluralistic
society? 7) what teaching strategies have you found have you found effective
in this area? 8) what tools have you found useful in assessing learners' knowledge and attitudes towards persons from different cultural backgrounds?

Various expert definitions were offered. For example, several people suggested that cultural diversity is a response to the problems confronted in living. The responses could involve religion, kinship, food preparation, clothing, level of technology, arts, humanities, crafts, furnishings, and architecture.

Frameworks for understanding diversity were described. One included levels of societal organization, such as the hunting/gathering, horticulture, agrarian, tribal, and industrial levels. A variation on this framework viewed three types of societies--the agricultural, industrial, and information societies. A second "system" used as topical approach in which religion, social organization, economics, education, time, music, and world views were suggested as dimensions for understanding cultural diversity. A third system advocated the use of self analyses of personal values related to status bases, achievements, work ethic, cleanliness, purchase of materials, degree of personal humanitarism, and the level of equalitarism in contrast to those of other cultures.

Experts had various opinions about the cultures which should be studied. A majority of the group felt that near cultures, culturally diverse groups within ones community, should be explored. Several people suggested that the American Indian and Southeast Asian cultures be considered.

For the major goal in classes related to human diversity, most experts stated that a student should 1) experience a change of consciousness with
widened horizons, 2) examine personal values, 3) develop respect for persons of varying abilities and backgrounds, 4) integrate a tolerant realization that one's own values are not necessarily the only or best views.

Knowledges, skills, and understandings needed by educators and human service professionals included 1) ability to view individuals as individuals and not as stereotypes of a group, 2) acquisition of background knowledge such as lifestyle, environment, religions, languages, history of cultures, 3) ability to speak native languages of cultures being studied, 4) understanding of the importance of pluralism in a democratic society, 5) skill in using verbal and non-verbal communication appropriate to specific cultures.

No single commercial teaching curriculum was identified, but the work of Carkhuff (1983) on the teaching of helping skills and the research of Johnson and Johnson (1982) related to cooperative learning were considered important. Direct and extended contact with persons of other cultures as well as audio-visual material and the cultures' own oral or written literatures were also thought vital for students' development.

Attitude scales were presented as most relevant in assessing learners' values. Tools which offered case study opportunities for rating various attitude items were most frequently used.

Summaries of interview data were compared with published literatures in the field of cultural diversity. Particularly important were books by Allport (1982), Feagin and Feagin (1978), Jones (1972), and
Gollnick and Chinn (1983). These books emphasized basic concepts related to prejudice, discrimination, and relating with persons from different cultural backgrounds.

The content that emerged from a synthesis of this effort in literature review and subject matter expert interview was chunked into the following main groupings: description of systems and processes for understanding cultural diversity, definitions of key terms such as prejudice and discrimination, and background information related to specific culture.

More specific descriptions of content for the discs related to cultural diversity are found in a later section of this paper.

**Analyses of characteristics of learners**

Another facet of designing instruction through the use of interactive videodisc is the analysis of learner characteristics. For the disc "Understanding Cultural Diversity," a survey of ninety undergraduate students in the College of Education and Human Service Professions was conducted. Four questions were addressed in the study: 1) How could the tolerance for persons from a variety of backgrounds that students possess be described and rated? 2) What level of content knowledge related to cultural diversity do students have? 3) If given the opportunity, what questions would students ask persons from diverse backgrounds? 4) How do students describe ways they have discriminated against persons from backgrounds different than their own?

To answer these questions, the survey contained sections related to tolerance and discrimination issues, content background, and demographic characteristics.
When tolerance is a dependent variable in a survey, it is often not useful to question support for abstract principles, such as the right to free speech or whether discrimination against minority populations is justified. Particularly in a democracy, one set of answers to these kinds of questions is defined as culturally correct. As an alternative in this dilemma, respondents in this study were asked to specify a group which they disliked the most. The respondents' tolerance of this group was then measured through questions such as:

I believe in free speech
Rated from (5) strongly agree to (1) strongly disagree.
for all no matter what their views might be.

The Ku Klux Klan, homosexuals, and Communists were identified as the students' least liked groups. The tolerance means scores ranged from 0.02 to 4.11 with an overall media of 3.00. The greatest tolerance was shown in three statements—over 50% of the respondents disagreed or strongly disagreed that their least liked group should be encouraged to leave the country or have their phones tapped; over 50% of the respondents agreed or strongly agreed that their least liked group should have freedom of speech. The greatest intolerance was shown in two statements—less than 25% of the respondents agreed or strongly agreed that members of their least liked group should be given the opportunity to be president of the United States or teach in the public schools.
--Interview and Discrimination Sections

In response to the question--"If you could speak directly with a person from a culture different from your own, what would you, as a future or practicing education and human service professional, ask? Students generated questions were grouped under the following categories--family life, education, community and social services, governments, and lifestyle. (See Table 1)

When asked how they were discriminated against, students responded that they were discriminated against due to their sex, ethnicity, sexual preference, social status, outward apparel, and age. When asked how they discriminated against others, students responded with categories of behaviors related to ethnicity, age, sex, social status, peer group status, and personal interests.

