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Team teaching was introduced in a summer academic program for grades one through three in Concord, California. Each team was composed of three or four teachers and a teacher aide. A total of 410 children were assigned to four teams, and curriculum was basically enrichment oriented with assistance for those with remedial problems. The curriculum included reading, mathematics, music, Spanish, social studies, art, physical education, and folk dancing. After a period of experimenting with organization, teams developed creativity, flexibility, and productivity by adapting curriculum to emerging needs of the children. The principal's role of coordinator strengthened interpersonal relationships within teams. This document describes and evaluates the program. (DO)

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Psychologist

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Two essential purposes are being served by this publication. It is a report to the Board of Education and administration of the office of the Contra Costa County (California) Superintendent of Schools who provided the supplementary funds to actualize the project. The writers also view it as a research study for the profession in general.

They are indebted to many individuals and groups who assisted in making the investigation possible. Staff of the County Superintendent's office gave valuable suggestions for the program's organization while assisting in the procurement of funds for research into staff utilization. Acknowledgement is therefore directed to Dr. Floyd I. Marchus, Superintendent, Dr. Francis G. Burke, Director of Educational Services, and Mr. Charles Montgomery, Research Intern.

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Invaluable assistance was derived from the insights and feelings freely contributed by the summer school staff.

Mrs. Virginia Acree, Leader

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Miss Dorothy Robbins
Mrs. Betty Sievers
Mr. Clark Skadden
Mrs. Dorothy West

Teacher and clerical aides added an important dimension to the investigation through their work and impressions.

Mrs. Beverly Dawson
Miss Patricia Hennessy
Mrs. Ruth Siverling
Mrs. Lucille Ward
Mrs. Myra Waud
Miss Ida Yamamoto

Without the contributions of the parents and children in this study, the findings would have been grossly inadequate.

The Authors
February, 1962

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PART 1
BACKGROUND AND DESCRIPTION

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CHAPTER I

GENERAL DESCRIPTION OF THE PROGRAM

by
Robert W. Reasoner

A. Background and Purpose

The feeling has been expressed in much of the current literature that under the traditional form of administrative organization, teacher strengths, skills, and interests are not being fully utilized. In addition, much of the teacher's time is necessarily taken up with menial tasks such as setting up audio-visual equipment, preparing materials, obtaining science equipment, putting assignments on the board, etc. Freed from these tasks it is felt that the teacher could more effectively spend the time in instruction, lesson preparation, and planning.

The purpose of this project was, therefore, to organize the summer school staff for grades 1-3 on a more flexible basis in an attempt to establish better teaching conditions. It was hoped that these conditions would lead, through more effective and efficient utilization of the teaching staff, to better instruction for children.

B. Development of the Project

The possibility of using money from the Contra Costa County research fund to employ teacher and clerical aides was explored with the County Office. With tentative approval, a proposal was formulated to evaluate these specific premises:

1. That it is possible to utilize the inherent strengths and interests of any staff to a greater degree.
2. That the personal adjustment of pupils will not be adversely affected when working with more than one teacher.
3. That it is possible to provide pupil groups of varying size according to the needs of the subject.
4. That pupil interest in specific subjects and in the total program will have a high correlation with teacher enthusiasm and morale.

5. That the program will have a higher degree of pupil attendance with less drop-out than the traditional summer school program.
6. That teachers will enjoy teaching to a greater degree when they are able to capitalize upon their strengths.
7. That a large portion of the teacher's present responsibilities can be handled by "aides," non-credentialed personnel, working under the direction of the teacher.
8. That teacher growth will be increased as a result of such an organization through mutual planning and sharing of ideas, approaches and techniques.

This proposal was then developed in more detail and the methods for gathering data were specified. (See Introduction to Evaluation Chapters.) Approval of the project was granted by the County Board of Education with an operating budget of \$2300.00.

C. Selection of the Staff

Teachers for the summer school were selected from among the applications submitted to the Director of Personnel for the Mt. Diablo Unified School District. Each of the eight summer school principals made a tentative selection of those teachers whom he wished assigned to his school. This decision was based upon the teacher's application form and the recommendation of his/her regular principal.

In making the selection of personnel for this project, particular consideration was given to the applicant's ability to work with others. In those cases where no indication was made in the recommendation, the regular principal was asked if the applicant would be likely to work well with others in a team situation. One applicant was assigned to another school when it was agreed that the person preferred to work alone. An effort was made to balance all schools with respect to male and female teachers, ability, etc. (This was later borne out by the personnel analysis of the experimental and control school staffs.) No attempt was made to select teachers according to subject matter strengths.

Information regarding the openings for teacher aides was given to Alameda County State College, San Francisco State College, and the University of California.

The teacher aides were screened from twelve (12) applicants. Selection of the four aides was based upon several considerations: educational background, experience in observing within the classroom, outside activities with children, and ability to work harmoniously with teachers and children. No aide was employed who had completed practice teaching or who was eligible for an elementary school teaching credential. Three of these aides had received their AB degree; the fourth was a sophomore in college. All were preparing for a teaching career.

Four teachers were appointed to serve as team leaders. Their selection related to their ability to work with others and their general insight into the total educational program. Two of the four selected had had administrative and supervisory experience as vice-principals, while the other two were regular classroom teachers. These persons were assigned the task of coordinating the work of the team and planning the educational program for all teachers assigned to the team.

D. Assignment of Teachers to Teams

The teachers assigned to the Cambridge School were placed on one of four teams. These assignments were based upon the Personnel Inventory Form completed by each teacher. (See Appendix A "Personnel Inventory Form.") The following factors were considered when making the team assignment:

1. Age
2. General philosophy towards summer school
3. Educational background
4. Teaching experience
5. Summer school experience
6. Subject matter interests and perceived competencies
7. Compatibility of personalities
8. Desire to work with more than one grade level

An effort was made to assign the staff so that each team was balanced in experience, philosophy of summer school, summer school experience, and subject matter interest.

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(Interests were used because as primary teachers they had not had an opportunity to specialize.) Based upon very limited observations of the staff, an attempt was made to put individuals who would work well together on the same team.

It became apparent that it was not possible to balance all teams. Teams B and D appeared to have a younger age level and less experience than that of Teams A and C. However, the teams did seem to be balanced in terms of subject matter interests or strengths. Each team had one person who could teach Spanish, one person interested in the remedial aspects of the program, and at least one interested in the enrichment phases. An attempt was also made to assign to each team a teacher who was strong in reading, and one who was strong in arithmetic.

The teacher aides were assigned to the grade level where they might be most effective. This conjecture was based upon the aide's previous experiences, if any, in working with children or in observing classes.

Two clerical aides (both parents in the attendance area) were employed to perform clerical tasks. They were not assigned to particular teams but rather were given certain designated tasks. Clerical time was allotted to each team on the basis of one hour per day.

Each team was therefore composed of three or four teachers (one of these served as a team leader), a teacher aide, and one hour of clerical aide time.

E. Assignment of Pupils to Teams

Children who attended the Cambridge Elementary School did so by virtue of residence from the surrounding attendance areas. Only those in grades 1-3 were assigned to the school, as Mt. Diablo Unified School District maintains separate primary and intermediate summer programs.

Enrollment in the summer program was entirely optional. The curriculum was designed basically to be of an enrichment nature, though an attempt was made to provide assistance for those with remedial problems. The curriculum in the primary

grades was centered around two cultural studies, "Mexico" and "Indians of North America." In addition to this study, all students received instruction in reading, arithmetic, music, physical education, art, and language.

Pupils were assigned to a homeroom within one of the four teams. First grade children on Team A were assigned to a homeroom on the basis of reading level. However, no attempt was made to place the children homogeneously in other teams. The composition of the teams is indicated below:

| <u>Team</u> | <u>Grade</u> | <u>Number of Pupils</u> | <u>Ability Level</u> |
|-------------|--------------|-------------------------|----------------------|
| Team A | 1st | 120 | Low to High |
| Team B | 1st | 60 | Average |
| | 2nd | 25 | Low |
| Team C | 2nd | 90 | Average to High |
| | 3rd | 25 | Low |
| Team D | 3rd | 90 | Average to High |

F. Team Organization and Development

All teams went through a series of developmental stages or periods. For simplification, these stages have been labeled 1) organization, 2) initial phase, 3) period of experimentation, and 4) application of the team approach to the curriculum. Teams varied in their rate of progress through these stages, and some did not reach what appeared to be the final stage. Yet there were great similarities in team development. This progressive development will be described in some detail to serve as assistance to future teams in evaluating their own progress, and illustrate the level of refinement ultimately reached through the team approach.

1. Organization

Prior to the opening of school, each team was given the complete responsibility for developing the educational program for those children assigned to the team. Under the direction of the team leader, teachers on the team were assigned subject areas, time allotments were determined in keeping with pupil needs, and a general method of operation was established.

No specific areas of responsibility had been set aside for the teacher aides since her role would vary according to the team members. Each team, therefore, agreed upon the tasks which the teacher aide would perform. These differed from team to team depending upon the particular needs of the teachers and the skills of the aide.

The teams decided to operate on a self-contained classroom basis for the first two or three days to enable the teachers to get acquainted with the children and orient children to the summer program. Throughout these three days, each teacher administered several diagnostic instruments to determine the level of reading and arithmetic achievement. The teachers were then better prepared to plan a program geared to the particular skills and areas where improvement was needed.

2. Initial Phase

On or about the third day, the teams began to combine various classes for music and go into the multi-use room for films. The children thus became exposed to some of the other teachers with whom they would be coming in contact. The teachers explained the general nature of the program to the children. Great care was taken to orient the children specifically as to where they were to go and how they were to move from room to room. Each child was given a name tag that was readily seen. This made it easier for the other teachers, not acquainted with the student, to call the student by name.

When the classes were first combined and/or regrouped, most of the teams did not operate on a complete team basis. They combined classes or exchanged classes for only a small portion of the day, until the children became accustomed to the procedure of exchanging teachers.

Most of the teams began by using what has been termed a "modified-departmentalized" approach. Under this "modified-departmentalized" organization each teacher had an opportunity to concentrate on one major subject, e.g. reading. The teacher assigned to a subject either taught that subject to more than one group of children or

assisted the other teachers on the team as a "specialist." Various modifications developed in other teams as the program progressed. However, they all seemed to have started with this organizational method.

An example of the "modified departmentalized" approach has been outlined below. It is a typical example of the daily schedule followed in this "initial phase."

Opening Exercises--The opening exercises were conducted in the homeroom. They included the pledge of allegiance, roll call, and a brief sharing period.

Departmental Periods (Reading, Arithmetic, Music, Spanish)--Three forty (40) minute periods followed the opening exercises. During these periods the children moved to each of three rooms. One period was devoted to reading; a second devoted to arithmetic, and the third was for Spanish and music instruction.

The children were placed in one of three homogeneous groups, according to reading level. They remained with this group for the three departmental periods. Each of the teachers was responsible for the development of the program in one subject area, thus providing an opportunity to specialize. Although the method of presentation might vary from day-to-day, the children were always taught a given subject by the same teacher in the same room.

Social Studies--Social studies was taught most often in the homerooms. However, the classes did meet together for films, presentations, demonstrations, or to hear resource people. In this way all classes covered basically the same material, though each teacher had an opportunity to make her own variations.

Art-- The homeroom teacher tried as much as possible to integrate art into the social studies program. For particular art projects the teacher exchanged classes with the teacher more skilled in art, the "specialist," so that she could demonstrate techniques to the class. The regular teacher then carried out the project with the children.

Physical Education, Folk Dancing--All classes had physical education at the same time, and combined classes for folk dancing on certain days. One teacher with experience in teaching folk dancing instructed the three classes while the other two teachers assisted.

Cleanup and Dismissal--The classes then returned from physical education to their homeroom for a short cleanup and dismissal period.

This general form of organization has been defined as a "modified-departmentalized" approach because although the children worked in a departmental situation for much of the day, they also spent a portion of the day in both a large group situation and in a self-contained classroom.

Because of this approach, the primary concern of the teachers related to time allotments for specific subjects. Differences were found in the amount of time required by the various classes or groups. There was necessarily a great deal of compromising to select the amount of time for a given subject. The teams also had to balance these time allotments so that some groups could have reading while others had another subject. Thus, for the first week or two of team teaching, there was a great deal of shifting of time allotments and much concern over scheduling.

Throughout this initial period most of the teachers had difficulty adjusting to the established time schedules. This was probably because they were not accustomed to watching the clock that closely. In their teaching they had ordinarily adapted the length of the period to the interests of the children as determined by the restlessness in the classroom. However under this program, they found it necessary to watch the clock, rather than the children, for the development of the lesson.

Each team went through a period of developing an atmosphere in which the teachers could feel comfortable when expressing weaknesses, concerns, and ignorances to their fellow teachers; this was a new experience for most teachers. The team members had to become sufficiently well acquainted with each other to discuss openly

these concerns and weaknesses. By the end of the first eight to ten days, this point was achieved though some had more difficulty in reaching it than others. Each team found that it could not operate satisfactorily unless the team members had achieved this freedom. Therefore it was considered vital to the proper functioning of the team.

3. Period of Experimentation

Following the initial stage, all teams appeared to enter a phase which has been entitled, Period of Experimentation. This period differed from the first phase in a number of aspects.

Most of the teams were not satisfied with the manner in which they were operating. Some of the teachers felt that they could do a better job in a self-contained classroom by themselves, and there was a general feeling that the team approach was not really doing a better job than the self-contained classroom. Hence, they moved from a pre-determined, set program, into a period of experimentation to develop new approaches that perhaps would be more effective. The teams experimented with departmentalized approaches, large group sessions, small group sessions, exchanging teachers and exchanging pupils according to interests, ability and/or achievement. When this feeling of dissatisfaction was expressed within the team, it usually indicated a readiness on the part of the team members to evaluate what they were doing and devise improvements.

All teams seemed to feel a real freedom to change their plans, though some did this to a greater degree than others. During the initial phase, when it became necessary to change plans owing to conflict of facilities or equipment, it was quite a frustrating experience. Now the teachers developed a greater amount of flexibility, in that they were able to change, at the last minute, plans which had been previously made.

The most frequently repeated phrase during this period and for the rest of the six weeks session was "Well, let's try this, and see how this goes," or, "Let's try

this, and see if it works any better." This phrase was heard almost daily in the team meetings. They were concerned not only with what they were going to do the following day, but also how they could do it.

The period of experimentation, therefore, was a time of general flux during which each team seemed to be going through the various approaches that could be used. They then were able to move into the next phase.

4. Application of the Team Approach to the Curriculum

In the third or fourth week, some of the teams entered into a period of real productivity. Here mutuality of thought and philosophy became focused on specific weaknesses and the team devised new ways of using their talents. Members of the team could readily understand ideas put forth, and these ideas were built upon and implemented by all team members.

When a team reached this point of mutuality and operated smoothly with a free exchange of ideas between the team members, they entered a period in which the team approach was applied to the curriculum. Many methods were used and the pupils were organized in various ways. The team was no longer experimenting with general forms of organization. Now they seemed to be able to adapt the forms with which they had previously experimented to specific purposes in order to satisfactorily meet the needs of the pupils and capitalize upon teacher strengths.

All of the team's discussion appeared to bear on the solution of particular needs or goals. how to reach five or six uninterested boys, the best way to organize the social studies program, the most effective method of teaching tomorrow's art lesson. It was during this period that the teams developed real creativity and an ability to find many new and effective approaches to teaching. Teams which operated in this manner were said to have achieved flexibility. The writers choose to define the "flexible" team as one which has the freedom to adapt the curriculum and organization to the emerging needs of the children.

To illustrate some of the various adaptations that were used, the daily schedule for one of the "flexible" teams is outlined below:

Opening Exercises--The children began the day in their homeroom with opening exercises and instruction by their homeroom teacher. This short period of instruction was similar to that found in a normal self-contained classroom. Plans for the day were reviewed before the children left for their various groups.

Reading--An individualized reading program was generally attempted. Great care was taken to analyze the children's weaknesses in specific reading skills. Children needing help in attaining particular skills were listed on a class evaluation sheet. The weak areas were categorized and each teacher selected an area to pursue on a particular day. Those children in need of a specific phonics drill, for example, were then called together from the three classes for special instruction during the reading period with one teacher. These children then returned to their homeroom while another teacher with special materials took all the children needing work on phrase reading. The third teacher worked with other children to raise their level of comprehension. She designed specific activities for this purpose. On the following day children requiring work in other areas were grouped from the three rooms and pulled together so that a teacher could work with them on a specific weakness. In this manner, each teacher was able to specialize in a particular phase of reading, yet no teacher became labeled as having the "slow group."

