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INNOVATIVE TEACHING CAN BE FUN:
AN EXPERIMENTAL COURSE UTILIZING INTERACT TV AND FILMS

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Agricultural economists, whether writing for their journals or at their professional meetings, have shown little interest in pedagogy. The American Agricultural Economics Association has held three workshops on the improvement of education in agricultural economics (1963, 1967, and 1973) and published a separate proceedings for each. However, most of the papers at these workshops were devoted to educational philosophy and curriculum development; in other words, to what should be taught and why, rather than to how. An occasional paper in our journal does address technique or method, but most of the verbiage is devoted to such tools as computer assisted instruction (CAI), the use of gaming models, simulation, and other self-instruction methods.

In this paper I shall describe a two-part experiment that involved (a) teaching a seminar at two separate institutions with the students linked via interactive TV and, (b) the use of films as the primary source of material for the seminars. No claims are made that this experiment represents the model for other institutions to emulate; indeed, it is doubtful that we would repeat the experiment at the University of Vermont. However, we did learn some things that will be useful for other courses at our institution and perhaps at others. Furthermore, I want to demonstrate that if we are willing to innovate, teaching can be fun.

During the spring of 1977, I was a member of a team of 12 agricultural economists and rural sociologists invited to Dartmouth College by Dr. Norman Miller of the American Universities Field Staff Inc. (AUFS) to preview a series of documentary films on rural development in the third world. To quote the AUFS descriptive material: "Faces of Change, a unique series of 25 documentary films, focuses on people under a variety of ecological conditions and on their aspirations and beliefs. The roles of women, education, social and economic systems, and the effects of modernization on values are themes explored in each of five rural settings - the Bolivian highlands, northern Kenya, northern Afghanistan, Taiwan, and the Soko Islands off the China Coast" (Miller, 1976). The task force spent the better part of three days viewing films and writing a report on how the films depict economic and sociologic principles and theories that could be used in classroom instruction.

During the summer of 1977, Dr. Miller, who had directed and produced the Faces of Change series for AUFS, contacted me about cooperating with him in a course on third world rural development. Miller proposed that the Anthropology Department at Dartmouth (where he is a faculty member) and the Agricultural and Resource Economics Department at the University of Vermont jointly offer the course using the Interactive Television Network. This closed circuit TV system links the medical colleges and hospitals

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at Dartmouth and the University of Vermont, and it could be used to tie together the separate seminars at the two institutions. We felt that the idea had merit and agreed to cooperate. The seminar - "Crisis Issues in Rural Development: The Third World" - was offered in the spring semester with eight students enrolled at UVM and 11 at Dartmouth.

In this paper, I will not attempt to evaluate in detail the use of interactive closed circuit TV to teach a course at two separate locations, since that experiment has been evaluated by instructional development personnel at both institutions (Holmes, Miller). However, it will be necessary to describe briefly the organization and structure to appreciate why the film part of the course developed in the way it did.

Dr. William Kelly, Associate Dean of the College of Agriculture and a professor of agricultural education, assisted me in teaching the course. Dr. Kelly had had extensive rural development experience in West Africa. Together with Norman Miller, we developed the issues to be covered and Dr. Miller selected the films that would be used for each problem area. Because of different academic calendars at Dartmouth and UVM, the Dartmouth section of the seminar met for three weeks before being joined by the UVM students. We met together via Interact TV for the next seven weeks, whereupon Dartmouth's term was over and the Vermont students continued alone for the rest of our semester. The scheduling differences caused some problems, but they were unavoidable.

Typically, each two-hour session went somewhat as follows: Miller, Kelly, or I would handle housekeeping details and assignments for the next session. Then, one of us would introduce the day's topic with about 10 or 15 minutes of monologue. The seminar would then break, go off TV, and view the day's film or films. Following the viewing of the film, we were again joined by TV and the remainder of the period involved a discussion of the film or other assigned material. Often there was another professor from Dartmouth or UVM to help with the discussions. Each student in the seminar prepared a major term paper on a rural development topic of his or her choice.

