

Case Study

Poster Display—Alternative Term Project

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Abstract

Developing communication skills while gaining additional knowledge beyond that presented in the classroom is a partial goal of term projects in many post secondary agricultural courses. The effectiveness of small-group poster displays as a term project alternative to individually written term papers was evaluated. Student responses to an evaluation questionnaire are given. Students felt that the poster display project was of greater overall educational value than written papers as a term project.

Effective communication of technical information to the general public is a skill that should be possessed by graduates of post secondary agricultural programs. Training of students in effective information transfer is incorporated in many educational activities. Most institutions suggest or require that students include courses in writing and public speaking in their educational programs. Many instructors of agricultural classes also include projects, such as term papers and oral reports, to allow students to develop communication skills.

Student projects in various formats have been successfully used in a cross section of agricultural courses (1, 2, 4, and 8). Greater student interest is developed by increased student responsibility (1). Students participating in small group projects generally find them socially pleasing and an effective vehicle for becoming acquainted with fellow classmates (6). Peer pressure to cooperate and intergroup competition can have a positive effect upon poorly motivated students (6). A class newsletter has been reported to enhance extra-subject matter communication and assist in developing student-teacher relationships (5).

Term papers provide an opportunity for students to investigate a subject beyond what is normally covered in the classroom and to develop further their skills in written communication. Term papers generally permit a limited amount of student-instructor interaction. Milford (7) feels that teacher-student relationships are more influential than course content and teaching methods in determining student attitudes toward a course. Students generally do not gain from the investigations of one another unless the term papers are shared as oral reports or assigned reading.

The educational value of term papers is the combined outcome of the efforts and thoughts that a student expends in researching a topic, analyzing and synthesizing the gathered information, and communicating the

material in a written format. In contrast, students preparing poster displays undertake similar information gathering, synthesis, and analysis activities; but they communicate their final product in a format different than they would if they were preparing a term paper.

This investigation was undertaken to evaluate the effectiveness of small-group poster displays as a term project alternative to individually written papers. This investigation was based upon the general hypothesis that the overall educational value of a small-group poster display was equal to that of a term paper. The specific objectives of the poster display project were as follows: 1) allow students to explore a topic of interest in the area of soil conservation and land use; 2) allow students to gain experience in functioning of committees; 3) allow increased student-instructor interaction during all stages of the project; and 4) allow students to develop communication skills involved in the display format.

Procedure

The investigation was performed as part of a course in soil conservation and land use. Sixty students were enrolled in the course which consisted of three lectures a week. The poster display project was conducted by teams of three to five students. Display themes were to be current soil conservation and land use topics. A title, objectives, support information, summary, and the names of the group members were to be included in each display. A proposal meeting with the instructor and team members was held at least one week before the display was due. The posters were prominently displayed for a week in a learning center (3) where they were viewed by class members and other students. Displays were evaluated by the instructor, an outside faculty member, and two randomly selected class members all of whom used a standardized form (Table 1). The evaluation criteria and procedure was explained to the students at the onset of the project. An evaluation meeting of the instructor and

Table 1. Poster Display Evaluation Sheet

Display Title:	
A. General	
1. visual appearance (20 pts.)	_____
2. appropriateness of the subject (10 pts.)	_____
B. Content	
1. correct format (includes objective, support information, summary, and team members' names) (10 pts.)	_____
2. accuracy and objectivity of information (20 pts.)	_____
3. appropriate level of information (10 pts.)	_____
4. does the display accomplish the objectives (20 pts.)	_____
5. overall effectiveness of display (30 pts.)	_____
	TOTAL _____
Place constructive criticism on the reverse side of this form.	

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Table 2. Poster Display Project Student Evaluation Sheet

- Please complete this form:
1. What was the level of knowledge gained from investigating your topic for the poster display compared to that normally gained through a term paper?
 - a. much higher
 - b. higher
 - c. equal
 - d. less
 - e. much less
 2. How valuable was the experience in small group participation that was involved with the poster display project?
 - a. very valuable
 - b. valuable
 - c. little value
 - d. no value
 3. How valuable was the increased student-instructor interaction during the poster display project compared to that associated with a term paper?
 - a. very valuable
 - b. valuable
 - c. little value
 - d. no value
 4. How much knowledge was gained by viewing the poster display projects prepared by your classmates?
 - a. a great deal
 - b. some
 - c. little
 - d. none
 5. On the basis of knowledge gained and overall value as an educational experience which of these formats would you select for a term project?
 - a. term paper
 - b. oral report
 - c. poster displays
 6. Place your comments concerning the poster display and suggestions for improving the project on the bottom of this form.

team members was held the week after the display was presented. All members of a team received the same grade unless a member failed to be an active participant. Students were required to view all displays, and the topics were covered on unit exams. Students were asked to evaluate the project (Table 2) after completion of their display.