Arithmetic--For arithmetic the children from this team were divided into three major groups: those requiring remedial practice or a review of the basic skills, those who needed more experience in applying the basic processes which they had already learned, and those who could use enrichment activities. For three days a week the children were sent to a particular room depending on the

type of program to which they had been assigned. One teacher primarily instructed those children in the enrichment program, another worked with the remedial group, and the third taught the "problem solving" or "application" group. The other two days a week the teachers usually worked with the children in a self-contained situation. On some occasions the teachers assigned to a particular area of instruction, e.g. the enrichment program, offered enrichment activities to the other two groups. This provided each child with instruction in basic skills, problem solving, and enrichment.

Art--Art was approached from several different standpoints depending upon the purpose of the art lesson. On some days all children assembled in the multi-use room where art was given by the teacher with a strong art background to all 90 children at once. The teachers then, either on that day or on the next day, conducted art lessons in the self-contained classroom situation, pursuing the instruction that had been given the children previously by the special art teacher. On other occasions, the children had an opportunity to select the art project they wished to work on. They then went to that particular room where that project was being conducted.

Social Studies--In social studies, this team used large group instruction on certain days for film presentations, resource persons, committee presentations to the large group and general direction by the team leader. When they studied Indian life, the team met as a large group for general instruction and student presentations. Smaller groups were used when they divided up into interest groups according to tribes of Indians. Children selected the tribe which they wished to study. They then went to the particular classroom studying that tribe, thus spending the social studies period each day in that room. Within each room the teacher divided the group into committees and smaller groups to study such topics as homes, transportation, general recreational activities, characteristics of dress, etc. The children did their research in these groups

and then returned at the end of the period to their homeroom. There they discussed and compared findings with children that had gone to the other rooms to study other tribes. This enabled the children to receive the benefit of a parallel study of four different tribes, as well as the intensive study of a particular tribe.

Closing Period--Following social studies the children usually remained in their homeroom. This period was used by the homeroom teacher to follow-up or clarify a portion of the day's instruction or to present other material to the class.

Children from a particular team, therefore, were likely to experience many different forms of organization during a single day, depending upon the team's decision as to the most effective way of teaching a particular subject.

Many approaches were developed in other teams that were very different but just as effective for that particular team. This team's activities were described merely to illustrate how one team might use different forms of organization. It was found, that a specific approach for one team was not necessarily feasible for another. The effectiveness of an approach seemed to be dependent upon the general qualifications of the teachers, the specific interests and backgrounds of the team members, and the children themselves. Interestingly, when a team reached this stage of being able to adapt team teaching to the curriculum, numerous approaches were created and used.

CHAPTER II

ROLE OF THE PRINCIPAL

by
Robert W. Reasoner

The principal believed that if team teaching were to reach its fullest potential, each member of the team must make his greatest possible contribution. He also believed that the full skills, interests and ideas of individuals could emerge only when certain conditions were present. The principal felt his role was, therefore, to establish the conditions under which these individuals could best develop and bring their backgrounds to bear on specific problems. Five conditions were considered to be basic:

1. An atmosphere that would be conducive to creative teaching, where new ways would be sought to improve existing conditions
2. A feeling of personal responsibility for the program on the part of each teacher.
3. The freedom to make decisions and changes when these were needed.
4. Release from certain routine clerical tasks so that teacher time could be more profitably spent in planning and evaluation.
5. The belief that each individual as a member of a team had a unique contribution to make to the team.

A heavy responsibility for the success or failure of the team approach thus lay with the principal himself. In order to establish these conditions, the principal had to maintain a delicate balance between controlling the entire program and allowing the staff to make decisions which were within their realm. To assist him in this, each team was asked to submit a copy of their plan for the succeeding day after the daily team meeting. This provided the principal with an up-to-date record of what was being done in each team. The principal also met almost daily with either the team or the team leader to keep abreast of progress.

The principal first established an atmosphere that would be conducive to creative teaching by explaining that this would be an experimental program, designed not to evaluate the staff, but to evaluate the possibilities of team teaching. It was emphasized that they were to make any modifications which they felt would do a better job, without concern for the success or failure of the general program. At the first meeting the principal explored various approaches to team teaching with the staff. All available literature was discussed and handed out to the teachers so they could see which approaches had been employed in the past. New variations which might be tried were then discussed. Throughout the summer new ideas were encouraged and given recognition by mentioning them to other teams. Personal interest on the part of the principal was always expressed to new methods being tried.

In his daily visits, the principal worked with the team as they looked for new ways of getting the subject matter across to the children. He reported on ideas which others were trying or had tried. He raised certain questions or issues which may have been overlooked to guide the team in their deliberations. On occasion, it was necessary to meet with a team to ask them to evaluate their program to see whether they had actually achieved the best solution, or whether they had merely grown accustomed to a standard procedure. However, the principal's role in these situations was primarily not to make decisions but to stimulate creative thinking on the part of the team members. The teams were encouraged to ask themselves, "Is this the best way of doing things?" or "Are we using our skills most effectively?"

Second, the principal worked to develop the feeling of teacher responsibility for the program, establishing an atmosphere where, hopefully, self-initiative would emerge. This personal responsibility was felt to be vitally important to the success of the program. Teachers were encouraged to make their own decisions by seeking the advice of others on their team.

For example, when the principal's advice was sought by individual teachers on such questions as the best way to group the class, the best reader to use, the proper sequence of subjects, or the balance of remedial and enrichment instruction needed by the class, the principal usually took the question back to the team for discussion and sought their advice, as experienced teachers. In this way it was hoped that the teacher might see the resources available within the team. Following the second week almost all questions were answered within the team. (In spite of the lack of principal-teacher contacts during the program, the teachers later reported that they felt that assistance was more accessible than in a conventional program.)

The principal, in his visits with the team, expressed his interest in the teachers' evaluation of the program to date and actively sought their suggestions for improvement. Confidence was expressed that the individuals on the team, being closest to the situation, were in the optimum position to see the changes which should be made.

Third, in addition to the sense of personal responsibility, each team was given the freedom to use its own ideas and to make changes which it felt were necessary. At the first meeting of the staff the principal explained that each team would be responsible for establishing the form of organization which it felt would be most effective for the individuals assigned to the team. Each team was also given the charge to develop the program which would be most beneficial to the children assigned to that team.

During his team meeting visits, the principal served as a consultant while encouraging the team to accept responsibility for its course of action. Administrative support was then given to the team and the team leader to help them implement this course of action. It was hoped that through these procedures the teachers would feel free to make those decisions and changes which they felt would improve their plan.

Fourth, provision was made to release teachers from some of the routine clerical tasks through the teacher and clerical aides. Teachers were encouraged to use these people for those tasks which the teachers felt would release them to do more thorough planning and evaluating. The clerical aides, as a result, did almost all of the typing and duplicating. They also corrected papers on occasion.

The fifth condition which was felt to be essential was the feeling on the part of each individual that he had a unique contribution to make and that he was a vital, integral part of a team. The principal fostered this feeling by first asking each teacher to enumerate his/her particular strengths and interests. The team leaders were then charged with the responsibility for utilizing these strengths and interests insofar as possible. Then, throughout the summer's team meetings, the principal served as a semi-outside observer, watching the interpersonal dynamics within the team. When problems were encountered, the principal subtly alerted the team to those personal strengths of the team members which might resolve the problem. He also worked at all times to strengthen the relationships within the team by providing opportunities for the individual's uniqueness to emerge.

Thus, the principal's efforts were primarily directed toward establishing those conditions necessary for the maximum involvement of each individual. At the same time, he was able to supervise the general program through informal contacts while the teams directed their own particular areas of instruction.

The role which the principal followed, however, did make it difficult to evaluate individual teachers. Although daily team lesson plans were received, he was not always familiar with the daily problems confronting a particular teacher. This, of course, was because these problems were no longer being brought to the principal's attention but instead the problems were being discussed with other members of the team and solved at that level. In addition, it became quite difficult

to evaluate a teacher without considering the teacher as a part of the team itself. What part did the team play in planning this lesson? Did the team determine what was to be covered or was this the teacher's decision? Was the teacher's effectiveness, or lack of effectiveness a personal shortcoming; or was it a function of the team? These questions were foremost in the principal's mind when he attempted to evaluate a teacher. It therefore became customary to ask some of these questions of the team leader, placing him sometimes in a semi-supervisory role. This role was not cherished by the team leaders, who felt it might endanger their effectiveness. Yet, the principal felt it was necessary to involve them to some extent to answer the questions above, in fairness to the teacher.

In summary, the principal's actions were based upon the premise that the success of the team approach lay in the establishment of certain conditions. These conditions included the necessity for the teacher to become personally involved with the program, an atmosphere that would be conducive to creative teaching, the opportunity for the teacher to use personal initiative, and the recognition of the teacher as a unique individual. It was believed that the teachers were qualified to cooperatively develop a sound educational program and if these underlying conditions could be achieved, they would make a maximum effort to build a better program than they could individually provide.

PART 2
THE EVALUATION

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INTRODUCTION

Sources of Data for the Evaluation

Qualitative and quantitative evidence contributed to the impressions, interpretations, and judgments found in the chapters of evaluation which follow. The authors attempted to develop the research design in a manner which would permit team teaching to emerge as the primary variable to be observed. Every effort was made to minimize subjectivity by assimilating all available data before inferences were drawn. The evaluation "instruments" follow:

1. Teacher daily log--Each staff member's representative reaction to the day's experience was recorded on a card which was deposited in a sealed envelope to be seen only by the psychologist.
2. Teacher weekly team reaction--The Thursday daily log card was accompanied by the staff's impressions of their team's functioning.
3. Principal's daily log--Administrative perceptions were added to a brief factual summary of outstanding events such as weather, projector break-down, bus schedule problems, visitors, etc.
4. Tape recorded session with total staff before team teaching--Leading questions by the psychologist determined the framework for responses of the total staff--one hour.
5. Tape recorded session with total staff at the conclusion of the term--similar to #4.
6. Tape recorded sessions with the team leaders (only) before and after team teaching--Team leaders discussed their work with the psychologist and principal before and after the session--one hour per tape.
7. Parent daily log from experimental and control school populations--A reasonably representative sample of parents from both summer session programs recorded

their children's daily and unsolicited comments upon their return from school.

8. Parent questionnaire--At the close of the summer session, all parents from the experimental and control schools were asked to respond to questions regarding the programs. (Appendix C)
9. Drop-out comparison--Holding power of the control and experimental schools was submitted to a comparison by drop-out rate percentages.
10. Teacher observation of pupil adjustment--A sample of Cambridge attendance area pupils was observed by summer session staff. Their questionnaire responses were compared to the observations of the teachers who had taught those children during the previous school year in a self-contained classroom.
11. Time study--Teacher preparation time in the team approach was compared to that required for the control school staff.
12. Teacher questionnaire--Questions unique to team teaching were asked of the staff at the conclusion of the six-week session. (Appendix B)
13. Teacher and clerical aide task summary--Duties and responsibilities demanded of teacher aides and clerical assistants were itemized.
14. Psychological examinations of individual children--A representative sample of children attending the summer session who characteristically attended Cambridge School, were examined before and after the summer program. Only Cambridge pupils were examined so that team teaching, and not a change in school environment, was the primary variable measured. "Before and After" data from the following instruments were submitted to statistical study:
 - (a) Bender-Gestalt Visual Motor Test--projective (See Chapter VI for scoring methods)
 - (b) Digit Span--anxiety indicator
 - (c) California Test of Personality--Personal Worth, Freedom from Nervous Symptoms, and School Relationships subsections.

- (d) California Achievement Test (Reading Vocabulary)
- (e) California Achievement Test (Reading Comprehension)
- (f) California Achievement Test (Total Reading)
- (g) Drawings of Self and Teacher--Projective
- (h) Draw-a-Family--Projective
- (i) Favorite-teacher and homeroom-teacher comparisons.

All tests except the California Test of Personality and the achievement tests were individually administered by the psychologist. The CTP and CAT were administered to groups of six or eight pupils by the principal who read them the questions aloud. Modifications in the format of the CTP answer sheets permitted the youngest children to respond satisfactorily.

CHAPTER III.

PROGRAM DEVELOPMENT IN THE TEAM APPROACH

by
Harvey R. Wall

Program development is seen as a process which in this report, impinges upon the theoretical administrative structure, the behavior of the teachers, administrator, and pupils, and upon the concept of the "team." This process then includes method of instruction and its supervision as well. Chapter III evaluates the "program" through an analysis of many of its aspects which are considered in greater detail in succeeding chapters. Thus this chapter is a partial overview of those which follow.

A. Development of Teams

Team assignments in this program were based upon the assumption that teacher's morale (and therefore, the final educational product) would be enhanced when individual teachers were able to utilize their primary strengths and interests. Subject matter interests and perceived strengths were considered major factors in assigning teachers to specific teams. Hence, most subject matter areas were represented by a "specialist" appointed by the team.

Before the instructional process began, each teacher had identified his special area of competency to his team members (thereby subtly exposing his probable professional weaknesses as well). However, in reality, the underlying assumption that each teacher possessed only one or two primary strengths could not be satisfactorily met. In some cases, the balance of assets appeared to be inequitous. Whereas a particular teacher may have possessed several assets, only one or two of these were allowed to be primarily utilized in the interests of compatibility. The team leader may or may not have been considered the master teacher in several areas or in one particular area. Instead, each teacher was considered a specialist or a master teacher in a given subject matter field. In view of these observations, two basic questions would be explored: (1) Were the strengths and interests of individual teachers successfully

utilized in the team approach? Yes. When an individual teacher felt that a contribution to the team's efforts had been made, the experience seemed to be accompanied by a feeling of unique ego-involvement. Although the concept of "my particular program" was frequently found on the daily log contributions, the implications seemed to carry pride rather than remote arrogance. When an individual had entered into the program with some resistance, this teacher found considerable satisfaction and reasons for identifying with the total program when his/her uniqueness and particular area of competency was recognized by the total team. When the remainder of the team observed a specialist in action, and when the team members sought out the counsel of the "specialist," considerable gratification from the teaching experience resulted. Another rather subtle by-product of the "specialist" approach seemed to follow; that is, this subject matter specialist seemed to extend himself somewhat beyond the normal limits of performance so that "I won't let the team down" and "The others are watching."

On the final evaluation questionnaire, all staff members were asked to what degree they felt that they were able to utilize their own strengths and interests in comparison to their experiences in a conventional program. Eight indicated that they were able to utilize their strengths and interests to a greater degree, three "about the same" and three indicated "to a lesser degree." All fourteen responding teachers indicated they felt relaxed and comfortable in planning instructional units and organizing the team behavior with others. Apparently, individual competencies were respected and used.

Throughout the experimental session, the daily logs described how individual teams used flexibility to accommodate for specific interests and ideas which an individual or a total team wished to explore. Although this accommodation was the rule, a few exceptions did exist. These were usually related to some elements of rigidity when the total team was "locked into" a series of time commitments and program schedules.

(2) Were the teachers able to profit from the strengths of others? Yes. The two

quotations which follow are excerpted from the final evaluation taped session involving all staff members: "My impression is that most of the teachers in this group were rather successful as self-contained classroom teachers . . . and felt rather comfortable in most things, but the ideas that I have derived from other people, and from other groups, have been most invaluable. I feel that I will be much more able to go ahead with a new situation from what I have gathered and from what the other teachers have given to me."

"The thing that we appreciated about team teaching more than anything else was the fact that the four of us were feeding ideas to one another, then building upon these. You then had an idea which mushroomed into something much bigger than you had originally. Therefore, by the time you presented it to the children you had something very worthwhile."

Daily log comments regarding the inservice values of cooperative and compensatory interactions were frequent. Specifically, individual responses indicated enthusiasm and professional gratification from observing a "specialist" in performance. Other compensations apparently occurred during meetings following the instruction. An experienced teacher indicated the accumulative effect on her final response form when she said, "Teachers learned from seeing others. We were jolted out of ruts of routine."

The above-cited compensations seemed to follow only after the teams developed a satisfactory level of compatibility and a mutual concern for one another. When apparent interpersonal threat was indicated, compensatory behavior was limited or nonexistent.

Most teachers felt that their weak areas were satisfactorily balanced by the strengths of others. This was achieved through discussions, observations of specialists in action, and through cooperative planning sessions.