TEACHING AND LEARNING WITH FILMS

Films have been used in university classrooms for years and there is probably no one attending this session who has not shown films to his classes, even if it were only as a fill-in when he was unable to meet the class. Films have been used to entertain, to add some variety to the normal lecture/discussion format, or even to give students exposure to some new concept. However, most so-called educational films leave much to be desired, particularly those produced by or for private industry where the motivation is more often to propagandize than to educate. Even if the film is topically objective, the message may be distorted by the "filters" imposed between the scene as photographed by the camera and the image as it appears on the screen - such things as "mood music" played by a 100-piece symphony or narrations that over-dramatize the message to be conveyed. Furthermore, there is usually only one, or at best a limited number, of films on a particular subject, precluding the possibility of building a course around a film series. The Faces of Change series eliminated most

of these problems.

Produced by AUFS on a grant from the National Science Foundation, the series covers five topical areas: the rural society, education, the rural economy, women, and beliefs and values. Each of these topics is explored in five different cultures: Bolivia, Kenya, Afghanistan, Taiwan, and the China Coast. Thus, there is a matrix of 25 color films, ranging in length from 13 to 27 minutes. This format offers several instructional possibilities; for example, the five topical aspects of a particular culture and country can be studied, or one of the five topical areas can be compared across the five cultures. Each film will also stand alone.

There is a separate essay of 15 to 20 pages in length that can be purchased to accompany each film. The essays expand on the particular topical subject and are closely keyed to events in the film.

There is very little filtering in the Faces of Change series. Background noises are not suppressed. The subjects and events are not posed but are filmed more or less as they happen. Sequences may run for as long as five minutes. The conversations of the people are recorded and some of the films carry "voice over" translations or short English subtitles. Several films have no interpretations of the dialogue or explanations of events and students must draw their own conclusions as to what is happening and why.

The eight students in the UVM seminar were a mixed lot. Three of the eight were women, one of whom had spent some time in Peru. Of the five males, two were graduate students, each of whom had had extensive work experience in developing nations. Only two of the eight were agricultural economics majors, but all were from the College of Agriculture. When joined by the liberal arts students from Dartmouth, we had a mix of interests and backgrounds that led to widely varying viewpoints.

Although several of the students in this seminar, both at UVM and at Dartmouth, had been in developing countries, the typical University of Vermont agricultural student comes from a middle-class parochial, New England, small town background. This creates problems when one is trying to teach a cross-cultural, multidiscipline rural development course, since the student has no experiential frame of reference. The films were useful in providing students with a common experience and in exposing them to the realities of developing country situations. In fact, the relatively unfiltered view of life in these cultures provided an occasional cultural shock to those students who had never been out of New England.

We attempted to use the films as true visual evidence, and students were continually urged to search for empirical evidence that would support hypotheses that would form the basis for broad generalizations. We were not entirely successful, in part because this was a new experience for students who had been spoon fed in lectures for most of their academic careers, and in part because not all of the films lent themselves to this approach.

EVALUATION

This course, offered as an experiment, was watched with interest and the interact television aspects were carefully evaluated by both Dartmouth

and UVM (Holmes, Miller b). The following quotes are from the course evaluation by Dr. Miller: "Overall, I think the course was a modest success. In terms of technology, it worked well...The system was not without flaws. Interact Television put some emotional fatigue factors into the learning process that had to be dealt with. For example, participants had to learn to relax during televising...The quick interaction possible in a face-to-face seminar was often lost over the television airways, particularly in the early weeks. Students were uneasy about dealing with unknown people who appeared 'four inches tall' on a television monitor."