--Knowledge Background

This section of the survey asked specific knowledge questions related to content about the newest immigrants, refugees from southeast Asia, and the oldest inhabitants, the American Indians. Knowledge of the definitions of general concepts, such as discrimination and prejudice, were also surveyed.

The range of percentages of correct responses for specific knowledge about refugees from southeast Asia and American Indians was 14% to 73%.
Respondents had greatest knowledge about reasons why refugees left southeast Asia (73%) and degrees of similarities and differences among
Table 1. Interview questions.

Social Organization

First questions relate to life as a child
Where were you born? When?
Who was there when you were born?
What celebrations occurred for your birth?
What did your mother do (work)?
What did your father do?
Who lived in your household? Who took care of you?
In what type of community did you live? Closest city?
What if there were disagreements--who settled them?
What holidays did you celebrate?
How has your home and community life changed as an adult?

Religion

What religion or religions did you have as a child?
What were the values of your religion?
What religious holidays did you celebrate?
What kinds of religious gatherings were there?
Was there a special "religious place" in your home? Community?
What part did religion play in medicine and healing?
How as your religion changed (if it has) from when you were a child
to when you became an adult?

Economics/property

What did people do for work?
Were individual households self-sufficient--grow all their
own food? make all their own clothes?
Were there any taxes? Describe.
How was property owned in your community?
Was there trading of goods?
How have economics changed from when you were a child?

Education

What kinds of things did you learn in your home?
What did you learn from friends?
What kinds of schools, if any, did you attend?
What did you study?
How did you learn? (Through books, through real experiences)
Do you remember any stories you might have heard as a child?
What games did you play? What did you learn from the games?

Time

Did things seem to change rapidly when you were a child?
Was it important to have a watch and be places "on time."
When things were bought or made, was there consideration of
long it would last?
North American Indian tribes (72%). They had the fewest correct responses about the geography of southeast Asia (11%), the Johnson-O'Malley Act (13%), and the structure of American Indian families (14%).

The range of percentages of correct responses on general concepts related to discrimination and prejudice was 13% to 91%. The respondents had greatest knowledge in the effects of overgeneralization and stereotyping and had the least amount of knowledge related to dilemma of discrimination in America (13%) and the definition of antilocution (2%).

The results from this survey were indeed interesting and helpful. There appeared to be a granting of basic rights to the respondents' least liked groups (freedom of speech, freedom from harassment through phone-tapping), while there was less support for allowing these persons unlimited opportunities for positions of influence (being President or teaching).

Also of great interest and importance in the development of the disc were the types of questions respondents would ask persons of different backgrounds if given the opportunity. Respondents had numerous questions related to family and community, government, education, and lifestyle. These were incorporated into the interview section of the disc.

The results of learner analysis were merged with the information gained from the subject matter experts and the review of literature.

**Description of disc objectives**

Upon completion of learner analyses and content development, the next steps include the development of objectives. For the disc related to cultural diversity, ten objectives were developed through a process of
through four revisions. The objectives are as follows:

1. To recognize similarities among peoples and develop respect for individuals;

2. To define and use a "system" or "systems" for understanding one's own as well as other cultures (sociological, anthropological, historical, political);

3. To use and evaluate a process for gaining knowledge and understanding of another culture which includes:
   a. seeking background information
   b. interacting with people of another culture
   c. reviewing another culture with someone who understands both the dominant American culture and another culture
   d. trial and error;

4. To define culture--man-made responses (personal and organizational) to basic survival needs of food, clothing, and shelter;

5. To recognize that one's own view of the world is not the only one;

6. To recognize that one's own view of the world is not necessarily better than another's view of the world;

7. To discover honestly one's own prejudices and stereotypes;

8. To see persons as unique individuals rather than as only stereotypes of a cultural group. recognize the difference between categorization and stereotyping;

9. To distinguish how each "group" excludes and includes certain other individuals and/or groups;

10. To recognize that valuing diversity is an essential ingredient for one's own freedom of choice;

11. To describe the following basic concepts: prejudice, discrimination, conformity, stereotyping, institutional discrimination, cultural discrimination, conformity.
Overview of disc content

In videodisc instructional design, the development of flow charts and specific content follows the learner analyses and subject matter expert interviews and the development of objectives.

The interactive videodisc, focusing on the southeast Asian case study, has four major content modules plus and introduction and conclusion modules. These modules are: 1) background information, 2) visits with persons from southeast Asia, 3) situations with feedback, and 4) theoretical overview of basic concepts related to cultural diversity.

--Introduction

In this module, the learner is introduced to two problem situations--a school situation which involves the learner in making an initial plan for three southeast Asian refugee children which will be in the learner’s simulated elementary classrooms, and 2) a human service situation which involves the learner in making a plan for a simulated social service difficulty involving the assisting a refugee whose utilities have been disconnected.

