An exploratory study was devised to determine those factors which affect the success of team teaching. Questionnaire responses from school principals and teachers in teams and data derived from personality tests of participants in six schools selected for the study were analyzed. Both principals and teachers who were members of teams contributed information concerning types of programs which they had, their major problems in team teaching, and their perceptions of the characteristics of successful team teachers (such as adaptability, flexibility, subject matter knowledge, cooperativeness, consideration, and readiness to accept criticism). An additional analysis of secondary school team teachers' planning sessions revealed that effective members of the team participated more than did less effective members. (SP)
Research on Team Teaching

Study of Human Interaction Variables in Successful and Unsuccessful Teacher Teams

WALTER R. BORG
Utah State University

Team teaching has attracted much attention in education over the past 10 years. The Ford Foundation's Fund for the Advancement of Education has sponsored several large projects involving the use of team teaching but evaluation of the results of these projects has been limited for the most part to a few enthusiastic testimonials by teachers who participated. Although quantitative data are scarce, a "common sense" appraisal of team teaching suggests that this approach may lead to better education under some conditions. For example, team teaching may improve subject matter competence by allowing each teacher to specialize in a specific aspect of his subject. It permits use of large group instruction for presentation of certain types of subject matter, which may give team members additional time for preparation, individual instruction and other activities. By using the less skilled teacher aides for small discussion groups and routine work, some improvement might occur in the efficiency of the educational system.

Because team teaching has been accepted rather uncritically by a number of schools and has already been abandoned by many of the schools that adopted it two or three years ago, investigation of the variables leading to the success or failure of teacher teams is badly needed. This exploratory study was designed to lead to more extensive and better controlled research concerned with such topics as establishing broader and more measurable criteria for judging the effectiveness of teacher teams, prediction of success of teacher teams, diagnosing the deficiencies of ineffective or unsuccessful teams, and defining criteria to use in organizing teams that would make optimum use of available teaching personnel.

PROCEDURES

1. A preliminary questionnaire was sent to 598 district superintendents and 299 county superintendents in 10 western states. The purpose of this preliminary questionnaire was to identify school districts in which team teaching activities were under way.

2. A total of 604 responses were obtained of which 182 indicated team teaching programs were being conducted in the respondent's districts and agreed to cooperate in the subsequent survey.

3. Each of the schools identified in the preliminary survey was sent a copy of the principal's questionnaire and five team member's questionnaires, one to be completed by the most experienced member of each team in the school.

4. A total of 443 principal questionnaires were sent out. Of this number 242 were returned in time to be included in the survey report. Of the responding schools, 75 were classified as elementary schools, 51 as junior high schools, and 113 as high schools, and 3 not classifiable. Responses were generally analyzed separately for the different types of schools.

5. A total of 543 replies were obtained on the team member's questionnaire. Of these respondents, 152 were teaching in elementary schools, 101 in junior high schools, and 254 in high schools. The remainder were classifiable.

6. Based on the survey results, a number of secondary schools in the Los Angeles and San Francisco areas were identified and contacted. Of these schools, six having well established team teaching programs were tentatively selected for the assessment. Each school was visited prior to data collection in order to explain the project, obtain the cooperation of the teachers involved, and observe the team teaching program.

7. Each school was then visited by one of the investigators who administered the measures that had been selected, interviewed the teachers, and observed teachers in team planning sessions. Data were obtained on a total of 63 teachers who were members of 15 teams in these six schools.

8. The data collected to measure the dependent variables included:

a. The California Psychological Inventory
b. The Edwards Personal Preference Schedule
c. The Rokeach Dogmatism Scale
d. The Personal Relations and general Activity subscales from the Guilford-Zimmerman Temperament Survey
e. The Emotional Stability, Surgency and Anxious Insecurity subscores from the 16 PF Questionnaire
f. Scores on ten variables from an adaptation of Hemphill's Group Dimensions Descriptions Questionnaire
g. Seashore's Index of Group Cohesiveness
h. The Leadership Opinion Questionnaire
i. The Team Leader Behavior Description Questionnaire
j. Interview data for each team member including such variables as age, sex, degree held, college major and minor, teaching experience, perceived strengths and weaknesses of team teaching and others.
k. Interaction scores based on tape recordings of three planning sessions for each team yielding data for each teacher on the number and percentage of total remarks made, the number and percentage of very brief remarks made, and the number of remarks classified into each of the 12 interaction categories established by Bales.

9. Analysis of the survey data employed simple percentage comparisons and chi square analysis of differences in response patterns for different subsamples.

In the principal survey, 242 principals of schools using team teaching indicated that:

1. A substantial percentage of current team teaching programs are exploratory, employing only one team.

2. About half of the respondents reported inadequate planning prior to the start of their team teaching programs.

3. The organizational and instructional techniques most often combined with team teaching were: flexible class size, ability groupings and individualized instruction.

4. Principals at all level perceived the most difficult administrative problem associated with team teaching to be adapting available space to team teaching.

5. In large schools the principal usually worked with the team leader on administrative matters, while in smaller schools, he worked with the entire team.

A survey of 533 teachers who were members of teacher teams indicated that:

1. The majority of teams worked with pupils at a single grade level, and usually taught all subjects at elementary level and one or two subjects at secondary level.

2. Teacher specialization in both teaching and preparation of curricular materials is the usual pattern.

3. Strong leaders with definite administrative abilities are found in a minority of the teams; the more predominant structure being to have no official leader or one with little or no administrative authority.

Adapting to Team Teaching

Both principals and teachers were surveyed concerning their perceptions of the characteristics of teachers who adapt well and poorly to team teaching. The data indicated that:

1. To adapt well to the team teaching situation, the teacher needs some of those characteristics that are desirable for teachers regardless of the teaching situation, such as enthusiasm and thorough training in their subject matter field.

2. On the other hand, to be effective in team teaching, certain characteristics are desirable that may be relatively less important in the conventional classroom. Such characteristics as flexibility, ability to cooperate and work effectively with other adults, organizational skill, consideration for others, and ability to accept constructive criticism all seem to fit into this category.

3. Thus, although it appears doubtful that a teacher who is exceptionally good in his own classroom would be exceptionally poor on a team, it does seem reasonable to expect that most teachers will differ in their ability to use these different teaching approaches. Team teaching seems to require different amounts of certain skills and characteristics, and probably gratifies different psychological needs.

In the assessment phase of the study, 63 teachers from fifteen secondary school teams were tested, interviewed and observed. The results of this portion of the study indicated, among other things, that higher rated teachers tended to also be significantly higher on the following variables rated from team planning session interactions:

a. percentage of total remarks
b. percentage of time used to make remarks
c. number of "Gives Suggestions" remarks
d. number of "Gives Opinion" remarks
e. number of "Gives Orientation" remarks
f. number of "Asks for Opinion" remarks

The data from the assessment phase further suggests that more effective teachers participate more in planning sessions and contribute a significantly greater number of task-oriented remarks than less effective teachers.