professionals with exposure to decision-making, group dynamics, coordinating, communication and organizing. By incorporating new problem-solving techniques, such as the 'soft systems methodology' or the 'farming systems approach,' into selected current coursework, students would have the opportunity to develop an array of competencies anticipated for their intended professions, as well as "learning how to think!"

Summary

It is time to reexamine undergraduate education in agriculture. We cannot continue to put pretty paper on an empty package. Undergraduate instructional programs in agriculture may never rejuvenate the peak enrollments of the past, but they can certainly strive to draw students by providing for their needs. As a reflection of the changing face of agriculture, undergraduate instructional programs in agriculture will have to continue to market themselves. If programs exist which prepare agricultural professionals for the future, the marketing will probably be worthwhile. Undergraduate instructional programs which emphasize the executive skills necessary for students to enter into professional positions in either the public or private agricultural sector may prove to be very attractive to current students.

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Improving Oral Communications Skills Using Video

Linda J. Cox and Michael V. Martin

Introduction

As Ladd points out, some of the most frequently used, versatile skills that students should acquire are generally not the topics that receive the most attention in our courses. Effective communications skills are consistently identified as being one of the most important skills to teach college students. At the same time, these skills are frequently among those cited as being deficient (Davis *et al*). The improvement of oral communication skills, moreover, receives much less attention in most curriculum than does the improvement of written communications skills (Katz).

It has been our experience that the building of communication skills in most curriculums is largely limited to specific speech and writing courses. Certainly it is important to include this type of course-work in undergraduate programs. Still, it is our observation that when skill-building is included in subject matter courses learning and retention are enhanced. The use of video presentations give students an opportunity to express themselves orally, while simultaneously developing their research, reading and writing skills (Kaplan). The purpose of this short paper is to introduce and discuss the integration of video presentations into standard courses as a means for improving students' oral communication skills.

Video Assisted Instruction at the University of Hawaii

At the University of Hawaii's Department of Agricultural and Resource Economics, video-aided instruction is utilized in an introductory agricultural economics course, an upper-division agricultural marketing course, and an upper-division agricultural finance course. Historically about 15 students have been enrolled in each course, and all of them were majors in departments within the College of Tropical Agriculture and Human Resources. In each course, the students are required to make a 10 minute presentation based on a term paper they prepared for the class. The presentations are recorded on video tape and, during the class meeting following the taping, everyone's video is viewed and evaluated by the entire class. Thus, each student benefits from prompt feedback as well as peer, instructor and self evaluation. The term paper/oral presentation is given sufficient weight in determining the final course grade to insure that each student takes the assignment seriously. Further, the nature of the assignment is outlined in detail early in the term so that each student has ample time to prepare.

We have found that emphasizing communications skills in subject matter courses is particularly useful at a school like the University of Hawaii. English is a second language for a large portion of our students, making every opportunity to hone their English communication skills important. Even for English as the first language students, experience in putting together a competent presentation of technical material can improve both their capacity to communicate orally and their understanding of the subject matter.

The Psychology of Learning

The decision to experiment with video technology to integrate skill-building and subject matter instruction rests on a straight-forward application of teaching/learning theory. An examination of the basic

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teaching model introduced by Glaser illustrates how the role of video, as described here, can enhance the educational process (Cecco and Crawford). As Figure 1 shows, the model divides the teaching/learning process into four parts. The instructional objectives are those the student should attain upon the completion of instruction. Entering behavior describes the student's level, including his previous development, intellectual ability, and all motivation, social and cultural determinants of learning, before instruction begins. Instructional procedures describe the teaching process, and, finally, performance assessment consists of the tests and observations used to determine how well the student has achieved the instructional objective.
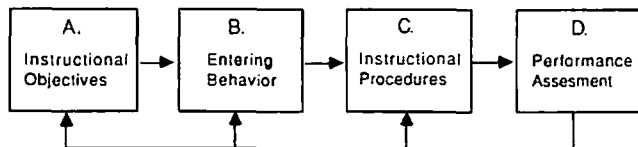

Figure 1. A Basic Teaching Model

Video can be used as an instructional procedure to meet a specific objective. This particular objective is assumed to be that the student be able to communicate orally, an analysis of a problem or situation specific to the field of study. The effectiveness of the presentation hinges on how well the audience grasps the essence of the analysis.

The conditions shown to be the most important in learning any skill, including communication skills, are contiguity, practice and feedback (DeCeccoo and Crawford). The sequence of any course should provide the student with knowledge of the proper order, contiguity, to conduct an analysis. The knowledge that the presentation will be graded should give the student sufficient incentive to practice, while requiring the students to view the video provides the opportunity for graphic feedback and self-evaluation.

Feedback has been found to be the single most important variable governing the acquisition of skills (Irion). Therefore, the feedback provided by viewing the video is expected to make the biggest contribution to the students' acquisition of communication skills. In addition, the motivational aspects of feedback, i.e. watching oneself on tape, will affect the amount of effort the student invests in practicing the skill. Learning defined as, "the process by which behavior (in the broad sense) is originated or changed through practice or training," can, thus. be enhanced by the use of video (Garry and Kingsley, p. 10).