--Background information

In this module, there are opportunities to see photographs and hear music and language samples from southeast Asia. The content focuses on the physical environment, history, religions, lifestyle, and languages of refugees from southeast Asia.

--Visits with persons from Southeast Asia

In this module, answers to commonly asked questions are presented by Pang Kou, a Hmong woman from the mountains of Laos, and Luan Xiang, a
man from the suburbs of HoChiMinh City (Saigon). They describe their family life, economic conditions, education, and reflect on their refugee

--Situations with feedback

In this module, two different education and human service situations are presented. There are opportunities for analysis of effective and ineffective components within each of these situations. In the school situation, a refugee family is enrolling its children in school. In the social service situation, a refugee is applying for a job.

--Theoretical overview

In this module, an opportunity for the learner to analyze their own values and beliefs is given and comparisons with those of refugees from southeast Asia are given. Concepts related to discrimination, prejudice, and tolerance are presented with pictures and text.

--Conclusion module

In this module, the learner is given an opportunity to return to the problem situations presented in the introduction and is given guidance in the writing of a final plan.

In the disc on Understanding Cultural Diversity: Case of Ojibwe Indians," the same instructional design is being followed. The background module will focus on history, traditional values, language, and cultural history. There will be free-flowing visits with a medicine man, young person on
on a reservation, and an older Indian person living in an urban environment. The learners will have an opportunity to compare their values with those of traditional Ojibwe culture. Students will have an opportunity to participate in two simulations—planning a pow-wow and serving as a member of a parent advisory committee interested in developing a bicultural curriculum.

Instructional characteristics of disc

--Learner choice and self pacing

Students have frequent opportunities to select the extent of content as well as the pacing of their own learning. For example, students may select a school situation or a human services situation. They may choose to see an overview of lifestyles or look at individual components with more explanation or they may do both.

--Active learning

Students are actively involved in the learning process. Presentation of new information requires learner response. For example, learners must rate their own values before receiving presentation of the values of most refugees from southeast Asia. There are ample opportunities for comparison and contrast.

--Feedback

Feedback is given to students after they make responses. For example, sponsor feedback is given to various school activities after the learners have first typed in their own critiques.
Multi-sensori learning sources

Text, voice over text, rolling video, music, slides--these are all combined in the videodisc. In this disc, students see numerous slides depicting the physical environments and lifestyles in southeast Asia. Rolling video is used as a refugee family new to the United States enrolls its children in a school.

Description of field testing and research

Three phases of field testing and research are included with the development of each videodisc. During the first phase of field testing, students from selected classes (where content is appropriate) are brought into the laboratory where they walk through the instruction with full observation by members of the research group. Faculty members from the college also complete the disc. Both students and faculty complete initial reviews of the materials, noting both content/instructional issues and technical issues. Results from these critiques are then synthesized and incorporated into the first editing.

The second phase of field testing is the broader dissemination of the materials over one academic year, where instructors and students use and further evaluate the materials. A final editing will then be completed, incorporating suggestions of this wider group.

The third phase of field testing is a more formal research study. For this disc, a comparative study of the effectiveness of interactive videodisc and videotape/lecture on student content acquisition and degree of satisfaction will be conducted.
Value of videodisc in social studies teacher preparation

There are several areas where the instructional interactive videodisc is enhancing the preparation of social studies teachers, particularly in the areas of cultural diversity and the recognition of the common humanity which we all possess.

Through the powerful medium of the disc, students learn important content which is part of the new core of courses which all educators and human service professionals need. The acquisition of knowledge related to background about the lifestyles, geography, customs, religions, and languages of Lao, Vietnam, and Kampuchea (Cambodia); the opportunity to ask questions of two refugee--one from the Hmong culture of Laos and the other from the suburbs of Ho Chi Minh City (Saigon) in Vietnam; the opportunity to analyze personal values and compare these with values represented by the cultures in southeast Asia; the chance to analyze professional interactions with refugees from southeast Asia in school and social service situations--all of these will, it is hoped, lead to a recognition of the common human characteristics all people possess as the differences in lifestyle and values.

Further, when students are presented with situations which they could confront as teachers and asked to develop a plan of action that will accommodate the needs of the refugee children, they are involved in a thinking process. They collect information and data from the disc to assist in the construction of 1) goals for the children; 2) instructional strategies; 3) curriculum content. This is certainly a valuable simulation of the real teaching experience.
Students also are exposed to a process which is applicable to a variety of situations in which they confront diversity. This process includes gaining background information, visiting with persons from different backgrounds, interacting with persons who are familiar with both the mainstream and the diverse group, as well as gaining theoretical perspectives from which to understanding diversity.

Finally, students use cognitive monitoring and metacognition skills throughout the disc. At the conclusion of each module, there is ample opportunity for learners to compare and contrast their own culture with that of southeast Asia. They also describe how what they have learned relates to them as persons and to their roles as teachers.

Thus, the interactive videodisc Understanding Cultural Diversity: A Case Study of Southeast Asian Refugees has great potential as a resource in social studies teacher education.
References