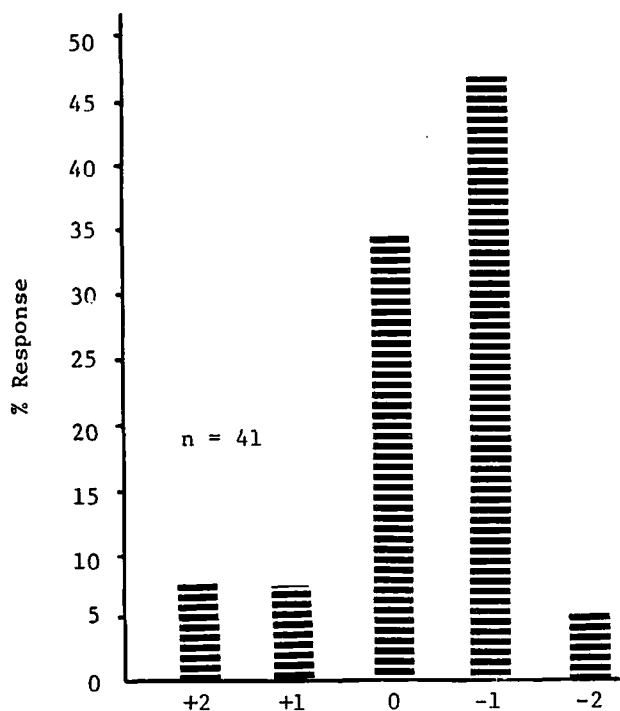


Figure 1. What was the level of knowledge gained from investigating your topic for the poster display compared to that normally gained through a term paper? (+2 = much higher, +1 = higher, 0 = equal, -1 = less, -2 = much less.)

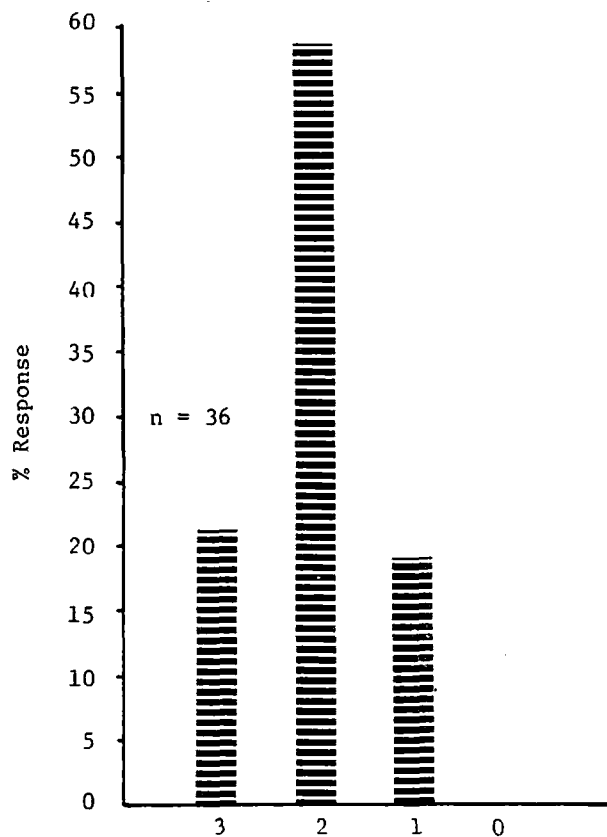


Figure 2. How valuable was the experience in small group participation that was involved with the poster display project? (3 = very valuable, 2 = valuable, 1 = little value, 0 = no value.)

Results and Discussion

Topics selected included resource conservation by reduced tillage, control of shoreline erosion, farmland preservation, channel terrace systems, sources of non-point pollution, surface mine reclamation, tile drainage systems, soil conservation in China, and water quality status of the Red Cedar River. The balance between learning new information and synthesizing previously provided material varied among the topics.

The level of knowledge that students perceived they gained from investigating the topic for preparation of the poster display was slightly less than or nearly equal to that normally associated with writing a term paper (Figure 1). Many groups divided the topic into individual areas of responsibility. This division of labor among the members of a team compared to a term paper where a student individually investigates an entire topic may have been responsible for the reported lower level of knowledge gained during the investigation phase.

Group activities should be included in student education because most students will become involved in committee activities after graduation. Students felt that participation in the small groups involved with the poster display project was a valuable experience (Figure 2). They also enjoyed becoming acquainted with their classmates.