Suggestions for Video Use

Any course in which a paper is assigned can be modified to include a video presentation of the paper. Generally such classes are upper-division so it is very likely that the students have already completed an introductory speech class. This ensures that the students have a rudimentary knowledge of how to organize and present a speech. If the students do not have such knowledge a short summary should be provided to them. A quick review, just before starting the presentations, is helpful, even for those who may know the basics.

At the time that the video technique was originally introduced, students at the University of Hawaii were not required to take a specific speech class[1]. Therefore. a hand-out was developed which outlines the rudiments of an effective oral presentation (see Appendix 1). This hand-out is still in use and provides: (a) a starting point for the preparation of a presentation; (b) a framework useful in the peer review process, and (c) criteria for grading each presentation.

Our experience suggests that the presentations should not occur until the end of the term. This is for two reasons. First, the students needed sufficient time to complete the paper on which their presentation was based. Second, at the end of the semester, the students are familiar with the instructor and comfortable with their fellow students. This serves to reduce presentation anxiety.

Still, students feel uncomfortable about watching their presentation on video. This is evident because nearly every student in every class in which the presentation have been assigned asked that the presentations not be taped. The students were reassured that the assignment was not meant to embarrass anyone, only to provide a valuable learning experience. These feelings of anxiety are lessened if the group is well acquainted.

Various methods can be used to incorporate a video presentation into a course. A large group can be split up into smaller groups of four to six. We have found that the assignment is more effective if the presentation is given to an audience, while the taping is incidental. Otherwise, the student must become concerned with how to speak to a camera, rather than to an audience.

Regardless, the recording technology should not intrude excessively on the assignment because the primary objective of the oral presentation is to improve the ability of the students to communicate to a group. To help achieve this, the classroom should be arranged so that the camera is behind the audience.

To complete the taping in a timely fashion, the students are given a timetable so each speaker can immediately be followed by the next in line. While viewing the video, the students are asked to write a critique on each presentation, including their own, while the instructor does the same. In completing their critiques, the students are asked to keep in mind the seven points of a good presentation discussed prior to the presentations.

If at all possible, it is helpful to provide an opportunity for each student to re-review his or her presentation individually. The student can go back over difficult parts of the presentation, looking for ways to eliminate these difficulties.

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[1]Requirements have now been changed so that currently an introductory speech course is required of all students.

Finally, students should be assured that after review and grading their tapes will be erased. This removes the concern that their tape will somehow result in future embarrassment.

Video's Effectiveness

In our experience the use of video-taped oral presentations has both improved student's communication skills and enhanced the learning of subject matter. It integrates skill-building and subject matter mastery, provides prompt, graphic feedback, and permits an important self-evaluation.

The evaluations for the courses in which video presentations were used yielded the following student comments:

"The best thing about this course was the video."

"I learned the most from the video."

"Even though I hated it, the video was the most useful thing we did."

These comments support the overall perception of the instructor that most of the students found the video presentation to be among the most useful components in the course design. At the same time, it has been found to be one of the most difficult. One student who had the opportunity to give two video presentations in successive courses indicated he found seeing his improvement very satisfying.

In discussing this use of video technology in the classroom with our colleagues across the country we found little evidence that it has been widely adopted. This seems a bit odd in the light of the extensive use of video in teaching physical skills such as golf and tennis. It has been our experience that the building of academic skills can be improved with the integrated use of this technology.

Summary

Our primary purpose has been to share our experiences using videos with colleagues in other agricultural disciplines and at other institutions. We encourage them to experiment with and refine the use of this and other emerging technologies to improve classroom instruction.

We certainly do not believe that technology can substitute for well designed classroom instruction. However, we do believe it can improve any educational program. As Colleges of Agriculture are continually challenged to meet new instructional demands. a willingness to innovate will likely have significant payoffs.

Appendix

How to Make a Better Presentation

You can make your presentation better if you incorporate the following suggestions:

1. In opening your presentation, take a minute to stand and face your audience, smile, relax, and begin your talk.

2. Be sure that you are familiar with the content of your presentation so that you will not read to the audience.

3. Speak clearly and with enough volume so that everyone can hear you. Be sure any visual aids you use can be seen by everyone and using them does not interfere with the flow of the presentation.

4. To avoid monotony, vary the tempo of your speech and pitch of your voice. A well placed pause will get the attention of the audience immediately. Vary your sentence patterns and gear your speaking style and choice of words appropriately to the group to whom you are speaking.

5. Look around at the audeince and use your head and arms to help get your point across. Eliminate any distracting verbal or physical habits. An expressive face and eyes are also part of the communication process.

6. Act as if you have something very important to say and are pleased to be able to share it with the audience. Don't let your non-verbal messages conflict with your verbal ones.

7. Lastly, have a strong conclusion, going over the main points you want to leave in everyone's mind. You should leave the audeince with a clear understanding of your message. Then, take a minute to enjoy your success, don't rush off as if you are late for your next class.

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