Drawing from research in the areas of education and sociology, the author has developed a rationale and three models for using students as teachers and counselors. That students taught and/or counseled by other students will benefit from the experience has been demonstrated in recent research, but the present proposal differs in that it does not require the students who teach or counsel to be academically superior, and the greatest change in desired behavior is predicted for the counselor or tutor, not the counselee or tutee. The models included are for student counseling, a freshman English composition course, and a biology course. The objectives, procedures, and a plan for evaluation are provided for each model. These theory-derived guidelines were developed to assist educational planners to deliberately capitalize on the influence which peers are known to exert on each other, and the evaluation plans make it possible to determine whether the programs have their intended effect. (MC)
STUDENTS AS TEACHERS
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TOPICAL PAPERS

1) A Developmental Research Plan for Junior College Remedial Education, July 1968

2) A Developmental Research Plan for Junior College Remedial Education Number 2: Attitude Assessment, November 1968

3) Student Activism and the Junior College Administrator: Judicial Guidelines, December 1968

4) Students As Teachers, January 1969
INTRODUCTION

This topical paper is the fourth in a series that presents paradigms for studying the effects of changed practices in junior colleges. Future papers will offer other models for assessing learning and the use of instructional techniques.

By providing these designs, the Clearinghouse hopes to stimulate research in the junior college field. Individuals or groups desirous of obtaining further information about the models may correspond directly with the Clearinghouse. It is hoped that when these designs are used, results of the studies will be sent to the Clearinghouse for distribution through the ERIC system.

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STUDENTS AS TEACHERS

Just before the last national election, a major political candidate rendered this judgment about current unrest among college students:

I wish I could get over to them this one idea: colleges are for learning . . . and you can't learn while you're talking.

This bit of cast iron logic proved to be quite a crowd pleaser and demonstrates peoples' feelings of certainty about what students ought to be doing while they are learning. It would also appear that teachers subscribe heavily to this view. Try walking past a dozen college classrooms and note what is happening as you go by: the teacher is talking.

It is the purpose of these comments to suggest some deliberate designs for instruction which change students' behavior as a result of talking.

To develop these strategies we can turn to our own intuitive experience as teachers. Teachers frequently comment that the time during which they learned the most about a subject was when they first tried to teach it. However, in educational circles, we do not yet have a rationale to account for the special impact which the act of teaching has upon the teacher. Nor is there readily available a set of procedures for implementing learning situations wherein students can profit from trying to teach.

It is true that many colleges have launched programs involving the use of students in tutorial or counselor-like roles (10). Knoell (11) recently suggested that special problems of the educationally disadvantaged should be attacked through use of students in recruitment and retention efforts.
However, discussion of these programs seems to be characterized by two emphases:

1) it is implied that those students serving as assistant counselors or tutors must be superior students, and

2) the basic reason for establishing the program resides in benefits to be received by the counselee or tutee.

There are, of course, research studies which have used average or below average students as tutors (7)(8). Also, some researchers have noted the effects of tutoring upon the tutors (2)(3).

Other studies have attempted to describe the dynamics of the processes which operate when young students of various ages and status levels interact with each other (1)(9)(12).

However, the task remains to translate from the research literature a simple rationale to guide teachers in designing learning activities so as to deliberately capitalize on the effects upon students who do the teaching.

Perhaps the clearest argument comes from the sociologist, D. R. Cressey (6). Re-phrased within an educational context, the situation is something like this:

In looking for the determinants of student behavior we must look at his verbalizations. His verbalisms represent a symbolic codification of the norms, values, attitudes, rationalizations, rules, rituals, schedules, and customs of the social organization within which he exists. Words exist as group definitions of what is appropriate and are learned from other
members of the group.

If student behavior is a function of attitudes embodied in words learned from membership in groups, attempts to change that behavior should concentrate on processes for changing verbal behavior.

As an illustration, let us consider a student attitude which schools might wish to modify. Students have been quite vocal about their perception of the futility of intellectual pursuits as exemplified by their course work. The verbalisms which serve as the underpinning for such attitudes might include the terms "the establishment," "turn on. . . drop out," "you can't trust anyone over thirty," etc.

What strategy is most appropriate to bring about change in these verbalizations so as to undercut this pre-packaged perception of the school? Cressey (5) suggests a general principle, "retroflexive reformation," again re-phrased to fit the educational setting:

The most effective mechanism for producing change will be found in groups organized so that anti-school students are induced to join with pro-school students for the purpose of changing anti-school students. When anti-school student A joins with some pro-school students to change anti-school student B, we can predict the greatest change in student A, not student B.

The basic notion here is that when a person tries to change others, he necessarily must use the verbalizations appropriate to the behavior he is
trying to create in those others. In attempting to change student B, student A identifies himself with pro-school students and assigns status to others and himself on the basis of pro-school verbalizations and conduct.

Stripped down to essentials, what does the proposed strategy consist of? An educational planner needs to provide for the following elements in his program design:

1. A reference group must be provided. This group would likely contain one or more institutional representatives such as teachers or counselors. In addition there should be present some students who have managed to take on the skills or attitudes which represent the program objectives. This reference group must provide the sub-cultural norm or expectation that "students should attempt to act in these ways."