Factors Related to Team Maturity: As indicated in the "Description of the Program," the four teams experienced an uniqueness in the amount of time required to achieve the rather distinct levels of maturation. In analyzing the data, it was found that

two primary factors emerged as determinants for achieving the final stage:

(1) compatibility within the team, and (2) the creation of a philosophical and conceptual framework for team functioning. Through the employment of these two factors, details in organization and functioning fell into place, as it were.

One team manifested a rather advanced stage of development before the instructional session began. Their succeeding conflicts were resolved with a minimum of trial-and-error behavior. Another team evidently experienced a similar level of refinement early in the program although more frequently resorted to trial-and-error methods. Team compatibility was sufficiently intense to permit a delay in the establishment of a conceptual structure. The departmentalized approach seemingly assured a smooth operation but the vehicles for communication seemed to center around mechanics rather than concepts. This was in contrast to the team which experienced the greatest expedition in satisfactorily progressing through the "feeling out" process shortly after the instructional program began. By the end of the second week, the more flexible team was concentrating on instructional experimentation using the children as standards for their flexibility.

By the end of the third week, those two teams who had satisfactorily approached the final stages of team development found their interpersonal relations gratifying and unthreatening. Midway through the session, one of these teachers indicated on the daily log, "Working with experienced teachers has not only given me ideas for the classroom but also we have openly discussed problems concerning the profession."

As the summer session progressed, less concern was experienced by teachers regarding the discrepancy between accomplishments, goals, and time allotments. Team planning and team interactions generally assisted most teachers in more realistic planning and evaluation. In addition, an increase in compatibility seemed to assist the teachers to more readily tolerate frustrating experiences. It was found that although the school principal indicated specific mechanical difficulties had occurred on certain days, these were no longer of utmost concern to the teachers on their daily log responses.

Team teaching versus departmentalization was a rather extensive topic for discussion in both evaluation taped sessions with the total group. Enthusiastic advocates of flexible team organization felt that they, as well as the children, benefited from the instruction of a specialist. The children also gained competencies from one another as they were exposed to different ideas and learnings through consulting with pupils from other groups.

Those who had practiced a modified departmentalized approach felt comfortable within the organization. But, it appeared that they did not share their problems and concerns with one another at the same level as did those involved in a more flexible organization. That is, the major communication vehicle between teachers in departmentalized teaching centered around the mechanics of the program. The possibilities for communication were less limiting to those teachers employing flexibility. The latter organizational method found its participants manifesting greater mutual concern for specific children and their individual needs as evidenced on the daily log responses. Thus, flexibility in organization provided more communication avenues between team members. This increased freedom for program structure, then, offered a more positive accumulative effect on the total instructional process.

As a part of the evaluation, teachers were asked to compare team teaching to self-contained classroom organization. When comparing the educational offerings to children when a specialist was teaching as opposed to a generalist (self-contained classroom teacher), all of the staff were in agreement that an exposure to a specialist in some organizational framework was more educationally provocative and stimulating to the children. When comparing team teaching to the offerings of a self-contained system, teacher and pupil stimulation seemed to be the factors most prominent in the minds of those advocating this flexibility. Generally, the total teaching group felt that enrichment opportunities were enhanced through the child's exposure to the specialist.

On the final teacher evaluation questionnaire, the staff was asked to indicate how much time each day it was felt that a teacher should be with his "homerom group"

either before, during or after team teaching exposure. Most of the teachers indicated that at least one hour was advisable. In addition, they were asked, "Of the children you instructed in the classroom situation (not in the multi-use room) what percentage do you feel you can call by name?" Although there was a wide range of familiarity with individual pupils indicated, a positive correlation existed between organizational flexibility and this familiarity. The average for a departmentalized team was 40% as opposed to an 80% average for the team employing greatest flexibility.

Daily log responses indicated that as frustrations in team interactions mounted, individual teachers sporadically longed for the apparent security of the self-contained classroom. The apparent need for a closer teacher-pupil relationship seemed to be associated with a lack of immediate gratification during the development of team mutuality.

A modified departmental organization is seen as an intermediary step in the sequential development of team functioning. Teacher-pupil communication in a departmental approach appears to be minimal in comparison to that realized when flexibility is employed. Although "specialists" in departmentalization can assist in the educational expansion of pupils, their impact upon them may well be fragmentary and too specific. Thus, a child may be forced to integrate the learned facts and skills himself without the benefits of part-whole relationship instruction which should be provided through the organization.

B. Instructional Method in the Team Approach

The relationship of time schedules to organization: As indicated earlier in this report, the initiation of the team approach was met with frequent frustrations as most of the teachers found themselves "fighting the clock." Their daily log comments frequently stated, "I always seem so rushed" and "There never seems to be enough time to go into the things I really want to cover." The anxieties related to time

pressures subsided as the teams took on improved intra-group communications and as team cohesiveness developed. This was particularly true when attempts were made to grow away from a departmentalized approach. That is, flexibility in scheduling seemed to accompany an increased focus upon the individual and group needs of the children.

Another factor may be active here. As the teachers entered into a new and highly stimulating experience, they found themselves to be excessively optimistic about the many things they wanted to present to the children because of enlarged and enriched ideas, instructional concepts, and actual units derived from mutual planning. When it was discovered that the time was limited, more realistic planning seemed to follow. Again, this observation relates principally to those groups of teachers whose interests and behavior were directed toward the flexible team concept. However, in those groups which seemed to retain some elements of a departmentalized approach, concerns pertaining to time-dictated fragmentation of unit presentations continued throughout the six weeks session.

Daily log comments registered during the last week of school seemed to manifest these basic differences in team behavior. Two teachers' comments from a semi-departmentalized team during this final week follow: "I feel a little rushed--there are so many things to finish up . . . too much material that we have developed to do justice to it, and have the children really be able to read the material, to say nothing of getting the concepts from the material . . ." and again, "We just have too many irons in the fire . . . I think we have started too many projects at the last minute in our team."

Teachers from another semi-departmentalized team commented thus: "I know I won't get everything done that I would like to this week." Again, "Time is still a problem." And a third teacher from the same team commented during the last week of school, "Four more days to go, and about 40 more planned activities--each child just has to do certain things. I hope they're not unhappy if we don't quite get around to all of them."

Two more flexible teams produced the following comments from individual teachers on the same day, "A good day--plans ran fairly smoothly. The children responded well although a trifle restless. We seem to be 'centering in' on a number of youngsters now." Another member from the same team said, "I hate the thought of this being the last week of school even though I'm looking forward to and need a rest." A member of the other flexible team responded: "Enthusiasm is running high on the program. The children have become quite accustomed to a different schedule each day. Behavior problems may have become intensified a little with having different teachers but as the teachers got more acquainted with the total group and with individual problems, this was minimized."

As is evident from the comments above, those teachers participating in the departmentalized organization continued their frustrations as they encountered discrepancies between the planned activities and those which they were actually able to present. On the other hand, those teachers with greater flexibility in planning, seemed considerably less anxious about time schedules, over-planning, and organizational details. Concern seemed to be more intensively focused upon the needs of the children, as one of these teachers commented, "It's nice to be able to adjust time to need."

Although teachers from all four teams indicated on the final questionnaire their frustrations regarding the problem of time, the daily log responses indicated considerably less concern about this problem when team flexibility was the rule. Because the summer session was of six weeks duration, most teachers felt too optimistic about the amount of material which they should have covered. The teams with greater flexibility were apparently able to philosophically resolve these frustrations as well.

Large Group Instruction: Large group instruction methods manifested significant differences between the teams as well. Whereas some teams felt compelled to employ large group instruction for its sake alone, others were apparently able to philosophically find a place for large group instruction and thus adapt it to their perceptions of the children's responsiveness level. Apparently, one of the outstanding frustrations

involved in teaching to large groups of pupils was related to method. Most teachers tried to instruct large groups in much the same manner as they would in a conventional classroom setting. Others felt more comfortable in restricting large group instruction to demonstrations. When a modification in method and technique was not employed, child restlessness became readily apparent. Midway through the session one teacher commented, "It seems the larger the group, the shorter the attention span . . . especially when individual participation is expected."

There seemed to be some relationship between the level of maturity of the students and their ability to successfully respond in large groups. That is, there seemed to be an expanded role for large group instruction as the pupils matured. In reiteration, those teams utilizing greater flexibility, seemed to be more readily able to find increasingly appropriate large group instructional techniques. Most teachers did not evolve instructional methods unique to large groups, but evidently tried to apply methods characteristically related to the self-contained classroom.

Teachers were unable to agree upon the specific subject matter areas most appropriate for large group instruction. Some teams had experienced positive and gratifying results from certain kinds of arts and crafts work. This was especially true when a specific kind of art technique was demonstrated to the large group and then pursued and refined through small group instruction. Some aspects of music education were successfully adapted to large group teaching. Some teams found their science demonstrations effective. Others found social studies a unique vehicle.

Basic differences between success and lack of success seemed to again relate to the organizational method employed by a particular team. Whereas a semi-departmentalized team found Spanish instruction to be ineffective in a large group setting, another team with less rigidity in its organization felt that Spanish

instruction had been highly successful. Differentiating factors seemed to relate to skill and manner in which the large group was instructed and the degree to which follow-up exercises became a part of the total exposure. When team members mutually contributed to the insights and techniques of the particular "specialist" making the large group presentation, the remaining team members seemed to be more able and willing to later complement and supplement the instruction in smaller groups of pupils.

Rather than isolate specific subject matter areas which would lend themselves to large group instruction, one teacher from a flexible team stated that it was not appropriate to specify subject matter areas. Instead, the whole issue seemed to be highly relative. "I am not convinced that it is not so much a matter of subject area as it is one of timing for certain things in each subject. But we engage in quite a bit of introductory large group instruction in social studies, for example, and we use the large group approach for culminating activities. We would always follow up in small groups later on. In arithmetic, we made a game presentation or something like that with a large group and then again we followed up in small groups. I'm not so sure you couldn't do quite a bit of this in most subject matter areas. Science demonstrations and large group class presentations were found to be effective as well. I just don't think you can say that a subject area can or cannot be presented in a large group. Timing and method seem to be quite important here." Thus, the large group approach can be employed whenever it encourages quality education. A subtle by-product has been previously mentioned; when other teachers observe the "specialist" in action, they may improve their instructional techniques and then professional development follows. In addition, supplementary follow-up experiences for the children would seemingly assist them in integrating the various areas of knowledge directed toward them. On the other hand, departmentalized and rather rigidly defined blocks of exposure to a particular subject area, could discourage a child's integration of the presented materials.

Pupil Creativity and Large Group Instruction: An individual pupil's creativity potential, in areas such as art, was felt to be only minimally utilized in large group instruction. That is, the child's individual inquisitiveness and the communication with the teacher which should accompany this curiosity, would probably be impaired if the child were not permitted to explore his ideas further in a smaller group setting. This potential problem pertained to many different subject matter areas including art. However, those teachers who had these concerns were quick to point out that even in the instruction of art, specific techniques could be successfully presented in large groups. Individual expression and the expansion of a child's ideas could indirectly be enhanced through his exposure to a "specialist."

Team Behavior and the Exceptional Child: Remedial groupings were frequently discussed throughout the summer program. All four teams provided instruction at a level perceived appropriate for a given group of children. In those teams using greater flexibility in their planning behavior, it was found that homogeneous and heterogeneous groupings could occur satisfactorily during the course of a single day. That is, when considering a specific variable, such as reading level, the child found himself in a group approaching some homogeneity for reading. This homogeneity did not pervade the total daily organization however and therefore, many different children were exposed to each other during the various subject matter presentations.

(Creativity in teaching would appear to be considerably more feasible and permissible, in team teaching organization when comparing it to other more conventional approaches. Expansion of this concept follows in a succeeding chapter.)

Two of the four teams sporadically used teacher aides (under supervision) for remedial, small-group instruction throughout the summer session. It was found that convenience in grouping seemed to govern these decisions rather than reflecting an attitude toward remedial instruction. It is conceivable, therefore, that even though the teacher aide (with less experience) was assigned some remedial instruction tasks, the children may have benefited because of the relative size of these groupings.

In both cases, also, these two teacher aides had expressed an interest in this work, and so flexibility and teacher interest seemed to be related.

The emotionally disturbed child was potentially able to receive the indirect benefits of concern from several staff members as they discussed remedies in improving this child's relationships and general behavior. This was especially prominent in the behavior of those teams with flexibility. As indicated previously, these teams found expanded vehicles for communication and an individual child was one of these vehicles. When it was found in these teams, that a particular emotionally disturbed child seemed to benefit from a specific relationship (with a teacher and/or pupil), flexibility was able to accommodate and facilitate these relationships.

Similar observations were related to those children reflecting academic precocity.

Communication Between Pupils: Interactions between teams of students were more frequent when flexibility was the rule. In departmentalized teams, these interactions were usually restricted to culminating activities such as total school or total team assemblies. Intra-group stimulation seemed to follow to a greater degree when students interacted around ideas which they had developed in parallel studies of related subject matter areas. It was the feeling of the teachers of these students that better education resulted from this approach than if committee work within the self-contained classroom had been the rule. Teacher-directed small group research activities were accompanied by a greater depth of knowledge for all students concerned. Therefore, not only did teachers interact and, in the process, provide a better educational program to the children; but teams of children also interacted while supplementing the stimulations offered by the teachers.

Role of the Assembly Program: Large group assembly programs were conducted for the total school population twice during the summer session. Smaller group assemblies were periodically conducted within teams. This "forced" culminating activity seemed to unify team members while serving as an evaluative tool which most teachers appeared to need. Total group assemblies also served another function. Competition

between teams occasionally resulted from seeing efforts of one team compared to those of another. There is no evidence to assume that the children were affected by this competition, but the teachers certainly were. However, not all teachers were willing to concede that this competition was unhealthy or negative. Those who saw this competition as serving some ultimate benefit, usually felt that they were stimulated, encouraged, and motivated to "dig in deeper."

Team Personality and Curriculum Practices: As team compatibilities developed over the course of the summer session, unique team personalities emerged. Accompanying this manifestation was a unique curriculum practice as well. Subtleties in team interactions appeared to govern decisions regarding curriculum practices and teaching methods. When hidden feelings pervaded the team interactions, greater rigidity in instructional presentations usually resulted. That is, when the freedom to discuss differences was contained at a superficial level, teachers tended to teach in much the same way as they had done in the self-contained classroom previously. On the other hand, when team meetings and general team behavior had transcended superficialities and when team members were readily able to admit to weaknesses while feeling more comfortable with their competencies, greater freedom in curricular offerings seemed to result. (Additional related observations follow in a succeeding chapter.)

Physical Plant: Physical plant and its relationship to team teaching was frequently discussed during the summer session. Insights regarding physical plant construction were usually most productive when teachers were frustrated in finding appropriate space for specific kinds of activities. It was generally felt that flexibility in design should permit conventional classrooms to be readily converted to ones of varying sizes. Some suggested the use of accordian-type doors separating the groups and yet permitting a ready expansion of room space. Others felt that unification of storage areas would permit an improved access to supplies and teaching aids. Although many specific recommendations regarding physical plant construction were presented by teachers, all suggestions related to the need for greater flexibility

in architectural design. "It seems to me that the answer is that your building design be governed by the concept of plant flexibility. For example, potentially soundproof accordion walls would allow you to move three or four classes into a large section when desired. You would also need to redesign your rooms so that they are not in a square or rectangle or some similar shape so that when you bring the total group together into a large room, you don't have children in long rows or the like." Because the summer session school plant was of conventional architectural design, only a few rooms and areas could be satisfactorily utilized for large group instruction. Therefore, considerable interdependence of one team upon another was imperative. Not only did this interdependence seemingly cause many frustrations in scheduling, but it also appeared to occasionally bring out subtle hostilities between teams. Earlier in this evaluation, the problem of "fighting the clock" was related to concepts outside of the concern of the physical plant. The fact that the teachers needed to terminate their presentations and move out of particular rooms to accomodate another team seemingly encouraged a greater anxiety than should have prevailed. Some of the anxieties related to schedules were actually a function of pressures emanating from inappropriate physical plant design for team teaching. Conventional plant design seemed to be responsible for some of the rigidity in curriculum development because of the interdependencies cited above.

