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Video Tape Use in a Micro-teaching Methods Course

ROBERT C. BAKER *

ABSTRACT — Video taping is used to enhance a prospective teacher's in-class confidence, to provide experience with audio-visual equipment, and to facilitate self-analysis of techniques applied in a general science methods course.

Requirements of the Science Methods course at Bemidji State College include the general methods course examined here and offered to students majoring in Chemistry, Physics, Biology and General Science. The course incorporates additional experience in several of the modern curricular programs (BSCS, PSSC, CHEMS, etc.) plus other topics selected on the basis of their importance to the beginning teacher.

The video-tape experience in the course being analyzed consists of three separate phases, each designed to support the preceding phase. They are discussed separately, along with the rationale for use of each phase.

The first phase is an experience in "in-class" teaching. It should be emphasized that this initial phase is preceded by discussions emphasizing the importance of planning lessons, teaching techniques, and methods of class presentations (discussion, demonstration, lecture, etc.). The students are then asked to select a topic (concept or principle) that they would like to "teach" to the class. They are allowed the flexibility of choosing a topic so as to avoid any feeling of compulsion. This also tends to instill a high level of confidence in the prospective teacher, in that he is requested to make a selection on the basis of feeling comfortable and competent to present the topic.

The presentation has three basic requirements: the student must include a demonstration; an audio-visual aid, preferably a bulletin board, must be used, a lesson plan, showing the presentation outline, time devoted to each segment of the lesson (introduction, demonstration, etc.) and materials needed, must be submitted to the instructor for approval not less than one day prior to the presentation. The student is also informed that the experience is to run not longer than 30-35 minutes in a common 50-minute class period. The remaining time is devoted to criticism by the class. It should be pointed out that the class is instructed to criticize constructively, and that this is highly desirable if improvement is to result.

After the student has completed a sometimes traumatic presentation before his peers, he is now prepared to perform before a group that holds little, if any, peer group status. This though, can also lead to some apprehension — with the introduction of video tape equipment.

In organizing this second phase, the student is asked to select a topic from a list of topics to be covered by freshman laboratory students. The restrictions here are more limiting, in that the student may not be 100 per cent enthusiastic about any of the available topics. If this situation arises, it is pointed out to the student that there will, in all probability, be a number of topics that he will be expected to teach in the coming years that may fall into this category. It might be well to point out also that the Biology majors select topics from the Freshman Biology labs, Chemistry majors from the Freshman Chemistry labs, etc.

The student then must work closely with the laboratory instructor in constructing his teaching plan for this phase. He must include everything that the laboratory instructor would ordinarily include, plus the completed plan. Innovations that he may wish to introduce must meet the approval of both the lab instructor and the science methods instructor, and must fit within the usual 15 to 30 minute time limit devoted to the introduction of a laboratory experience.

The actual video tape experience, then, is fairly well-structured. The equipment used is a Standard Ampex 7500 1-inch helicel scan commercial recorder. The camera is a Dage RGS-11 mounted on a dolly, located usually in one corner of the laboratory, and is equipped with a zoom lens. The audio is provided through a lapel microphone on a cord around the neck of the student, with a long extension cord back to the recorder.

During the presentation both the lab instructor and the methods instructor are present, along with one equipment technician. The two instructors monitor the student's performance. The laboratory instructor takes note of possible improvements in the academic presentation and the methods instructor does the same concerning techniques and methods. This is accomplished by observing the performance and at any given point in time, noting the incident, and at the same time observing the footage indicated by the footage counter on the video tape recorder. This phase of the experience is concluded by obtaining about five minutes of tape showing the student working directly with the class he has just instructed. This is particularly useful to the student, in that he finds out, to a certain extent, the limits of his effectiveness. Often, for example, he may find that procedural steps that he felt were clearly presented, were not completely understood by the students. This knowledge alone can be most profitable to the methods student.

The final phase of the experience immediately follows the taping. The recorder, with the monitor, is taken into an adjoining room, and the student views the tape using the notes provided by the two instructors. The student is also expected to take notes relative to his performance.

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and is required to write a critique as a part of the final examination for the methods course.

It might be pointed out, also, that during the “instant replay” following the taping, neither instructor is present. The notes given to the student are felt to be adequate for this initial viewing. Also, hearing and seeing oneself for the first time on video tape can involve some trauma, and it is reasoned that this need not be shared with others. In addition, one of the basic purposes of the experience is to develop in the prospective teacher an attitude of self-evaluation and criticism. The development of this attitude is most important because the teacher will seldom have the advantage of outside supervision in the actual classroom situation. It is also felt that the student exposed to this use of video taping will be more inclined to use the method later for self-analysis.

Finally, the student is requested to review the tape at his convenience 3-4 times before the end of the school term. This is arranged through the Audio-Visual Center, and can be done to fit a schedule.

It has been found, from student feedback, that this experience is apparently well received. In the three years in which the procedure has been followed, almost 100 students have participated in this activity, and only one negative response has been received from evaluation questionnaires. Some unedited, randomly-selected, student reactions follow:

There is no better way of learning about yourself than observing what you are teaching.

A valuable asset in showing me mistakes which otherwise might go unnoticed.

It scared the hell out of me . . . and it's a lot of work, but I would very much like to try it more often.

It's a truth teller . . . and one sees himself as he actually is.

You can see errors you have, much more vividly, than if people just tell you about them.

I really was able to see what I was doing wrong and where I can improve.

It is anticipated that the college will continue this experience as an integral part of the methods course, but changes and modifications will be considered on the basis of student reaction and technological advances of the future.

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Parental Participation in a Sex Education Program

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ABSTRACT — This paper reports selected findings of an evaluative study of parental participation in a sex education program. One of three hypotheses is confirmed, and the direction of findings suggests the need for further development and testing of hypotheses in this area.

Among the notable developments in American society since World War II, accompanying changes in institutions which have altered the relation of marriage, family, and courtship to the rest of society, has been an accelerated change in sex mores. This change has been made manifest as a sharpening gap between generations, which has resulted in the pressure to shift the task of sex education to the schools. Inevitably this, in turn, has stimulated extreme traditionalistic reactions against such education on the part of John Birchers and other radical rightwingers. These developments have meant that the teachers upon whom the burden of sex education has tended to rest are faced with the problem of educating the parents, too; or if not “educating” them, at least acquainting them with their programs and winning their cooperation.

Hence, when the proposal was made to undertake a pilot parent training project to accompany the sex education program in St. Paul, Minnesota, an opportunity was provided to examine some of the sociological dimensions of the changes in society and culture of which the rise of sex education is a part. A review of the recent history of sex education was undertaken. On the basis of materials reviewed, a number of hypotheses were developed.

It was proposed to gather data for the test of these hypotheses on the basis of self-administered questionnaires given before and after the special parent training program in St. Paul. Scales were designed for this purpose and were tested for reliability and validity. The major means of analysis of the data were t-test and analysis of variance.

The questionnaires were administered to 71 persons signing up for five classes conducted by five teachers. At the conclusion of the study, 18 of the original group declined to complete the post-training questionnaire. Hence, as a result of this and other contingencies, only 53 usable cases could be obtained.