2. Group A. This group consists of a random sample of the target learners. Students from Group A will be asked to join the cause of the reference group, i.e., try to get other students to modify their behavior in accord with the program objectives.

3. Group B. Members of this group can be any persons who Group A might urge or assist in taking on the behavior described by the program objectives.

4. Group C. This group would serve as a comparison baseline and should be another random sample of the students from which Group A was selected.

After a specified length of time during which 1) Group A has exerted itself in attempting to influence or train Group B, and 2) Group A has been reinforced by the reference group for its efforts, the program planners may compare the achievement of Group A against the control group, Group C. Group A's performance should exceed Group C's performance on the program objectives.

To apply the rationale, three models are proposed which might be imple-
mented in a counseling program, an English composition course, and a biology course.

Model I: Counseling

Objectives: A randomly selected group serving as "counselor assistants" shall demonstrate superior performance on three indices:

1) Lower drop-out rate,
2) Higher overall grade point average,
3) Self-reports of satisfaction with the school program.

Procedures:

1. Counselors shall recruit several 2nd or 3rd semester students who, as entering freshmen, had a high potential as predicted drop-outs. These students shall agree to meet with a counselor for the purpose of establishing a group to train and assist "counselor assistants." As soon as group norms develop regarding the objectives, target learners who are to become "counselor assistants" shall be inducted into the group.

2. A target group of 60 high drop-out potential entrant freshmen shall be identified and randomly divided into 3 groups: Group A, B, and C.

   Group A will serve as the "counselor assistants."

   Group B will serve as counselees for Group A.

   Group C will serve as a control group and shall be processed normally through institutional channels.

3. The training group (described in 1 above) shall arrange for one hour a week to provide counseling sessions for Group B students. Each small group shall consist of the following
members:

1) A second-semester student from the original training group,

2) Two "counselor assistants" from Group A, and,

3) Two "counselees" from Group A who need advising.

Every two weeks, the original training group and all Group A members shall meet for two hours to review progress, with 2nd and 3rd semester students reinforcing Group A members for any statements which demonstrate commitment to the project objectives.

Evaluation:

Group A performance on selected indices (see "Objectives" above) after one semester shall be superior to Group B or C. If Group A performance is superior, enlarge the project. If not, change the program or abandon it.
Model II: Freshman English Composition Course

Objectives: 80% of entrant freshmen shall write essays displaying 80% of the desired characteristics described by the rating scale (See 1 below).

Procedures:

1. A teacher of English recruits 3-5 students who have successfully completed the beginning English composition course. The teacher meets with these students for several sessions during which sample essays are rated by all. The rating scale shall be developed by the group and items should be modified or discarded until the group can get 80% consensus on 80% of the items. Guidelines for the development and use of such a scale have been reported in the Topical Paper, "Is Anyone Learning to Write?"

2. Two beginning English composition classes shall be established by random assignment. One of these shall be taught by ordinary procedures (Group C). The second shall be randomly split into one third (Group A) and the remaining two-thirds (Group B). Group B shall meet ½ of the time with the teacher and proceed with normal instructional activities. The other ½ of the time Group B shall meet with Group A for tutorial assistance from Group A.

3. Group A shall meet ½ time with the teacher and the 3-5 students who have achieved consensus on essay rating procedures. Group A shall be taught criteria for rating essays using essays made available through three sources: a) samples of essays written by others, b) essays written by themselves, and c) essays written
by Group B. When Group A meets with Group B, it will be for the purpose of tutoring Group B students or explaining the basis for ratings assigned to Group B essays.

Evaluation:

Hypothesis: At the end of the semester, Group A performance shall exceed the performance of Group B or Group C based upon essays rated by an external teacher using the established rating scale. If Group A's performance is superior the project should be enlarged. If not, the program should be changed or abandoned.
Model III: Biology (Basically similar to Model II)

Objectives: 80% of entrant freshmen shall correctly answer 80% of the questions on either a standardized or teacher-made final examination.

The final examination shall be randomly drawn from a larger pool of items and the remaining items shall be used as study items.

Procedures:

1. A biology teacher shall recruit 3-5 students who have successfully completed the beginning Biology course. These students shall agree to train a tutorial group (Group A) to assist Group B in attempting to answer correctly the study or practice items. In addition, Group A may be asked to serve as lab assistants and a) help conduct experiments, b) help gather specimens, c) help set up demonstrations, d) supervise dissections, e) assist in microscope exercises, etc.

2. The above training group, Group A and the teacher shall meet one hour a week to check progress of tutees in Group B. Group A members shall be reinforced by the total training group whenever they show evidence of concern and effort to improve Group B's performance.

Evaluation:

Group A's performance shall exceed the performance of Group B or Group C. If Group A's performance is superior the project should be enlarged. If not, the program should be changed or abandoned.
The reader has probably observed that elements of the three models appear in conventional educational programs. Teachers often ask students to assist in the instructional program in some capacity; students often informally assist each other. However, it was the author's purpose to propose some theory-derived guidelines which would allow educational planners to deliberately capitalize upon the influence which peers exert upon each other. And, following desirable institutional research procedures, evaluation plans were included to permit the determination of whether these programs have had their intended effect.
BIBLIOGRAPHY