C. Administrative Direction, Supervision of Instruction and Evaluation of Teachers in Team Teaching Organization

Administrative involvement with individual teachers was different from that previously experienced by the staff, including the principal. Rather than directing the work of specific teachers on a one-to-one basis, the principal delegated the responsibilities for program development, program implementation, and teacher involvement to the four teams. Thus, teams of teachers were given the opportunity to exercise and implement their ideas while being assigned the responsibility of living with their decisions. Before a realistic evaluation of an individual teacher could be affected,

the principal had to become sensitive to the behavior of the team as a working milieu of this teacher. The impact of the team upon the teacher and contributions of the teacher to the team had to be analyzed before personnel evaluation could proceed. When in a self-contained classroom, the teacher could achieve a high performance rating for independent excellence in itself. But her evaluated competency within a team required an analysis of her teaching ability plus her cooperative and supportive behavior with peers.

Hence, the teams identified the problems and attempted to resolve them. Only when they encountered problems requiring disciplinary action on the part of the administrator or when they were unable to resolve a particular conflict, did the principal directly influence the team. The principal's primary method of stimulating thought was through frequent visitations to team meetings as he described innovations developed in other teams. It appeared that this method successfully stimulated team behavior toward improved thought and action.

The democratic processes involved in team behavior had a tendency to encourage teachers to not only identify more closely with their work but also promoted professional growth beyond a point not usually experienced in the conventional administrator-teacher relationship. Whereas in the conventional administration of a school program, the principal assumes full and direct responsibility for the instructional program, the teams shared this responsibility. This assumption of responsibility seemed to discourage lethargy and consequently had a tendency to encourage teachers to find, develop, and use more creative methods in dealing with instructional problems.

Because administrative supervision of instruction was identified as a potential problem, team leaders agreed that routine sessions with the principal, for various reasons, would be indicated in future team teaching endeavors.

In recognizing the value of team responsibility for affecting the program, the administrator could disseminate his supervisory insights through the team leader,

through total staff meetings, or through periodic supervisory sessions with individual teams as working units. Through the latter method, the team leader would be seen merely as a senior member of the unit and one whose responsibilities would be coordinative rather than directive. Thus, the growth of team responsibility for program development may be accompanied by an increased distance between administrator and individual teacher.

When the team leaders were asked about their perceived role as it pertained to the evaluation of staff, none felt that he should be thus involved. Although one or two perceived their roles more as coordinators than as leaders, per se, all four were cognizant that a status structure in team organization did exist in varying degrees. Disagreement between the four team leaders related to the degree of leadership they wished to exercise. One leader stated: "I think the role of the team leader should be as minor as possible and the leader as unobtrusive as possible . . . I see the role as being more of a coordinator than as a director." Another presented an opposing viewpoint: "I see the role of the team leader in a number of ways . . . as a catalyst, a constant agitator from a constructive standpoint by asking why are we doing this, how are we doing this, was this done well, etc. Also, the team leader would be sensitive to interpersonal problems on the team and try to come up with some approach to alleviate these problems and lessen tensions."

All four recognized that their positions denoted status to some degree and therefore they uniquely influenced the behavior of their teams.

The accumulated data imply that if the administrator has psychological need to continually remain in contact with and supervision over individual teachers through direct methods, flexible team teaching organization would find difficulty in succeeding. On the other hand, if the administrator has the tendency to permit some freedom for thoughts, concepts, and methods, to develop in individual teachers, the flexible team approach has greater success potential. Evaluation of individual competencies may require some creativity on the part of the administrator along with

considerable sensitivity to group behavior and group interactions.

D. Applications Available to a Conventional Instructional Organization

1. Educational Phenomena Associated with Team Teaching The accumulated data seemed to indicate the following observations regarding a flexible team teaching approach:

a. The teachers, during the summer session, found themselves involved in the program at a level of responsibility heretofore not experienced. They were given the responsibility for identifying problems, establishing goals for instruction, and resolving conflicts as they arose; this participation can be considered the democratic process. This process transcends mere committee functioning because each group of teachers was an action and responsibility-associated body and did not merely make recommendations.

b. This democratic process seemed to involve the total staff in the problems of curriculum content, instructional methods, and administrative practices. Therefore, their identity with the total educational process was greatly increased. The staff projected themselves into "their" program and not a program devised, directed, and evaluated by an administrator. That is, they were less dependent and more goal-directed in their behavior than if they had been specifically and generally directed by an administrator.

c. Because each successful team found its members to be mutually supportive of one another, a new teacher could find short cuts to the usual problems of orientation and the implementation of her own competency. Because the total group represented continuity of effort and concept, a substitute teacher was more readily able to give continuity to the education of pupils. All teachers found a general and more gratifying involvement with the total school program. It was also found that their professional competencies were increased at a faster rate while their individual insecurities were minimized. In reiteration, all teachers felt that they had been the recipients of professional stimulation and growth through this process.

d. Because each teacher was responsible to her fellow team members, and because she was required to instruct groups of children of varying achievement levels, several commented that they were thereby required to "stay on their toes" and maintain a higher level of functioning competency. They were stimulated toward the development and maintenance of a good instructional program for many levels of children. Lethargy and false security which may accompany homogeneous grouping were either minimized or avoided.

e. Flexibility in pupil-teacher relationships seemed to be accompanied by guidance implications. All members seemed to be aware of and concerned about the apparent and specific needs of a particular child. Hence, all focused their attention upon a child's problem in the team meetings and worked toward a mutually satisfactory solution for "reaching" this child. In addition, where an emotionally disturbed child seemed to uniquely respond to a particular teacher, flexibility in grouping provided an increased exposure to this teacher.

f. Evaluation of the instructional processes was an on-going practice. Teachers felt an inherent responsibility for continually evaluating their work with a greater depth of concern than if an administrator had assumed this responsibility. This was found to be a vital differentiating factor in the over-all effectiveness of the team approach.

2. Applications to a Conventional Program

If it can be assumed that the above-cited benefits accrue from team teaching, then similar benefits can be derived from some applications of the team teaching concept to a conventional instructional organization. The intensity of the benefits may not accompany these applications and so the writer chooses to classify them in the order of predicted gains available to its participants.

a. Homogeneous groupings through flexibility can be accomplished when a specific subject-area need has been identified. As indicated in an earlier chapter, one team related this method to mathematics. "We administered brief diagnostic tests

and on the basis of this information we separated the children into several groups. One group and teacher worked on basic facts. Another directed-group, worked on problem solving while the other group worked on modern approaches to arithmetic. We shifted children from group to group when we saw that they didn't seem to fit or that something was amiss. After we had tried this method for a period of time we found that all three groups seemed to have a common problem; that of place-value. We then approached the instruction from a place-value standpoint when it was indicated."

A teacher in another team felt that there was a somewhat different application of the same idea. "This system could work in three second-grade classrooms, for example, in which reading level would determine group assignments. You have one teacher giving reading instruction to all of the children of one ability level, the second teacher offering it to the next ability level, and the third teacher to the third ability level. Through this method, a given teacher would have different children than the ones that were in her own room plus a few of her own. She would then prepare one reading lesson instead of three or four and could thereby attempt to teach a number of skills in one room. Essentially the same approach could be used in arithmetic. Therefore, she could give her attention to skills at a given level as needed by the children while they were being exposed to various achievement levels during the course of the day. Your own class would be heterogeneously organized, but you could "funnel" various children to an individual teacher in a homogeneous setting. It would seem that through this method the children would not be able to say 'I'm in a high group' or 'I'm in a low group.' Similarly, they would probably have the advantage of being with children in many instructional levels and yet their special weaknesses could be identified and the educational offerings could be directed toward these weaknesses. It seems that this might be a modification of the usual ungraded primary approach."

It would appear that an instructional program directed toward a series of identified needs could potentially carry greater depth than would usually be available in

multiple group exposures in the self-contained classroom. Through the employment of multiple homogeneous groupings, limited or modified team organization would be required. Communication between staff and mutuality among its members would be a benefit and a requirement at a rather refined level of participation.

b. Specific groups of children engaged in parallel study would frequently reassemble and communicate their findings to other groups of children who were pursuing different but related ideas and facts. Thus, teams of children would be interacting and stimulating one another toward greater depth and breadth of accomplishment. This application should be accompanied by increased communication between teaching staff and pupils alike.

c. A master teacher (specialist) could present demonstrations or a specific series of facts and concepts to a large group of pupils. After the "ancillary" teaching staff had observed the specialist in action, they would then assist smaller groups in integrating the presented material with depth, breadth, and applications. This method of instruction can be situational, periodic, or routine, but it would require some level of communication between staff members. In addition, it is assumed that all the people on this "team" would assist the specialist in preparing the demonstration or lecture. Several of the usual subject matter areas in the elementary school curriculum could be presented in this manner.

d. A modification of child-centered interest groupings could be employed within a classroom or through the combination of several classrooms. For example, explorations related to the development of the Western Hemisphere could be submitted to study. Italians, Spanish, Portuguese (et al) could be studied by groups of children indicating a specific nationality interest. Study in depth would precede the culminating projects which would in turn allow interactions between groups. Those who used this method during the summer program found their pupils to be more closely identified and more deeply involved with the subject matter than previously.

e. Teacher-assigned groups from several classrooms could share in the

study of a specific area. Having accomplished some depth in their studies, a rotation of these groupings could occur and thereby each child would be exposed to the over-all intent of the instructional unit. Although communication between teachers would be somewhat superficial it is felt, some benefits could follow. The child may benefit from his exposure to a teacher's specialized knowledge. A possible handicap in this approach might be a potential fragmentation of learned bits of information. That is, integration of learned facts and insights would be the responsibility of the child. However, this could be avoided through frequent cross-grouping experiences and frequent culminating and semi-culminating activities.

f. There may be teachers on a faculty who could be identified as specialists and thus serve as consultants to the total faculty. The faculty would continue in self-contained classrooms but theoretically their competency would be enhanced by frequent discussions with these consultants. Depending on the breadth of these specializations, rotating leadership roles could be included in this organization. From the accumulated information in the study, it is felt that this approach could be characterized as superficial in its communication and stimulation benefits and only limited in its over-all effect upon the education of the pupils. However, it is conceivable that it might serve as an initial phase in preparing the teaching staff for eventual flexible and/or modified team teaching organization.

g. The employment of aides could serve a unique function in relieving the teacher of those responsibilities not directly related to the instructional process. The employment of an aide may or may not account for an increase in teacher proficiency or improved educational offerings to the children. If the utilization of such an aide is accompanied by increased teacher stimulation and professional growth due to some additional organization technique, then the presence of this aide on the staff is a vital contribution. (Additional observations regarding aides are found in the succeeding chapter.)

h. Teams of teachers, such as those of the same grade level, may be

assigned or encouraged to merely plan materials together without the shifts of children involved in their efforts. This application would be similar to an on-going committee. Vehicles for communication would be frequently lacking in depth. Group evaluation of its performance should be assured. Teachers would not necessarily learn from one another because they would not experience the involvement with the program described earlier in discussions pertaining to flexible team teaching. Because the children would only be a vague focus in their concerns, it is felt that this application technique has limited value. However, it may also serve as an initiating tool for the actual implementation of a program carrying more breadth and depth.

All applications of flexible team teaching organization should be goal-directed. That is, it was found that periodic and specific (terminal) goals were important for improving and increasing communication within the teams. It was also found that when teams did not discipline themselves to establish short-term goals, anxieties seemed to increase. In addition, short-term goals were more readily accessible to evaluation.

It is assumed that additional applications to conventional organization are possible. The team-lecturer idea occasionally implemented at the secondary level of instruction could be considered an application. However, it is assumed that when any modification or application of flexible team teaching is attempted, it should be accompanied by an increase in communication between teachers and pupils. This increased level of communication would theoretically be accompanied by an increase in the level of teaching competency.

Large group exposure to one lecturer in itself is not considered an application of team teaching in this report.

CHAPTER IV.

THE TEACHER IN THE TEAM TEACHING ORGANIZATION

by
Harvey R. Wall

During the initial phases of team development, an individual teacher's perceptions were readily submitted to evaluation. As compatibility increased, team perceptions emerged and these influenced the individual's reactions to the organization. Thus, the evaluator was permitted only limited access to the individual teacher's impressions. These are treated in this chapter while the succeeding chapter discusses the team as a unit with its many aspects or parts.

A. Teachers' Initial Reactions to their participation in team behavior were varied. Those who had not been previously involved in some level of responsibility for a school program felt initially "at sea." This initial anxiety related to their realization that each of them was taking on virtually sole responsibility for the development of the program through the team medium. It appeared that the anxieties were most pronounced among those who were somewhat dependent upon specific direction from an external and superior source (administrator). Insecurities became increasingly less evident as the summer session progressed. As indicated in Chapter III, the primary determinant for minimizing this anxiety was related to the mutuality developed in each team.

B. Teacher Reactions to Shifts manifested significant changes throughout the summer program. Initially, most teachers indicated on the daily log responses that they were "fighting the clock." On the surface it appeared that they were concerned about unfinished lessons for a particular period of time. However, their concerns more realistically related to their need to vacate a given classroom so that another group or team could utilize the space. The recognition of this interdependence upon others was accompanied by a mixture of feelings within the teacher.

She felt uncomfortable and somewhat threatened about this interdependence which sometimes encourages hostilities between teachers. Because the physical plant was a product of a conventional school program, the interdependence requirements were increased because only a few of the rooms lent themselves to flexibility and/or large group instruction. Initially therefore, the clock became a vital and common supervisory and threatening influence upon teaching behavior. As indicated earlier, the threat of time was minimized as: (1) mutuality developed, (2) individual teachers gained more security from the work in which they were involved, (3) competition between teams was minimized, and (4) the problem of interdependence was recognized and successfully resolved in the team meetings.

Because all teachers had been previously accustomed to self-contained classroom behavior, program shifts were difficult to integrate into their daily work. In fact, many teachers found the children more readily able to "follow the mazes" than they, during the early phases of the program. Eventually, the teachers saw "time" as an asset. That is, they no longer were shifting for its sake alone but were finding that flexibility in timing and grouping was possible. Therefore, they were increasingly able to reach the children to whom they were committed.

C. Extra Time Spent on Planning was particularly necessary early in the session as team organization frequently required refinement. However, as the teams took on individual characteristics, the additional time for planning was minimized but the length of the team meetings occasionally became expanded to accommodate communications aside from goal-directed instruction. Those teachers who felt dissatisfied with the functioning of the teams during the initial phases were likewise unhappy with the length of time required for team meeting resolutions. As their behavior became more mutually goal-directed, their concerns about the length of time required for resolving conflicts was minimized. A member of a flexible team analyzed this concept at the end of the fifth week of the program: "As time progresses, we spend less time in formal planning. We can more or less feel the direction in which

the ideas will travel as a team and therefore, we need less time to find out how other team members feel about the specific mechanics."

D. Inservice training, teacher mental health and teacher stimulation came under considerable scrutiny during the course of the session. On her final daily log response card one teacher indicated "I've become increasingly aware of hidden resources in other teachers, the lack of communications between faculties in a conventional setting, and the end products of cooperation between teachers." As the teams progressed toward more mutuality and began accomplishing flexibility in their behavior, the exchange of ideas between teachers took on greater meaning and depth for them. Whereas some teachers were initially somewhat distant from one another in the agreement or disagreement of concept and idea, they found that their daily discussions provided unlimited resources for inservice stimulation. The final teacher questionnaire revealed unanimous feelings of having grown professionally during the summer session.

Daily log responses frequently reflected the strength of the team with comments such as "We will have to work on this problem in our next team meeting" or "We'll have to discuss this and find something more workable." As indicated in the previous chapter, team compatibility was ego supportive for the individual teacher. Because it was almost impossible for a teacher to be an "instructional island," the team setting required the individual to work through his frustrations within the group. This practice was especially prominent in those employing freedom and flexibility in their team planning behavior. In contrast, when pervasive team conflicts were not readily resolved, individual teachers seemingly longed for the security of the self-contained classroom and its inherent stable relationships with the children. Clinically speaking, this desire seemed to be a need for withdrawal from the conflicts and frustrations found in team behavior. By the end of the summer session, however, no teacher indicated this need to the degree expressed at the outset. These perceptions were confined to two or three teachers during the course of the session.

Those teachers whose personalities had need for frequent indications of success were able to organize their behavior so that this need was accommodated. Those who entered the session with a relative freedom from short term goals, and a general attitude toward inquisitiveness, were also satisfied through their pursuits.

