This study examined interaction among members in small groups under different leadership conditions: leadership by teacher, by untrained student, and by trained student. Small groups of low-income fifth- and sixth-grade students were videotaped as they discussed solutions to problem-solving stories. Analysis of the tapes shows that trained student-led group members had a higher rate and different type of participation than did the group members operating under different leadership conditions. The study suggests that training student leaders in specific leadership techniques will enable the teacher to provide a classroom setting which is conducive to the active exchange of student ideas. (Author/HMD)
COMPARISON OF ELEMENTARY SCHOOL CHILDREN'S INTERACTION
IN TEACHER-LED AND STUDENT-LED SMALL GROUPS

(Abstract)

by

Mary Anastole Wilcox, Ph.D.
COMPARISON OF ELEMENTARY SCHOOL CHILDREN'S INTERACTION IN TEACHER-LED AND STUDENT-LED SMALL GROUPS

This study was designed to examine the interaction among members in small groups under three different leadership conditions: leadership by teacher, by untrained student, and by trained student. Using the theory of Status Characteristics and Expectation States as a general conceptual framework, it was predicted that a proportionately higher rate of participation would be found among group members in student-led conditions than among group members in teacher-led conditions. It was also hypothesized that groups with trained student leaders would produce more active student participation than would groups with untrained student leaders or teacher leaders. The trained student leader was taught to encourage equal participation by all members and he was directed to refer to the suggestions for "good discussions" which were posted on the wall of the discussion room at all times.

In the exploratory analyses, two additional areas were examined: a) the qualitative mode of interaction (defined as divergent-analytic acts), and b) participation by group members over a four-week period. It was predicted that trained student-led group members would initiate a greater proportion of divergent-analytic acts and would make increasingly greater contributions over time.

The principal of an urban elementary school in a middle class area was asked by the investigator to hold a faculty meeting in order to present a study on "how children interact in small groups." Interested teachers volunteered their participation on a one-week or a four-week basis.

The student sample consisted of low income fifth and sixth graders. Students who were considered for the study were bussed from an inner city school and were selected on a sex-controlled random basis. The black children formed approximately one-half of the sample and were represented in each group.
Student leaders were selected on the basis of median social power. Their leadership training was conducted by the investigator on the morning of the day their discussions were scheduled. Similarly, teacher leaders and untrained student leaders were given a general introduction to the task on the same day their discussion groups were scheduled.

Six groups of four members and a leader for each condition (total of eighteen groups) participated in the Week 1 task. Half of this group participated in the over time study which was conducted once a week for four weeks.

The tasks were based upon a series of problem-solving stories which were presented in synchronized film strips and recordings and which stop at a dilemma point. Groups were videotaped as they worked on the task of agreeing on a solution to the problem situation.

Data on the participation of group members and the group leaders were collected from videotapes and were recorded in the following categories: a) initiating task acts, b) receiving task acts, and c) divergent-analytic acts. Additional measures which were not the major focus of the study but were useful for the understanding of group interaction were taken on a) leadership acts performed by leaders and/or group members, b) maintenance of control within groups and initiation of acts not related to the task, c) activity level of the four group members within groups and within conditions, d) participation by sex, e) participation by race, f) persistence of rank ordering across time, and g) qualitative differences between conditions.

The major findings of the study may be summarized as follows:
1) Students in groups with trained or untrained student leaders initiated and received a higher proportion of all group acts than did students in groups with teacher leaders. Section 3 (below) contains an explanation of why the use of proportionate acts as a measure of group participation did not adequately reflect the participation of the untrained student-led condition. 2) Students in groups with trained student leaders initiated and received a higher proportion of all group acts than did students in groups with teacher leaders. Two major predictions of the study were confirmed. 3) Students in groups with trained student leaders did not initiate or receive a significantly higher proportion of all group acts.
than did students in groups with untrained student leaders, although the differences were in the predicted direction. Upon careful examination, it was found that although the proportionate group acts for the untrained student-led group members were relatively high, the actual participation in group discussion was low. The measure of student participation used in this study was the proportion of all group acts. Whereas this measure was chosen to avoid the biasing effects of raw numbers, results based upon proportionate data for this condition were not reflective of the situation. Since the intent of the study was to encourage greater participation, the untrained student-led condition did not fulfill this purpose.

Findings dealing with the secondary analyses are as follows:
1) Students in groups with trained student leaders initiated a higher proportion of divergent-analytic acts than did students with teacher leaders. Insufficient data from the untrained student-led condition did not permit a comparison with the trained student-led condition.
2) Over time, students in groups with trained student leaders did not increasingly initiate proportionately more task acts, including divergent-analytic acts, than did students in the teacher-led condition.

Additional findings of interest to the investigation include the following: 1) An examination of activity levels of members within groups shows that passive members of the teacher-led condition had even lower participation in the fourth week than the first week; passive members of the trained student-led condition showed a consistent and steady increase through the fourth week period. The difference between the passive members in the two conditions in the fourth week was significant.

The very high rank order correlation in the trained student-led condition from week to week indicates that the trained student leaders did not prevent a stable status structure from forming. However, participation by all members in the trained student-led condition was on a more active level. 2) An analysis of the qualitative differences between conditions shows that members in the teacher-led condition tended to devote a much greater time period to the recall of the story and less time to the giving and asking of opinions than did the trained student-led members. 3) The ability of the trained student leaders to apply
their leadership training was demonstrated by the large number of leadership acts initiated by trained student leaders. 4) Fewer than one percent of all acts initiated during group sessions were directed to issues other than the group task in all but two of the forty-five groups. In addition, coders rated the discipline of all trained student-led groups as satisfactory; that is, they were evaluated as being conducive to the free exchange of ideas.

Conclusions

The superiority of the trained student-led group members is recognized both from their high participation when compared on a proportionate basis with teacher-led group members and their high participation when compared on a raw total participation basis with untrained student-led members.

The untrained student-led condition did not meet the intent of this study because of a) the inability of the untrained student leader to encourage greater participation among group members, and b) the unpredictability of the untrained student-led condition. Its high variability, brevity, and the inability of members to respond to one another for any length of time may well be a factor in the loss of control which teachers fear and may be a reason for the teacher avoidance of small group activities in the classroom.

One may conclude that the proposition that reduction of status space will lead to increase of participation has been supported. However, the low level of participation by the untrained student-led group members indicates the need for a leader who is trained to facilitate and encourage equal participation.

The lack of significant change between conditions over time may reflect an unrealistic expectation on the part of the investigator. It may be attributed to the very brief four-week time study and to the lack of adequate training time for the trained student leader. However, the upward trend through the weeks is a positive outcome. The attention of the group members to the task, considering the lack of any supervisory figure, suggests that the problem of teachers' fear of loss of control during small group activities may be solved by training a student to lead
discussions on a subject of interest to the group members.

One may conclude that the teachers in this study did not evoke the kinds of responses nor the number of responses from their groups that the trained student leaders were able to encourage. These findings are consistent with the studies cited in Chapter 1 in which the teachers investigated showed little ability to facilitate discussion in their classes. The need, therefore, for a procedure which will lead to greater and different participation within the classroom is a real and important one.

On the basis of the findings of this study, one may conclude that training of a student leader for small group discussion will contribute to proportionately greater participation and to a qualitatively different type of participation on the part of group members. The use of the trained student leader for specific purposes during one part of the school day will enable the teacher to provide a classroom setting where the strengths and abilities of students are more fully realized.