Most students considered the increased student-instructor interaction during the proposal and evaluation meetings to be valuable compared to the degree of inter-

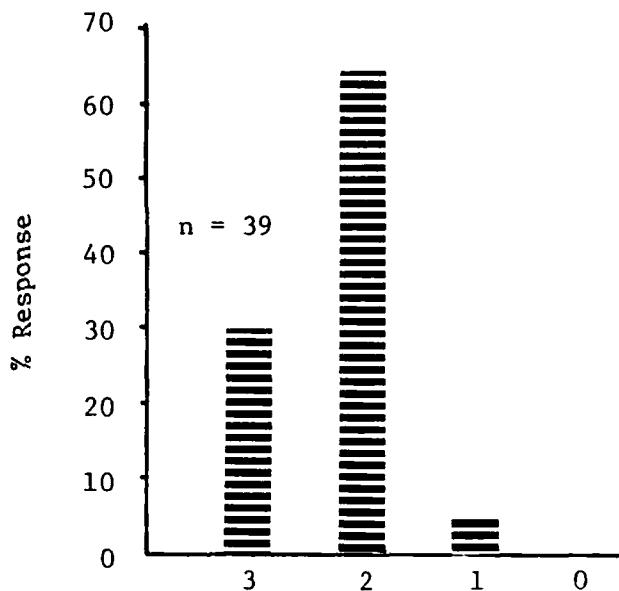


Figure 3. How valuable was the student-instructor interaction during the poster display project compared to that associated with a term paper? (3 = very valuable, 2 = valuable, 1 = little value, 0 = no value.)

action associated with a term paper (Figure 3). Term papers generally permit only limited student-instructor interaction and tend to be impersonal. The interaction involved in this project helped to develop an open and friendly atmosphere that carried over to the lecture phase of the class.

Students gained knowledge from viewing the poster displays prepared by their classmates (Figure 4). Comments from student evaluation sheets (Table 2) showed that students enjoyed viewing their classmates' poster displays. The diversity of topics selected complemented the lecture phase of the course and generated discussion both in and out of class.

Many students (61 percent) felt that the poster display project was a more valuable overall educational

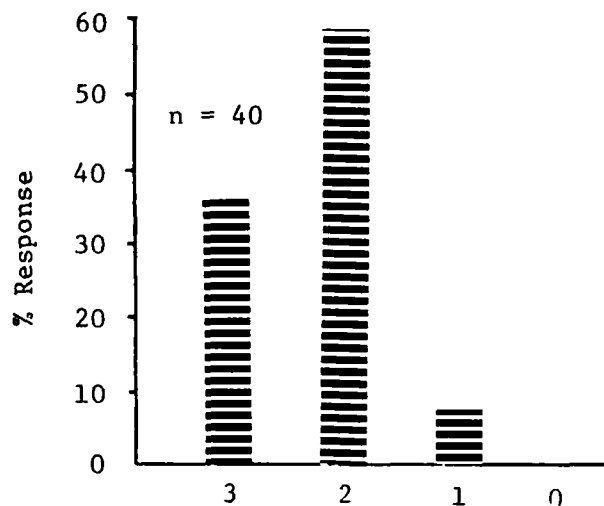


Figure 4. How much knowledge was gained by viewing the poster display projects prepared by your classmates. (3 = a great deal, 2 = some, 1 = little, 0 = none.)

experience than is a term paper project (Figure 5). These conclusions are based upon the students' experiences with term paper projects and oral reports in other classes and thus are not a direct comparison to the poster display project. The manner in which any project is administered in a class will influence the student's reaction. Poster displays should not replace all term paper projects but should be considered as an alternative in some courses.

Literature Cited

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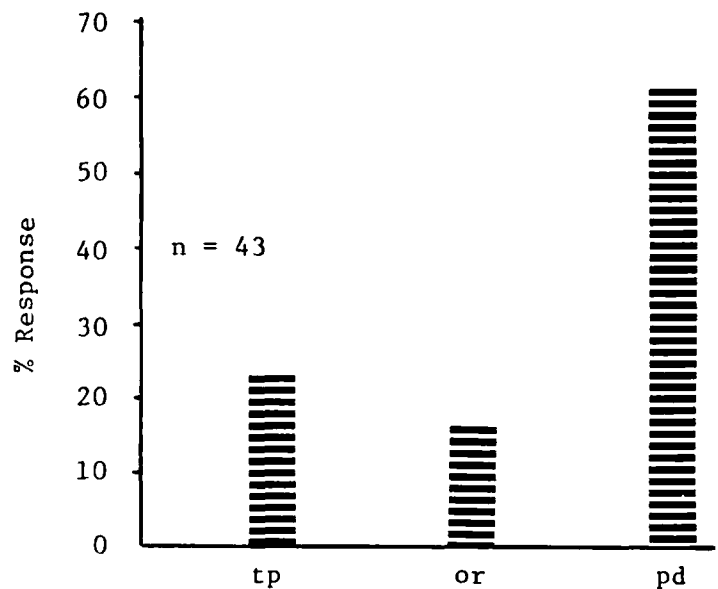


Figure 5. On the basis of knowledge gained and overall value as an educational experience which of these formats would you select for a term project? (tp = term paper, or = oral report, pd = poster display.)