As team development progressed, and the compatibility of the teams encouraged interdependencies, it became increasingly evident that an individual's mental health on a given day seemed to influence the mental health of the whole team. There was some indication that the attitudes of the team leader had a slightly greater effect upon the team's "attitude" than did other members of the team.

On the final questionnaire, the teachers were asked "Under this program did you find it easier or more difficult to find help when you needed it?" Twelve of the fourteen teachers stated that it was easier to obtain this help when needed while two found it to be "about the same." In return for this help, the teachers seemed to be in agreement that they saw themselves as vital and contributing members of their individual teams.

The expanded teacher seemed to be a product of team teaching organization. She was released from some of the more mundane and routine clerical tasks usually associated with the teaching profession and she was also given teaching assistance by the "professional aides." Not only did she acquire new ideas for future use as a teacher, but she was able to see her ideas put into practice after these had been tested out through the team-interaction-behavior. Hence, she could be described as experiencing greater "fulfillment" in her motivations to become a better teacher.

E. Teacher Utilization of Aides was a source of on-going concern for both aides and teachers alike. Because the roles of the aides were not specifically defined, each team was required to find a meaningful role for them. Because individual teachers were the products of required independence (self-contained classroom behavior), they found it difficult to release some of their functions and responsibilities while permitting the aides to grow professionally as they (aides)

desired. Although the aides, in a sense, were approaching the "practice teacher" level of training, their roles were quite different from the usual student teacher in a self-contained classroom. When specific, menial chores were assigned the aides, the teachers felt most comfortable with this assignment and the aides felt most uncomfortable. Compatibility in team functioning seemed again to be the determinant in the most successful utilization of these aides. That is, when the above-cited conflicts were recognized and discussed inside the team, mutually satisfactory solutions followed. On the other hand, when interpersonal distance within a team prevailed, such discussions did not emerge. (The reader is directed to Chapter V for further analysis of the aide program.)

F. Teacher Daily Log Reactions were an important aspect of the evaluation process. On the final day of the session, all team members were asked to indicate their feelings about the requirement of having to respond in such a manner. While some indicated that it had been a "drag," others felt that this had been a successful and beneficial method for self-evaluation. Some teachers found it exceptionally difficult to project themselves into these daily evaluations, whereas others found considerable benefit from and consequently freedom in their self-evaluations. A teacher on a semi-departmentalized team indicated her reactions to these cards thus, "This little chore of the daily cards was one we'll all be happy to dispense with when the experimental stage of team teaching is finished." Whereas another teacher on the same team indicated "I think the daily commentaries are an excellent idea--I probably could have been more explicit in describing my attitudes." A teacher from another team indicated "Once the program began to function, remarks were difficult to make. It is much easier to be aware of shortcomings than successes." A fellow team member indicated "Cards have proven a good release for me," and another: "I did become repetitious at times but in general, I've used these cards as a friend--I poured out all my problems disappointments and pleasures."

And finally: "These cards are a necessary evil. They have been good for me so that I could evaluate the day's work."

As one studies the daily evaluation system, it is evident that the cards benefited individual teachers, especially when introspection was the product of this task. They were motivated to find assets and deficits in the daily program before entering the daily team meetings. In addition, the staff felt that this method assisted them in effectively evaluating themselves as individuals. Generally the daily cards seemed to serve a quasi-therapeutic function. Greater introspection occurred with most teachers although a few of them maintained a rather superficial involvement in their daily comments.

CHAPTER V.

TEAM FUNCTIONING

by
Harvey R. Wall

A. Selection of Teachers and Their Placements in Teams

The successful, contributing team member was found to be one whose attributes included interpersonal relationship capacities as well as professional competencies. To ensure team compatibility, both variables must be considered by the administrator in his staff selection and team composition contemplations.

1. Personality variables were subjected to extensive study throughout the session. All professional staff members participating in the summer program directly contributed to this area of evaluation. Those personality characteristics most accessible to study pertained to the individual's relative freedom from personality disturbance. The successful team member is one who can acknowledge his weaknesses to his peers and in turn has sufficient ego strength to do something about his lack of competencies in a given area. He cannot be easily threatened when someone disagrees with a particular viewpoint. Personal insecurity may minimize or prohibit wholesome and necessary interchanges within a team. Criticism of others must be balanced by an ability to absorb criticism of one's own ideas and performance. Hostility must be balanced with an ability and desire to sympathize with his peers while gaining strength from them.

The characteristics which follow may be manifestations of this freedom from disturbance cited above. Although not totally inclusive, these traits are representative of those which aid in the differentiation between success and conflict within teams.

a. The ability to be ego-supportive to fellow team members will expedite the work of the group. Individuals must be able to recognize something positive in the work of others and not merely desire that his own self concept will be enhanced

through team functioning. Cooperative behavior is dependent upon the emergence of this trait within the membership.

b. Relative freedom from dependency needs is a manifestation of internal strength and is required of the individual member when he assumes responsibility for program planning and development. The dependent person has a tendency to look for strength from others thereby contributing only minimal strength to them. Team members cannot become excessively anxious when they are unable to turn to anyone but themselves for a scrutiny of their successes and failures. Team success is dependent upon a balance of interchanges of ideas and productive competencies. Thus, the excessively dependent teacher should not be placed in a team teaching setting unless the remainder of the team is willing to assume responsibility for the improvement of this person's mental health.

c. Individual flexibility in attitude and behavior permits the team's organization to be adapted to the perceived needs of the pupils. Flexibility could be defined as a freedom from rigidity and constriction which are attempts of the individual's personality to deal with feelings of insecurity. The teacher requiring routine for purposes of reassurance will undoubtedly feel threatened during the initial phases of team teaching. If this person can gain security from the efforts of supportive team members, it is assumed that the basic personal need for rigidity will be minimized. A frequent concomitant of rigidity is basic distance from peers. As has been inferred in an earlier chapter, some phases of departmentalization should be appropriately provided for those whose personalities require routine and rigid external organization.

d. Mental organization, on the other hand, must be sufficiently prominent in the individual's personality structure to ensure reliable behavior to other staff. The disorganized team member has a tendency to interrupt the required interdependencies and schedules in the normal team's functioning. Other teams who are dependent upon room space and general schedule adherence will be frustrated by one disorganized

and unreliable teacher. Inter-team hostilities may emerge from the disruption of scheduling due to this errant individual.

Problem solving is frequently enhanced by mental organization. Freedom from trial-and-error behavior lends economy to the team's efforts in planning and its implementation of ideas.

e. Tolerance for frustration was found to be particularly essential during the introductory stages of team development. During this period, indications of success were frequently intangible and did not provide immediate avenues for the enhancement of a teacher's self concept. Again, when compatibility was experienced, the need for such reassurance was minimized and patience replaced impulsivity. This ability to delay gratifications frequently permitted total teams to feel involved in a given final product.

f. Ability for introspection encourages an ongoing evaluation of motivation and behavior. Self inquiry fosters similar behavior within the team as a unit. Dissatisfaction with mediocrity could be the result. One teacher described this variable in another way, "I think you have to be the kind of person that never reaches a goal." A balance between self inquiry and pervasive self-criticism must be achieved.

In reiteration, the personality variables identified above are not considered discreet by definition but are seen as identifiable functions of an adequate self concept and a reasonably well-integrated personality structure. They play an important role in successful team behavior.

2. Competency variables can be described in two ways: (a) a teacher's perceived areas of competency and (b) her real areas of subject matter strength. Both levels of identified strength must be taken into consideration when forming teams. For some teachers in the session, self-appraised assets agreed with appraisals of these assets by peers; for others there was disagreement.

In trying to achieve a balance of competencies within each team, a teacher's subject matter interests were frequently relied upon to a considerable degree. As the session progressed some teams recognized the differences between a teacher's interest and her real competency. When the team felt sufficiently internally secure to discuss these differences, mutually satisfactory resolutions followed and teachers redefined their subject matter responsibilities.

The universally able teacher was required to surrender some of her specific interests and competencies in furthering team mutuality. Thus, this compromise permitted another team member to perceive herself as a vital, contributing individual.

The assimilated evidence demonstrates the need for the administrator to be thoroughly acquainted with his staff before teams are assigned and are given some level of responsibility. If, for various reasons, the administrator does not wish to assume the responsibility for team assignments, these could be evolved through a natural or a measurable method of selection through a sociometric-type instrument. It is felt that this approach can be successful if the following assumptions are met:

(1) That all teachers on the faculty could function as well on one team as on another,

(2) That these teams would have limited responsibilities at the outset and "grow into" expanded accountability for their decisions,

(3) The teams would be assured the opportunity of flexibility in trying to accommodate the interests and strengths of individual teachers into a satisfactory balance.

B. Team Compatibility and the Implementation of Instructional Goals:

Earlier in this report, the four teams were described as having achieved varying levels of compatibility throughout the summer session. Some degree of compatibility

and mutuality were required before a workable form of organization could be implemented to the benefit of the children. As compatibility increased so did vehicles for communication. Children were discussed in the flexible team approach as opposed to the mechanics in the semi-departmentalized organization. Most teachers felt that some exposure to one another prior to the actual implementation of the instructional program was vital. Had this occurred to a greater extent, trial-and-error behavior experienced in the initial phases in all the teams could have been avoided. In appraising mutuality and its effect upon the implementation of the curriculum, one team member indicated during the fourth week of the session--"A week of real progress . . . our problems are shifting from team-centered ones to program-centered ones." Other members in the same team indicated--"We are a team," "We are working better as a team," "The team problems seem to be ironed out," and "Finally, I feel we are a team." All these comments were made during the fourth week on the daily response cards by members of the same team.

Tension-reduction was found to be another function of the team meetings. This attribute was not realized until mutuality had been accomplished in some form and at some level. The ability to resolve conflicts between members, to work out mechanics of the program, and to find a satisfactory balance between interests and competencies were not accomplished until some dimension of compatibility had been experienced. The exchange and sharing of ideas again, was not accomplished until refinements in compatibility were experienced.

C. Inter-team Relationships:

As the personalities of teams began to emerge, some elements of "clique" behavior developed. There seemed to be less communication between teams and it became apparent that unique concerns expressed in the teachers' room and on the playground were usually related to the problems being resolved in the individual teams. Communication between teams was enhanced somewhat by the techniques employed by the principal as he disseminated highlights of team behavior to other teams.

through his daily visits. Team leaders also recognized their apparent lack of communication between themselves and felt that they should have met more often during the course of the session. Instructional materials, developed by individual teams, were shared with the total group and this had a tendency to enhance communication.

However, the pooled materials had a tendency to encourage some competition between teams. In addition, the semi-culminating activities (assembly programs) also had a tendency to encourage the beginning elements of competition between teams. This competition however was most apparent when a disorganized or resistive team member from one team disrupted the schedules of another team for a specific room.

In retrospect, team leaders found that the competition experienced between teams generally enhanced and improved the instructional program for the children. On the surface, the competition was occasionally threatening, especially when comparing assembly program presentations; but all team leaders were convinced that the exposure of their product to another's product was another beneficial evaluation technique.

D. Instructional Material Development:

An expanded and deeper development of instructional aids and units seemed to be the result of team teaching organization. Teachers felt that not only had they developed more instructional guides and units through their mutual efforts, but that these materials were superior to those they might have produced individually. The improved quality of these materials seemed to be a function of many forces interacting upon the individual teachers and the teams. Because they were relatively free to experiment with instructional techniques, they felt that they could either rule out or refine methods of instruction. They obviously gained considerable insights from one another in their team meetings. Furthermore, they refined their methods of instruction through observing one another perform.

Lesson plans were constantly evaluated by the total team before and after instruction. Children's reactions to the presented materials thus became the evaluation criteria.

Ocasionally it was found that a team leader felt compelled to present materials which were individually conceived and organized. This method seemed to have a dampening effect on the mutuality attributes of team teaching organization.

Clerical assistance to each team seemed to be the vehicle for mechanically developing more instructional guides for the children and the teachers. When an aide had a particular talent or competency in art, for example, she was assigned the responsibility of illustrating certain materials.

Team personality appeared responsible for differentiated forms of instruction and curriculum practice. Whereas some teams felt compelled to cover much material rather superficially, others were content to attempt depth in their instruction. These differences may have been a function of competition between teams in which one team attempted to "get more done" than another but it seemed to also relate to the depth of compatibility to which individual teams were pursuing their planning and consequent instruction.

E. Team Teaching and the Team Leader:

Team leader selection was an administrative decision made prior to the beginning of the summer session. The roles of the team leaders were not concretely defined by the administrator and therefore four different definitions evolved during the summer session. All four of the team leaders felt it was their responsibility to assist individual teachers in the development and utilization of their potentialities. Their methods for involving teachers in this "fulfillment" process differed however. Whereas some used a more directive approach, others were permissive, thus relying upon group dynamics.

Although some team leaders felt that they were catalysts for encouraging the constant evaluation process, others found this resource in another team member. All

four agreed, however, that a catalyst was an important ingredient for each successful team. All felt that it was their responsibility to encourage and support this catalyst as he questioned decisions and products of these decisions.

Personality of the team leader would require essentially the same characteristics as those indicated for teachers. In addition, a team leader would need to be sensitive to individual needs of the team members through an on-going recognition and an encouragement of the individual member's strengths. The leader would also need to be sensitive to a particular weakness or series of weaknesses and work in such a way as to assist the person in a fuller development of self. The leader would need to have some freedom from anxiety when successes were not immediately forthcoming in the team. Generally, he would need to manifest sufficient stabilities so that a person in some need of assistance would find him accessible and helpful.

Although a principal could readily encourage a team leader to take on some responsibilities such as the vice-principal, all team leaders felt that they should not be perceived by the teachers as possessing administrative responsibilities for evaluating them. Instead, they should be seen as peers with additional responsibilities and some coordinative functions. All four leaders seemed to agree that communication between an individual teacher and the principal should not be interrupted by the team leader, either subtly or overtly. All four recognized that there was a status structure in each team and therefore their perceived attitudes had some effect upon the daily behavior of the teams. At times, they recognized a need to be ego-supportive while at other times questioning. Generally, team leaders who encouraged an open interchange of ideas and feelings found compatibility enhanced.

F. Size of Teams:

All teachers agreed that a comfortable working unit would involve either three or four teachers plus an aide. However, when interpersonal conflicts were evident

during the initial phases of team behavior, frequent daily log comments related to the size of the team--wishing that the team were smaller by one person. Again, this concern was absent as compatibility increased.

There are indications that the size of the team, in terms of numbers of teachers, is not a primary but a secondary variable to be considered. Balance in team composition appeared to be primary. When a team had a concentration of teachers with leadership traits, compatibility seemed to emerge more slowly than in others. Conversely, it is assumed that a team comprised of dependent individuals would also flounder for an excessive period of time before compatibility and goal-directed behavior could be experienced. From the data gathered during the summer session, it is difficult to assess an appropriate number of members for team teaching organization. Instead, size of the team should be considered a relative concept and that other variables such as personality, competency/interest balances, and behavior of the team leader should determine the size of the group.

G. The Aide Program:

As indicated earlier, the teachers seemed to be somewhat overwhelmed with the amount of assistance that they were able to call upon for the tasks not usually assigned to someone else. Role definitions for the teacher aides were minimal when the program began. Generally, the aides were integrated into the team and their interests were respected whenever possible. This encouraged some frustration on the part of the teacher when they found that the aides wanted increased responsibilities given them.

Some aides felt that their strengths had not been satisfactorily utilized. However, all four aides felt that they had been integrated, at some level, into the planning sessions of the teams. This feeling of integration was accomplished when their suggestions for team behavior were accepted, evaluated, and occasionally implemented. All four aides entered into the program hoping to gain experience,

knowledge, and exposure to children through their work. Probably because the roles of the aides were not precisely defined by the administrator, both teachers and aides directed rather excessive concern toward a mutually satisfying aide program. Most teachers seemed to feel that the teacher aides were of considerable assistance to them and that their concerns and planning for the aides were therefore justified.

Daily log responses indicated that the teacher aides were responsive to the daily tone of the teams. They soon discovered that they were serving as links between teachers. An overwhelming concern on the part of all four aides was the desire "to be needed." They perceived their most frequent contributions to be clerical, assisting in the preparation of materials, and small group instruction. They also found themselves occasionally serving as a brief substitute teacher or an ancillary teacher while the regular teacher was either involved in a specialized form of instruction, previewing films, or similar activities in which short term assistance was required. All four teacher aides felt that their experiences would have been a valuable "proving ground" for someone who was indecisive about entering the teaching profession.