In the UVM evaluation, David Holmes wrote:

1. Except in comparison to broadcast TV, or the transmission of video tapes over the television circuit, or individualized learning formats, Interact TV is not particularly interactive. There are several obstacles (including emotional, knowledge and skill factors) that tend in most circumstances to inhibit a free-flowing, comfortable dialogue between people. The face-to-face seminar will continue to be a much more effective means of pursuing educational goals that require complex and subtle human communication.
2. The Interact system works best in a teaching model characterized by a predominantly one-way flow of information from instructor to students. Limited, inevitably formalized, dialogue with the instructor enhances this process. When a one-way communication flow is accepted by the students as the prevailing instructional arrangement, students are unlikely to expect frequent teacher-student or student-student dialogue. Hence, the course will not carry a credibility problem based on unrealistic expectations about the quality and frequency of person-person interaction.
3. A teaching model calling for extensive dialogue and group interchange (such as the AREC 256 course) is extremely ambitious and requires experienced and skilled students to reach its potential. Teachers and students need training and practice in order to make it work. Except in a very well financed and very comprehensive interact-based curriculum, it is unlikely that many faculty or learners will reach the necessary level of skill and comfort.

No formal evaluation was done on the use of film as an instructional technique. Indeed, it would have been difficult to do so because there were so many other variables - the interact aspect, the attempt to meld into one class liberal arts, Ivy League students with the technically-oriented students at a state university, and the physical separation of the faculty responsible for the course. The Vermont students liked the format and found the films a useful source of information and a welcome respite from their other lecture courses. If the seminar performance of some of the students was less than we had hoped, it was due in part to their shyness before the television camera and monitor, or their inferiority complex when confronted with the more vocal Dartmouth students.¹

COSTS

The budget for the course was modest. Disregarding professional salaries, the highest cost was the \$2,500 paid to the Interact Television system for use of their facilities. It covered about 20 hours of transmission over the seven week period, and was paid for by a Sloan grant at Dartmouth.

The highest nonsalary cost to UVM was the \$450 spent for film rental and shipping. If the films were to be used on a continuing basis, it would be more cost effective to request the institution to purchase the set of 25 at a cost of about \$5,800. The total nonsalary costs to UVM was about \$800, or \$100 per student enrolled.

CONCLUSIONS

We hope to offer the course again, but just on our own campus. As a result of this experience we have arrived at some conclusions that should be useful to whomever assumes the responsibility for the seminar, and may be useful to others who have not used films extensively in their teaching.

1. An orientation session on the use of films as visual evidence rather than just for entertainment is necessary.
2. Instructors should preview each film shown and be prepared in advance with questions and issues.
3. The films should be available for individual viewing outside of the classroom showing, and students should be encouraged to view them either before or after class showing.
4. Students should be encouraged to map and analyze each film in detail, identifying central themes that lead to principles and generalizations.
5. When showing in the classroom, the lights should be only partially dimmed to enable students to take notes as they view.

Two further conclusions are specific to this set of films:

6. If the whole range of issues covered by these films is to be taught, it will be desirable to utilize guests from other disciplines or have the seminar team taught. Few agricultural economists or rural sociologists have the breadth of academic training to be knowledgeable in all issues covered by these films.
7. The films and essays alone will not provide enough reference material for most instructors.

In the "instructor's notes" Norman Miller sums up the use of films as follows:

"Some people believe a peaceful revolution is coming - a revolution in film usage. As with most revolutions, it will reject a great deal of the past and hold many hopes for the future. Gone will be the cumbersome technology, the amateurish materials, the staid classroom format, and the passive student responses.

In their place will be a different kind of film and a far more flexible technology that allows the instructor to be an innovator and, at the same time, to have access to a wide range of pertinent materials. This particular revolution will not be in the use of films as 'enrichment' nor as entertainment, but in the serious, scholarly, enormously exciting application of film to the learning process."

FOOTNOTES

¹Course evaluation comments of two UVM students support this conclusion.

"What stood out was the first day when I suddenly realized I was on television. I never did overcome shyness about being on the screen and microphone. It was a problem for many of us and should be considered in future courses."

"What I was not able to understand was why some UVM students would not participate unless specifically asked to, while Dartmouth students all were able to contribute. The value was not just a cross-cultural study of underdeveloped and western values, it was also a real cross-cultural experience with respect to Dartmouth and UVM."

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