Some staff members felt that a teacher aide assignment should be a terminal position and not one which will be used in gaining many forms of gratifications from the experience. The clerical aide assistance given the teams was unanimously perceived as beneficial to the total program. Evidently the functions of the clerical aides were carefully defined and thus one area of frustration in team behavior was eliminated.

Personality requirements of a teacher aide would be somewhat different from that of a teacher entering into team teaching. It was found that the successful aide was sensitive to the limits to which she could pursue her role. The teacher aide who constantly wanted some role spelled out for her was frequently unhappy and frustrated because of not being "wanted." Therefore a unique combination of independence and dependency is required in a teacher aide. That is, a successful aide would behave much like an executive's secretary; assume responsibility within defined or

perceived boundaries (and) when in doubt: ask (but not too often).

Although the teachers felt responsible for integrating the aides into the teams, all agreed that the aides could work with remedial groups, assist in the art program, assist individual children in some form of instruction, prepare ditto materials, correct papers, and assist in yard duty.

Clerical and teacher aides were found to be vital contributors to the "expansion" of the teacher. Although it was evident that the teacher aides gained professional gratification from their experiences, they were found to be essential, working members of every team. The major source of confusion seemed to be in the role definitions of the teacher aides. It is assumed that if the teacher aide position is a terminal one and not to be used for professional advancement, the role definitions will be somewhat more readily available to the administrator or the teams attempting to utilize this person.

CHAPTER VI

PUPILS IN THE TEAM TEACHING ORGANIZATION

by
Harvey R. Wall

Due to the nature of the data pertaining to pupil involvement in the program, this chapter is treated in a dual manner, through qualitative and quantitative summaries. Neither procedure can completely solve the problem of finding the actual reactions of the pupils. Instead, the writers gathered impressions from teachers and parents as they obtained clinical information from a representative sample of students.

It should be noted that these inferences and their supporting data are treated in the two succeeding chapters as well.

A. Pupil Involvement and Pupil Stimulation

Student Reaction to Program Changes: Each of the four teams used different methods in preparing the children for the shifts which they would experience in team teaching. One team used color designation whereas another team encouraged the various groups of pupils to become identified with a particular teacher. All teams employed a modified and abbreviated practice for the impending shifts during the second or third day of the summer session. Apparently, most of the children were adequately prepared for these changes. Near the end of the first week, the children, regardless of age, had successfully adapted themselves to the individual schedules which they were to follow. The children were found to be more flexible in their ability to shift than were some of the teachers; the staff occasionally asked the pupils where they (the teachers) should be.

In an effort to encourage pupil relationships within the total team, recess schedules were initially established so that the smaller group (the team) would be alone on the playground for a short period of time each day.

Initially, one or two rather withdrawn, shy, and insecure children became confused and somewhat disturbed by the changes inherent in team teaching. Near the end of the first week, the teacher's daily log comments no longer indicated the presence of these reactions. A questionnaire submitted to all parents in the Cambridge Summer School indicated similar observations: "When your child was shifted to different teachers during the day, what were his reactions?"

Enthusiastic--112
Positive--24
Indifferent--27
Negative--18
No indication--28

On the final teacher questionnaire, a similar query was made: "Have you seen some evidence to indicate that some children have perhaps been disturbed by changing teachers and groups?" To this question six teachers indicated "Yes," whereas eight indicated "no." In the qualitative comments which accompanied their answers, most of the six teachers further indicated that their primary concern related to one or two children only. There was also a slight tendency to elicit more concern on the part of the teachers when their organization was one of departmentalization rather than of flexibility. Age of the pupils seemed to have some bearing on this however. That is, those two teams instructing the older children in the primary grades saw less concern than did those relating to the first and second grade children.

Student Reaction to Large Group Instruction: Large group instruction was of apparent minimal gratification to those teachers in the departmentalized organization. They felt less able to reach the children in expanded groupings than did those employing flexibility. Pupil response to large group instruction seemed to be related to age and development as well. It was found that the younger children found it occasionally difficult to achieve an attention span beyond ten or fifteen minutes, whereas the older children in the primary grades evidently were able to readily gain from expanded group instruction.

As indicated in an earlier part of this report, large group instructional methods

varied considerably. In departmentalized teams, it was found that the total, large group of children was instructed by a teacher in essentially the same manner as would be found in a self-contained classroom. One such teacher commented midway through the summer session "It seems the larger the groups, the shorter the attention span; especially when individual participation is expected." In another team employing greater flexibility, large group instruction was found to be the organizational medium for demonstrations (by teacher and/or by groups of children), reviews, and culminating activities. Therefore several groups of children were assembled to gain the benefits of reports from children, demonstrations from teachers, and direction into impending or approaching activity. It is assumed by this writer that the success or failure of large group instruction was dependent upon the flexibility employed in making presentations to the children. (When the pupils are involved in some way with the large group presentation, success of this method is virtually assured--assuming of course that the presentation in itself is goal-directed and has educational meaning.)

Attitude and Stimulation: When the teachers were asked "What seemed to be the attitude of the children during the day?" They responded thus:

More attentive than normal--5
About the same--9
Less attentive than normal--0

These responses did not follow a discernable pattern in relationship to type of organization employed or to maturity level of the pupil.

Pupil stimulation in this program was exceptionally difficult to measure. The opinions of the teachers were used in evaluating pupil stimulation. Generally, the teaching staff felt that pupil stimulation was greatly enhanced by their participation in some organization within the broad definition of team teaching. On the final questionnaire they were asked "From the standpoint of the pupils, what did you feel was the greatest value or advantage of team teaching?" Their responses indicated a conviction that the children's stimulation and therefore their achievement

was encouraged. Representative responses to this question follow:

1. "The children had a greater exposure to more and expanded materials."
2. "Flexible re-grouping of pupils provided greater avenues to reach the children."
3. "Pupils' exposure to the different strengths and interests of teachers encouraged stimulation."
4. "High interest level of the children was obvious."
5. "We were able to more readily adopt programs which were more in keeping with the pupils' needs."
6. "The depth of the instructional presentations benefited the children."
7. "Diversified activities provided a broader exposure to the children."
8. "Special skills of the teachers benefited all the children."

Frequent daily log comments indicated pupil enthusiasm. It is recognized that these are teacher perceptions, but as indicated above, at this point these opinions are the most reliable sources of data.

B. Pupil Achievement

Organizational flexibility seemed to provide greater vertical and horizontal exposures for the children. As indicated above, broadening experiences seemed to be one of the attributes of team teaching. When flexibility in grouping was encouraged, a given child could progress vertically at a speed appropriate for his progression. That is, as a child manifested progress and a readiness for another stage of exposure, he could really accomplish movement through the groups when flexibility was the rule.

Philosophical disputes frequently surrounding the heterogeneity or homogeneity in grouping were not found to be necessary when flexibility was employed. The given child was a member of several different groups during the course of the day and therefore was not stigmatized. Therefore, remedial instruction was

readily found to be a functioning part of the team teaching organization during the summer program. When teachers were able to identify a particular instructional deficit in a group of children, flexible grouping could accommodate instruction toward this achievement pursuit. Therefore, special techniques unique to a given need were presented.

The atypical child was usually able to find a place for himself--and to his benefit--when greater flexibility was utilized. On the other hand, when departmentalization was employed, a schedule was maintained and a teacher attempted to reach the atypical child within the rigid confines of this schedule.

Two of the four teams instructed combination grade levels. No reactions regarding these combinations were elicited from pupils, parents, and/or teachers. On the other hand, it was found that pupil communication across instructional levels seemed to benefit both the upper and lower grade level children. For the younger child, articulation to the next grade level was enhanced. In addition, the younger child was able to receive the benefits of some integration of learnings in which the older children were involved. The older child was permitted the opportunity to occasionally review learned materials. In addition he was permitted to gain in ego strength as he attempted to explain and passively instruct his younger classmates.

Small interest groups manifested greater opportunity to deal with individual problems. Cross grouping again provided expanded peer interactions ordinarily unavailable to the child in the self-contained classroom.

When the teachers were asked, "How did the program for the children in your team compare with that you would have given them if they had been in a self-contained classroom situation?" They indicated:

Better program--9
About the same--4
Poorer program--1

Assumptions underlying these responses have been covered elsewhere. However, these and other responses from the teachers indicated that the instructional program

was of better quality than if conventional organizational methods and techniques had been used. An evaluation of pupil achievement would therefore necessitate the evaluator to be dependent upon many sources of data other than objective or subjective test results. This report has attempted to do this.

Because the experimental team teaching session was of relatively brief duration, objective test data are of questionable value for evaluation purposes. However, a quantitative comparative study is one aspect of the statistical section which follows, somewhat later in this chapter.

C. Guidance Provisions in Team Teaching Organization

A team of students can conceivably become a small school social environment for a given pupil. That is, when a child sees himself as a member of a smaller group (his team), his world may provide more security while not necessarily confining him to the limitations of this "small school."

It was found that social relationships were generally enhanced when problems could be satisfactorily contained within the functioning of the team and the teacher's concerns for this behavior could be a vehicle for communication in the resolution of the conflicts. Expanded social experiences were also the rule inasmuch as the child was able to relate to more children within the structure of a given classroom offering. Whereas a child might be somewhat alone and not able to find someone to whom he could relate in a given classroom, his opportunities to market and search for a compatible relationship were greatly enhanced through team teaching.

Using those above-cited premises as points of reference, one should then ask which children were unsuccessful participants in team teaching. Most of the teachers felt that the shy and socially recessive child was initially overlooked by the teaching staff. As greater team mutuality was experienced, team members encountered less anxiety about their relationships and about the program. Consequently individual children's needs were more frequently discussed in team meetings.

Although it was obvious that all teachers had concerns about the specific children, it was interesting to note that the teams employing greater flexibility were able to attempt program accommodations for those children to whom they were directing considerable concern. Departmentalization on the other hand seemed to be restrictive and the teachers continued to be somewhat frustrated in their attempts to reach a child within the rigidities of the organizational framework. The younger achieving child was usually found to have program provisions readily accessible to him. The reluctant learner, on the other hand, experienced somewhat greater distance from the instructional program than did the children manifesting other forms of exceptionality. However, flexibility again encouraged teachers to attempt instructional provisions in keeping with the perceived needs of the children. Both program flexibility and improved teacher-pupil relationships were found to occasionally assist in minimizing the child's reluctance to learn. The academically precocious children in this study manifested the expected adaptability and utilization of the offerings provided.

The staff was asked "Did you find it easier or harder to reach an underachieving or disturbed child?" Nine indicated that it was easier, one indicated no difference, and four indicated that it was harder to reach these children. The four teachers who indicated that it was harder to reach these children were from those teams employing a modified departmentalized approach.

Control and disciplinary measures within a given team were most uniform again when flexibility was employed. This observation is in keeping with those previously cited in this report when considering the vehicles for communication within teams. When team compatibility was reasonably well established, mutual sympathies were accompanied by a subtle understanding of the control methods employed by the fellow teachers. This uniformity seemed to create less confusion in the minds of the children.

Those children comprising the representative sample in the evaluation study were observed by all teachers with whom they came in contact during the summer session.

Near the end of the session, these teachers evaluated general performance of the children according to the following categories:

1. Social behavior in the homeroom setting
2. Responsiveness with a teacher other than the homeroom teacher
3. Responsiveness in large group situations
4. Social behavior during recess
5. Social behavior during class changes
6. General adjustment to changes
7. Additional comments by the teachers

As a point of reference, this evaluation form was submitted to those teachers who had taught the child during the previous school year.

Generally, no outstanding differences between the two programs were found in the teacher responses. It was found that children had a tendency to display similar behavioral characteristics in both instructional programs. Specifically, eight individual pupils showed more positive response to the summer program in areas covered in the above-cited questionnaire. On the other hand, five children apparently manifested less positive behavior patterns in summer school than they had during the regular year.

When considering the qualitative data available in this evaluation study, the writer feels comfortable in assuming that:

1. Apparently because of increased teacher morale and teacher stimulation, the children derived ultimate benefit from their experiences in a team teaching setting. Vertical and horizontal expansion was a concomitant of team teaching organization.
2. Team teaching can provide educational opportunities for all children committed to it when assuming that some degree of flexibility in the organization itself is available to the children. Thus, pupils will benefit and will not be denied the needs of security and stability--even at the primary grade level--in team teaching organization.

D. Quantitative Summary

It was the intention of the writer, through psychological examinations of a sample of pupils, to test the administrator's previously stated hypothesis, "That the personal adjustment of pupils will not be adversely affected when working with more than one teacher."

This aspect of the research design required the psychologist to examine the children before and after their experiences in the team teaching system so that the comparative data could be readily submitted to quantitative study. The data collected before team teaching began were therefore used as a point of reference to which the final examination results could be compared.

Each statistical test was entered with the null hypothesis, or no difference, approach. Thus, when no statistical significance was found in a given variable, it could then be assumed that the children in the sample did not manifest a difference in their test responses due to chance alone. Hence, "no difference" then meant that the sampled pupils were not significantly affected, on the variables tested, by the program of team teaching. When significance of difference was found, the direction of the difference is indicated.

Achievement tests were administered to pupils who had completed the second or third grade, therefore the sample in that aspect of the report is less than (N=18) the customary 31 children.

Because it was assumed that the distributions of test scores would not approximate the normal curve, a non-parametric statistical technique, the Mann Whitney U Test, was used in determining levels of significance of difference.

When the nature of the acquired test data did not lend itself to statistical study, the results are reported in simple form.

The specific psychological instruments in the study were chosen for two reasons: (1) their relative ability to sample critical aspects of internal personality organization, and (2) the relatively brief amount of time required in their administrations.

The writer recognizes that these instruments can render only partial evidence in the evaluation of the effects of an instructional program upon the children committed to it.

1. "Bender-Gestalt Visual Motor Test"--One of the more common uses of this test relates to its projective qualities. That is, psychologists frequently employ it as one aspect of a battery of tests to analyze the examinee's internal organization and his ability to satisfactorily relate parts (objects) to one another.

The examination requires the subject to reproduce with paper and pencil, nine designs which are individually placed before him. The only factor scored in this study related to the examinee's order and arrangement of these designs on the paper. Scoring procedures followed a four-point progression as defined by Max Hutt, an expert in the use of this instrument:

- (1) Logical--Planning with flexibility--correct sequence of designs.
- (2) Methodical--Pre-planning with careful placement.
- (3) Irregular--Placement which is out of order.
- (4) Confused--Chaotic order with overlapping or collisions of designs--scrambled product.

As can be determined from the definitions of the scoring scale, the lowest score indicates the more positive internal organization. Because the scoring of the Bender-Gestalt permitted a limited range of scores, from one to four points, the results were not submitted to a test of the significance of difference.

TABLE 1

TOTAL MEAN BENDER-GESTALT SCORES BEFORE AND AFTER TEAM TEACHING

| | Before | After |
|-------|--------|-------|
| N | 31 | 31 |
| Total | 100 | 87 |
| Mean | 3.23 | 2.81 |
| Range | 2-4 | 1-4 |

From these data, the sampled pupils evidenced a slight gain in internal organization. Therefore, it can be assumed that when considering this variable, they were not adversely affected by the program.

2. Digit Span--The memory for digits given by the examiner is a recognized method of determining an examinee's manifest level of anxiety (vague insecurity). A child's score represented the highest number of digits he could recall from those given him in an irregular sequence, both in forward and reversed orders. A comparatively higher number of recalled digits is interpreted to indicate lessened anxiety, while a lower relative number is seen as increased manifested anxiety.

TABLE 2

TOTAL MEAN SCORES WITH LEVEL OF CONFIDENCE FOR TEST OF DIFFERENCE
ON DIGIT SPAN BEFORE AND AFTER TEAM TEACHING

| | Before | After |
|-----------|--------|-------|
| N | 31 | 31 |
| Total | 240 | 250 |
| Mean | 7.74 | 8.06 |
| Range | 4-11 | 5-13 |
| P = .3734 | | |

A probability level of $P = .3734$ is not statistically significant although the population sample in the study manifested a slight gain on the second administration of the test. When considering this variable, then, it can be assumed that the pupils were not adversely affected by the program.

3. California Test of Personality (Sense of Personal Worth)--The standardized administration of the CTP was modified to accommodate the age levels of the pupils in the sample. The answer sheet was similarly modified to more readily permit the younger child to respond with his "yes" or "no" answers while the examiner read the

questions to the groups of six to eight children. High scores are interpreted as representing a tendency toward positive feelings of personal worth.

TABLE 3

TOTAL AND MEAN SCORES WITH LEVEL OF CONFIDENCE
FOR TEST OF SIGNIFICANCE OF DIFFERENCE ON CTP SENSE OF PERSONAL WORTH
BEFORE AND AFTER TEAM TEACHING

| | Before | After |
|---------|--------|-------|
| N | 31 | 31 |
| Total | 261 | 287 |
| Mean | 8.42 | 9.26 |
| Range | 5-11 | 5-12 |
| P=.0818 | | |

The difference between the two test administrations is statistically significant at the P=.0818 level of confidence. As is evident in the table above, the sampled pupils made significant gains, as a group, on this test when comparing the scores of the "after" administration to the "before."

4. California Test of Personality (Freedom from Nervous Symptoms)--A high number of correct responses is interpreted as meaning that the examinee is relatively free of concerns which are considered to be nervous symptoms.

TABLE 4

TOTAL AND MEAN SCORES WITH LEVEL OF CONFIDENCE
FOR TEST OF SIGNIFICANCE OF DIFFERENCE ON CTP FREEDOM FROM NERVOUS SYMPTOMS
BEFORE AND AFTER TEAM TEACHING

| | Before | After |
|---------|--------|-------|
| N | 31 | 31 |
| Total | 242 | 220 |
| Mean | 7.81 | 7.10 |
| Range | 4-12 | 2-12 |
| P=.2802 | | |

Although the population sample indicated a slight loss on this variable after team teaching, the difference is not statistically significant ($P=.2802$). Of interest to the writer is the disagreement of these findings with those represented by the Digit Span study. It is conceivable that the ability to admit to more indications of nervous symptoms may indicate a tendency toward mental health. If this is the case, these findings appear to be in agreement with those related to manifest anxiety decrease as found in the Digit Span data. The writer is unable to make this interpretation, however. Neither the Digit Span nor the Freedom from Nervous Symptoms studies were statistically significant, therefore a prolonged discussion is not warranted.

5. California Test of Personality (School Relations)--A high number of correct responses is interpreted as reflecting perceived social and academic school-related success.

TABLE 5

TOTAL AND MEAN SCORES WITH LEVEL OF CONFIDENCE
FOR TEST OF SIGNIFICANCE OF DIFFERENCE ON CTP SCHOOL RELATIONS
BEFORE AND AFTER TEAM TEACHING

| | Before | After |
|-----------|--------|-------|
| N | 31 | 31 |
| Total | 284 | 305 |
| Mean | 9.16 | 9.84 |
| Range | 5-12 | 5-12 |
| $P=.1586$ | | |

Children in this sample manifested a gain during the summer session on this variable, but the difference ($P=.1586$) is not considered to be statistically significant although the tendency toward significance is evident. Thus, when considering the variable of perceived school relations, the program appeared to have no adverse affect upon these children.

6. California Achievement Test (Reading Vocabulary, Reading Comprehension, and Total Reading)--This standardized test was administered to those children who had completed either the second or third grade. An instructional program for primary grade children of six weeks' duration is characteristically not considered capable of demonstrating significant quantitative gains in its population. As evident in the tables which follow, this summer session was apparently not responsible for significant

TABLE 6

TOTAL AND MEAN SCORES WITH LEVELS OF CONFIDENCE
FOR TESTS OF SIGNIFICANCE OF DIFFERENCE ON CALIFORNIA ACHIEVEMENT TEST (READING)
BEFORE AND AFTER TEAM TEACHING

| Vocabulary | | |
|---------------|--------|-------|
| | Before | After |
| N | 18 | 18 |
| Total | 77.0 | 83.0 |
| Mean | 4.28 | 4.61 |
| P=.4472 | | |
| Comprehension | | |
| | Before | After |
| N | 18 | 18 |
| Total | 71.7 | 75.1 |
| Mean | 3.98 | 4.17 |
| P=.5686 | | |
| Total Reading | | |
| | Before | After |
| N | 18 | 18 |
| Total | 74.2 | 79.5 |
| Mean | 4.12 | 4.42 |
| P=.4592 | | |

measurable gains in the population sample. The CAT reading subtest and total reading scores are treated together above and are expressed as grade placement scores.

Because two instructional levels of the CAT were administered, derived scores rather than obtained scores, were used in the achievement studies above.

Although none of the three aspects of the measured achievement studies demonstrated significant difference between "before" and "after" administrations, slight gains in the sample were found. When considering measured reading achievement, team teaching appeared to have had no adverse effect upon these children.

7. Drawings of Self and Teacher (projective)--This instrument was included in the battery of tests to give the psychologist information pertaining to the child's perception of his affective contact with the teacher(s). Evaluation criteria related to (1) role differentiation between child and teacher, (2) affective involvement by assessing the relative distance between child and teacher, and (3) identification with teacher when sex of teacher and pupil were the same. The first drawing (before team teaching) was used as the standard or point of reference by which the final drawing (after) was evaluated in terms of gain, loss, or no change in the child's apparent perceptions. Relative gain was given a rating of 3, no change was assessed 2 points, and relative deterioration in apparent perception was assessed 1 point. Thus, a mean (average) score would equal 2 points, when no change was found between the two test administrations.

TABLE 7

THE RELATIONSHIP BETWEEN DRAWINGS OF SELF AND TEACHER
BEFORE AND AFTER TEAM TEACHING

N = 31
Total = 74
Mean = 2.39

It is noted that a mean of 2.39 is indicative of gain in apparent perception of teacher-pupil relationship. Thus, the program evidenced no adverse effect upon the sample population on this instrument.

8. Drawing of the family--An individual's involvement and differentiation within his primary unit, the family, was the principal evaluation standard for this instrument. Scoring was identical to that employed in Drawing of Self and Teacher instrument.

TABLE 8

THE RELATIONSHIP BETWEEN DRAWINGS OF THE FAMILY
BEFORE AND AFTER TEAM TEACHING

| |
|-------------|
| N = 31 |
| Total = 66 |
| Mean = 2.13 |

9. Favorite-teacher and homeroom-teacher comparisons--At the conclusion of the summer session, the 31 children in the sample were asked to indicate their "favorite" teacher during team teaching. Seventeen of these children, or slightly more than half of this group, indicated preferences other than their homeroom teacher. Four of the seventeen preferred teacher aides. If it can be assumed that a child's choice of a favorite teacher indicates perceived accessibility to this teacher, then significant guidance inferences can be drawn from these data. That is, more than half of the sampled children seemingly felt more comfortable (need fulfillment) with a teacher other than the one to whom the child would have been assigned if a self-contained classroom organization had been pursued.

When analyzing the qualitative and quantitative data, it was found that the children committed to a team teaching system were not adversely affected by the

organization's functions. Instead, many intangible benefits were directed to the children through this organization. Benefits such as intellectual expansion through increased stimulation and interest development, are difficult to measure with conventional evaluation instruments.

CHAPTER VII

EXPERIMENTAL-CONTROL STUDY OF TEAM TEACHING

by
Robert W. Reasoner

A. Selection of Control School

A comparison between the experimental program and a control situation was believed to be important to determine the differences, if any, in pupil attitudes, achievement, attendance, and parent response. The Oak Park Summer School was selected as the most comparable from the standpoint of previous attendance (see Table 9), socio-economic level, and school size.

TABLE 9

PERTINENT DATA FOR EXPERIMENTAL AND CONTROL SCHOOL--
1960 SUMMER REGISTRATION AND ATTENDANCE

| | Experimental No. of Pupils | School Area % of loss | Control No. Pupils | Area % Loss |
|--------------------|-------------------------------|--------------------------|-----------------------|----------------|
| Registration | 429 | | 480 | |
| 1st Day Enrollment | 377 | 12% | 404 | 16% |
| Average Attendance | 323 | 13%* | 352 | 13% |

*percentage loss from peak enrollment

B. Description of Experimental and Control School Staffs

All teachers from the two schools were asked to complete a personnel inventory form in order to establish some degree of comparison between the two staffs. The analysis of these data indicates that, for the most part, they were quite comparable with no great significant differences between them (see Table 10).

TABLE 10

STAFF TRAINING AND EXPERIENCE FOR EXPERIMENTAL AND CONTROL SCHOOLS

| | Experimental | Control |
|---|--------------|----------|
| Number of Teachers | 14 | 14 |
| Average Teacher Age | 37.5 yrs | 35.6 yrs |
| Average Age of Experience | 10.7 yrs | 11.3 yrs |
| Average Primary Experience | 5.8 yrs | 7.3 yrs |
| Master's Degrees | 4 | 5 |
| Administrative or Supervisory Credential | 4 | 3 |
| Average Number of Sessions Taught in Summer School | 2 | 1 |

The control staff was evidently slightly more experienced in the primary grades while the experimental staff averaged one year more in summer school teaching experience. These two areas would seem to balance each other since the total years of experience did not differ significantly. The total number of advanced degrees or credentials held appeared to be the same.

Although no attempt was made to measure the quality of teaching, it would appear that the staffs of the experimental and control schools were sufficiently similar with regard to objective background data that any differences in the programs could probably be attributed to differences in the organization of the two programs.

C. Curriculum

The basic curriculum of the two schools was identical. Both schools designed the program around two major social studies areas, Mexico and Indians of North America. Each school conducted the unit on Mexico for the first three week period and the unit on Indian Life the final three week period. The same films were ordered and shown to the pupils from the two schools. Both schools attempted

to provide an enrichment program with help provided for children who needed a review of the basic skills.

Insofar as possible, therefore, the curriculum for the experimental and control schools was identical.

D. Time Study

Articles on team teaching frequently mention the fact that additional time is required in team teaching. Seldom, however, is one able to find more specific information. Hence, a study was made to determine the amount of additional time required for those teachers involved in the experimental team teaching program.

Throughout the third week of summer school all teachers in both the experimental and control schools were asked to maintain an accurate record of the amount of time devoted to their summer teaching. The study showed great variations in the amount of time put in by teachers on both staffs. In general, one is impressed by the number of hours spent in addition to actual teaching time. Many teachers spent far more time working outside of class than they did in actual teaching. A few teachers averaged almost two hours of preparation time for each hour of teaching.

Table 11 provides a summary of the results.

TABLE 11
AVERAGE PREPARATION TIME SPENT BY TEACHERS-
EXPERIMENTAL AND CONTROL SCHOOLS

| | Experimental | Control |
|-----------------|--------------|-------------|
| 1st grade | 15 1/2 hrs. | 12 hrs. |
| 2nd grade | 14 hrs. | 10 1/2 hrs. |
| 3rd grade | 14 1/2 hrs. | 9 hrs. |
| Average | 14 3/4 hrs. | 11 hrs. |
| Average per day | 3 hrs. | 2 1/4 hrs. |

Teachers in the first grades at both schools seemed to find it necessary to put in more time than did the teachers at the other grade levels. At all grade levels those in the experimental program found it necessary to put in an average of three quarters of an hour more per day, about the length of the team meeting. The use of both teacher aides and the clerical aides did not seem to make up the difference in the amount of time required. The aides did not mean shorter hours for the teachers. Rather, many of the teachers used more time to prepare additional materials which could be typed by the aides.

It would be presumed that if an additional three quarters of an hour is required for merely a four hour program, teachers should plan on at least one hour per day during a regular session.

E. Attendance

One of the critical problems each summer is the large number of drop-outs occurring throughout the summer session. It was felt that since attendance was voluntary, drop-out percentages would serve as one means for evaluating the effect of the team teaching program upon the children. Table 12 provides comparative data on attendance for the experimental and control schools.

TABLE 12
EXPERIMENTAL AND CONTROL SCHOOL ATTENDANCE DATA

| | <u>Experimental School</u> | | <u>Control School</u> | |
|--------------------------|----------------------------|--------|-----------------------|--------|
| | No. Pupils | % Loss | No. Pupils | % Loss |
| Pre-Registration | 489 | | 539 | |
| 1st Day Enrollment | 371 | | 424 | |
| Percentage Loss | 25% | | 22% | |
| Peak Enrollment | 378 | | 431 | |
| 6-30-61 | 363 | 4%* | 403 | 4% |
| 7-7-61 | 353 | 7% | 388 | 10% |
| 7-14-61 | 335 | 11% | 367 | 15% |
| 7-21-61 | 317 | 16% | 343 | 20% |
| 7-28-61 | 300 | 21% | 313 | 27% |
| 8-3-61 | 300 | 21% | 300 | 31% |
| Average Daily Attendance | 330 | 13% | 358 | 17% |

*indicates percentage loss from peak enrollment

The drop-out rate, as indicated by the percentage loss, shows a consistently greater loss in the control school, particularly during the final week. Whereas the difference appeared to be about four percent (4%) throughout most of the summer, the difference increased to ten percent (10%) by the end of the session.

The average daily attendance figure as computed for the state apportionment takes into consideration not only the drop-outs but also the absence rate of those enrolled. This figure also reflects the difference (4%). In monetary terms, this means the experimental program received approximately \$525 more than the control school.

When compared with the other primary schools in the district, the experimental program had the lowest rate of drop-out of the four schools. The difference between the experimental school and the other three schools in the average daily attendance ranged from two percent (2%) to ten percent (10%).

The evidence clearly indicates that attendance under the team approach was at least as high as in the control school, if not significantly higher. It would therefore appear that the children did not become unduly upset or discouraged under this program to the point of dropping out of summer school.

F. Pupil Attitude

The regular school principals were asked to suggest the names of parents who would probably be willing to keep a daily record of their child's comments throughout the summer. From this list, thirty (30) parents from each school were asked to assist in the study. Each parent was given a set of instructions with a 4 x 6 file card dated for each day of the summer session. They were asked to record the free comments made by their child and assess the general attitude of the child towards school that day. The parents were told that we were interested in surveying the children's attitude toward summer school and studying these aspects of the curriculum which seemed to make the greatest impression upon the children.

The parents were asked to record the child's attitude toward school on a five-point scale: (1) "Enthusiastic," (2) "Enjoyed it," (3) "Neither positive nor negative," (4) "Disinterested," or (5) "Negative." The attitude and comments made by children from the experimental and control schools were then compared.

The general attitude turned out to be identical for the two schools. The children in both samples represented all ability areas. Yet the results indicated that children from both schools "enjoyed school."

The daily attitude evaluations were averaged every two weeks for the two schools, using the five-point scale mentioned above (See Table 13.)

TABLE 13
AVERAGE ATTITUDE RATINGS OF PUPILS IN EXPERIMENTAL AND CONTROL SCHOOLS

| | Experimental | Control |
|---------------|--------------|---------|
| 1st two weeks | 2.0 | 2.0 |
| 2nd two weeks | 2.0 | 2.0 |
| 3rd two weeks | 2.0 | 2.0 |
| Total Average | 2.0 | 2.0 |

Although there were variations in the attitude of each child from day to day, the over-all average was remarkably the same. It would appear, therefore, that the children in both the team teaching and the conventional summer programs thoroughly enjoyed the experience. However, there seems to be no evidence to support the premise that children enjoy school more when working with several teachers. The children merely accepted the practice of working with other teachers, without becoming emotionally upset, and without significantly affecting their attitude toward school.



An analysis was also made from the parent questionnaire of the curriculum areas the children enjoyed the most. The parents were asked, "Which subject did your child enjoy the most?" to determine whether or not a greater amount of interest in particular subjects had been engendered through team teaching. The preference for subject areas has been summarized in Table 14.

TABLE 14
RANKINGS OF SUBJECTS PREFERRED
BY PUPILS IN EXPERIMENTAL AND CONTROL SCHOOLS

| | Experimental | Control |
|------------------|--------------|---------|
| Study of Indians | 1 | 2 |
| Study of Mexico | 2 | 1 |
| Crafts | 3 | 4 |
| Spanish | 4 | 3 |
| Films | 5 | 5 |
| Folk Dancing | 6 | - |
| Arithmetic | 7 | 6 |
| Reading | 8 | 7 |
| Assemblies | - | 8 |

The similarity in children's attitudes between the two schools seems quite remarkable. In no case was the rank order of the control school more than one category distant from the ranking of the experimental school. Seven of the eight subjects preferred by the children in the experimental school were also chosen by the children in the control school.

In summation there was a high degree of similarity in pupil attitude between the two schools. First, the children in the team teaching program thoroughly enjoyed school, as did those in the control program. Second, the subject areas most talked about at home were very similar for the two schools. Third, there was a remarkable degree of similarity in the subjects "enjoyed the most." Therefore, it could be assumed that the attitudes of children in a team teaching

program did not significantly differ from that of children in a conventional program.

G. Reading Achievement

Academic achievement is of primary interest to many educators when they view the possibilities of team teaching. The question as to what happens to a child's achievement when exposed to numerous teachers has been investigated in several research studies. It was not the intent of this study to examine the area of achievement to any great degree due to the fact that there were only twenty-nine (29) instructional days. It is extremely difficult to tell what went on in the children's minds during this experience. The areas covered by any test may or may not be representative of what went on, or what benefits a child received. It was felt, however, that a standardized reading test would be as representative as any test. Therefore, the California Achievement Test was administered to a random sample of second and third grade children.

The sample was selected by taking every third child attending summer school from the home school in which the summer school was being held, i.e. Cambridge and Oak Park. It was felt that this would hold constant the familiarity with the school and the physical environment at least.

Near the conclusion of the summer school the test was given to the sample of twenty (20) students from each of the two schools, ten (10) second graders and ten (10) third graders. Each child's score was then compared with the score obtained on a comparable form administered in May. Although some growth in achievement might have been expected between the test in May and the conclusion of the regular year in June, each child would have had the same opportunity for growth as that experienced throughout the year. Any significant differences in growth might, therefore, be a result of the child's summer experience. A comparison of the results for the experimental and control schools is shown in Table 15.

TABLE 15
COMPARISON OF READING ACHIEVEMENT

| | Experimental | Control |
|----------------|--------------|----------|
| Second Grade | G.L.P.* | G.L.P. |
| May Average | 2.5* | 3.3 |
| August Average | 2.6 | 3.4 |
| Average Growth | 1 month | 1 month |
| Third Grade | | |
| May Average | 4.9 | 5.5 |
| August Average | 5.3 | 5.5 |
| Average Growth | 4 months | 0 months |

*Grade Level Placement

It is apparent that there was no significant difference in the growth between the two groups of second grade children. The third grade children in the experimental school scored an average gain of four months in reading achievement. This may have been due, in part, to the fact that the Upper Primary Form did not provide a sufficiently wide range. Five of the ten children at the control school, for example, scored a maximum score on the "Vocabulary" section. Possibly, on another test form, the difference between the two schools at the third grade would have been less. Nevertheless, it appears that the third grade children under team teaching made as much academic growth in reading as those in the conventional program, if not more.

H. Parent Reaction

Parent reaction to both the experimental and control programs was elicited through a questionnaire sent home to all parents. Both schools had a return of 80-85%, generally considered to be a high rate of return.

It appears quite evident from the results of the questionnaire that parents

send their children to summer school for different reasons, some for enrichment, some for basic subjects, and others a combination of remedial-enrichment instruction.

"Karen was sent to summer session for the expressed purpose of improving her basic subjects."

"Our boy was interested in a creative, enriched program this summer."

"We sent our boy because he enjoyed the enriched program, yet we feel he needs the remedial work in arithmetic, too . . ."

The results of the first question point out the similarity between the two schools, and the divergence in the program expected by the parents.

1. What type of program did you want for your child this summer?

| | <u>Experimental</u> | <u>Control</u> |
|---------------------------------------|---------------------|----------------|
| Basic Subjects | 25% | 20% |
| Enriched Program | 50% | 55% |
| Arts and Crafts | 11% | 15% |
| Both Enrichment and Basic Subjects | 13% | 8% |
| No Response | 1% | 2% |
| | — | — |
| | 100% | 100% |

Both the control school and the experimental school planned a program that would meet this difference in needs as closely as possible. That they met this challenge fairly adequately is indicated by the results of two questions. The second question was asked to serve as a check on the parent attitude toward the summer program. Although the questions were placed in different sections of the questionnaire, the results are almost identical, both indicating a high degree of satisfaction.

2. Were you satisfied with the program your child received?

| | <u>Experimental</u> | <u>Control</u> |
|-------------|---------------------|----------------|
| Yes | 94% | 91% |
| No | 4% | 6% |
| No Response | 2% | 3% |
| | — | — |
| | 100% | 100% |

3. Based upon your child's experiences would you send him to a similar session again in the future?

| | <u>Experimental</u> | <u>Control</u> |
|-----|---------------------|----------------|
| Yes | 94% | 93% |
| No | 6% | 7% |

Parent comments on the questionnaire also gave evidence to the fact that the program met the needs of the children.

"This program has been a wonderful thing for our child. He has always hated school--this summer his whole attitude has changed."

"The total family enjoyed our child's summer experience. Congratulations on a job well done!"

"The program this summer was just right for my boy who needs instruction in basic subjects."

"I am very enthusiastic about the enriched summer school program."

"Our child certainly enjoyed the program which was offered at summer school and we are certainly happy with what was accomplished."

In spite of concern by the professional staff regarding the optimum length of the summer school, the parents seem to feel that a six-weeks session is "just right," though a significant percentage feel that the session may be too long.

4. How do you feel about the length of summer school?

| | <u>Experimental</u> | <u>Control</u> |
|------------|---------------------|----------------|
| Too Short | 2% | 1% |
| Just Right | 80% | 80% |
| Too Long | 18% | 19% |

One of the major areas of concern regarding team teaching was its effect upon the child and his relationships with his peers and his teacher. The questionnaire covered three areas in an attempt to determine any difference.

5. How easy was it for your child to develop new friendships this summer?

| | <u>Experimental</u> | <u>Control</u> |
|----------------|---------------------|----------------|
| Easier | 22% | 20% |
| About the Same | 64% | 69% |
| More Difficult | 4% | 4% |
| No Indication | 10% | 7% |
| | ----- | ----- |
| | 100% | 100% |

6. Which phrase would best describe your child's attitude toward his teacher?

| | <u>Experimental</u> | <u>Control</u> |
|------------------------|---------------------|----------------|
| Very warm relationship | 43% | 40% |
| Positive | 47% | 51% |
| Indifferent | 9% | 8% |
| Critical | 1% | 1% |
| | ----- | ----- |
| | 100% | 100% |

7. When your child returned home from school each day, how did his behavior compare with that shown during the regular year?

| | <u>Experimental</u> | <u>Control</u> |
|--------------------------|---------------------|----------------|
| Happier and more relaxed | 33% | 37% |
| About the same | 66% | 62% |
| More tense and nervous | 1% | 1% |
| | ----- | ----- |
| | 100% | 100% |

From the viewpoint of the parents, there appeared to be no areas of difference between the experimental and control schools in any of the three phases covered: peer relations, pupil-teacher relationship, and emotional adjustment. In each area the children seemed to have been able to make a very positive adjustment with only a few exceptions.

This would seem to indicate that from the parents' observations the children's social and emotional adjustment was not affected adversely by a team teaching approach. Furthermore, the children seemed to have developed as strong a relation-

ship with their homeroom teacher as children in the control school, even though they may only have been with this teacher an hour per day.

Thus, the questionnaire indicated a high degree of satisfaction on the part of the parents, indicating that with but a few exceptions, the needs of the children were met through the program developed. The results of the survey failed to bring out any significant difference in the attitude of parents or children towards school. There seems to be strong support, therefore, for the premise that the personal, social, and emotional needs of children can be as adequately met in a team teaching program as in a conventional one.

I. Summary

Efforts were made to select and equate a control situation with that of the team teaching experimental school. The two situations were judged to be fairly close with regard to socio-economic level, school size, previous attendance record, curriculum, and staff.

The results of the study seemed to indicate that children exposed to a team teaching situation are not adversely affected. Neither are they stimulated to a greater degree than in a conventional program. With regard to most aspects surveyed, there was no significant difference between the two programs. Both pupils and parents indicated that they were pleased with the experimental program and with the control program. The only area where there appeared to be a difference with respect to the pupils, was in the area of attendance; here, there seemed to be slightly less drop-out in the experimental school as the summer progressed. The other area of difference was in the greater amount of teacher time required by team planning.

The evidence gathered from the experimental-control school study on attendance, pupil attitude, achievement, and parent reaction supports the premise that teachers working in a team setting can provide an instructional program that compares

favorably to that of a conventional school. It is conceivable that over an extended period of time the differences between the two programs would become more pronounced. In addition, numerous other benefits may be possible through the team approach.

CHAPTER VIII

PARENT REACTIONS TO TEAM TEACHING

by
Robert W. Reasoner

Because parents are in a unique position to note the effect the school has upon the child, an attempt was made to solicit their reaction to team teaching. Responses were received on both the daily log cards and on the final questionnaire sent out to all parents.

Several general evaluation questions were included in the questionnaire. The responses indicated a high degree of satisfaction with the summer school program itself. Ninety-four percent (94%) responded "Yes" to the question, "Were you satisfied with the program your child received?" The same percentage also replied that they would send their child again to a similar session. The replies to other questions are reported under the chapter on the "Experimental-Control Study of Team Teaching."

Specific questions were asked about those areas in which team teaching might possibly have had adverse effects upon the child's relationships and personal adjustment. (See Appendix "C") One of these areas was that of pupil-teacher relationships. What happened when the child couldn't go to the same person for help" Could a child feel as close to a teacher when he was with her only one hour per day as he could if he were with her all day? What would be the child's attitude when he moved from class to class? Can a child develop a warm relationship with teachers other than his homeroom teacher?

First, there did not seem to be a high correlation between length of exposure to a teacher, or lack of it, and the child's attitude toward the teacher. Ninety percent (90%) of the parents reported that their child had either a positive or a very warm relationship with his teacher. This was almost identical with the results

reported in the control school.

No question was asked regarding the child's relationship with teachers other than his homeroom teacher. However, through observation it became quite obvious that team teaching enabled some children to become close to other teachers. This observation was also supported in some of the parent comments: "Our child likes changing classes because if one isn't too nice one day, maybe another will be. This makes good sense as we all have our ups and downs."

"I think team teaching makes it easier for the child to establish a close rapport with the teacher of his choice, which could often carry over into pleasant experiences in other classes with other teachers."

"Even though Miss _____ was not Dale's regular teacher, he really looked forward to the time when he was with her. As a result of this teacher, perhaps, his whole attitude toward school and his teachers has greatly improved."

Many of the children thoroughly enjoyed changing teachers, while others seemed to accept it as if it were the same as changing subject matter areas.

"Becky liked the different teachers a lot."

"Sharon needs to be kept busy at all times. By going to the different rooms with different teachers, her interest remains high."

All parents were asked what their child's reaction had been to the shifts to different teachers during the day. Seventy-six percent (76%) reported that it had been either positive or enthusiastic. Less than ten percent of the children had had negative feelings toward it. Most of these primary children, therefore, had obviously not only accepted the practice but also had enjoyed it.

A second area of concern related to peer relationships. Did the team situation with its varying groups make it more difficult for the child to develop friendships? Parents were asked "How easy was it for your child to develop new friendships?"

Eighty-six percent (86%) felt it was "about the same" or "easier." Only four percent (4%) expressed the feeling that it was more difficult. (This was the same percentage reported in the control school.) Participation in various interest and ability groups did not make it any more difficult for the child to make friends than if he had been in the same room all day. In many cases it undoubtedly made it possible for children to become acquainted with children they would not have met otherwise. One parent reported, "Joyce really enjoyed having different teachers. She is very friendly and always comes home with stories about her new friends."

Parent observations were asked in a third area. The question was asked, "When your child returned home from school each day, how did his behavior compare with that shown during the regular year?" Only one percent (1%) reported that the child appeared more tense and nervous, and again this same percentage was reported in the control school. Obviously, therefore, children can be asked to change classes and teachers several times a day without noticeably affecting their behavior.

According to the results of this questionnaire, almost all of the parents observed no adverse effects of team teaching upon the child's attitude towards his teacher, his peer relationships, or his overt behavior.

There were, however, a number of unsolicited comments from the parents regarding the positive effect of the team approach upon the child's attitude. The following remarks were found written on either the daily log cards or on the questionnaire:

"Sharon does the school work in regular school with much less enthusiasm."

"I feel the program is really reaching my daughter."

"Always dressed and ready to go--very unlike her usual attitude during the year."

"Connie has never shown too much enthusiasm for school before, perhaps this different approach brought out these feelings."

"This has been a wonderful thing for our child. He has thought he hated school--this 'painless teaching' he had this summer, I hope will carry him on in a positive manner this fall."

It is interesting to note that although a large number of positive comments regarding team teaching were received, not one negative comment or criticism was received.

The parents' general reaction, then, was quite positive. Some felt that this team approach had significantly changed their child's attitude towards school and school work. Others felt that it provided a greater amount of stimulation, while others felt it afforded each child the opportunity to develop a relationship with the teacher of his choice. Several did not specify why they were pleased with the approach, but indicated their approval:

"We were certainly impressed and pleased with team teaching."

"We were extremely pleased with the methods with which our child was taught."

"I'm most pleased and satisfied with the summer session. I cannot offer any criticism at all. I feel that this summer Nan has gained an important experience with the various teachers."

"I'd like to see this in the regular school year!"

PART 3

SUMMARY, CONCLUSIONS AND IMPLICATIONS

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CHAPTER IX

SUMMARY AND CONCLUSIONS

A. Description of the Organization

Team teaching has been proposed as a means for more efficiently capitalizing upon the strengths of a teaching staff and hence improving the educational program. However, a great amount of research is needed to determine the conditions which underlie the success of a team teaching approach and the effect which this approach has upon the teachers and children subjected to it. This project was designed, through the cooperation of the Contra Costa County (California) Schools Department, to provide research on these two major issues.

The study was conducted at the Cambridge Elementary Summer School, one of four schools in the Mt. Diablo Unified School District designated as a primary school for the summer of 1961. In many ways, it was a conventional summer school, with no special provisions made for the pupil population, staff ratios, or the curriculum. Normal procedures were also followed in the selection of the staff, although only experienced teachers with a history of harmonious staff relationships were considered for summer school employment. A teacher's specific subject matter strengths were not particularly considered. In addition to the teaching staff assigned, four teacher aides and two clerical aides were engaged, the teacher aides being chosen from applicants enrolled in teacher training programs.

In his first organizational meeting with the total staff, the principal explained that all personnel would work in teams cooperatively with other staff members. Previously adopted team teaching methods were discussed as well as additional possibilities available for exploration.

Using a Personnel Inventory Form, the principal then assigned each teacher to one of four teams. In making these assignments an attempt was made to balance the four teams in teaching experience, summer school experience, subject matter interests, and (hopefully) compatibility of personalities. Team leaders were appointed by the

principal on the basis of their general knowledge of the program and ability to work well with other staff members. Each team was thus composed of three to four teachers (one of these serving as team leader), a teacher aide, and a part-time clerical aide.

After the principal defined the general framework of the team organization, he indicated that each team would be responsible for determining how it would treat the various curriculum areas, who was to be responsible for particular subjects, how pupils were to be assigned within the team, etc., with the team leader acting primarily as a coordinator.

Teams met at their own convenience to discuss their individual strengths and interests, and to determine how they could most profitably use these within the outlined curriculum. By mutual agreement the team members selected their strongest people for the reading area, others for arithmetic, music, etc. Overlap of interest required some shifting but each teacher was able to concentrate on one or more areas of her choice. The team aide was given varying assignments according to how the team felt she could serve most advantageously. The initial grouping of the assigned pupils was also arranged at this time.

The grade level composition of teams varied. One team had first graders, another had pupils from the first and second grades, another was assigned second and third graders, and the fourth had third grade students only. Pupils assigned to the teams were grouped into homerooms, and later the teams organized groups of pupils from each homeroom according to arithmetic and/or reading levels.

Time allotments for each subject and the sequence of subjects to be followed were determined. The mechanics of regrouping pupils for instruction and the movement of groups of children from one room to another were established.

Most of the teams began by using what has been termed a "modified departmentalized" approach. The teams planned to have the children go to the teacher or teachers responsible for the particular subjects, i.e. reading, music, etc. They were

grouped into homogeneous reading sections, then regrouped into arithmetic sections. Other subjects were taught in the homerooms. The extent of the departmentalization varied from team to team.

In the initial phase of team teaching, the primary concern was to establish time allotments for each subject. This accomplished, the teams entered what was termed the "experimental phase" in which they tried to overcome some of the shortcomings already observed, by trying new ideas. They used departmentalized approaches, large group sessions, exchanges of teachers, exchanges of pupils, and grouping according to pupil interests, ability and/or achievement. The teams were thus becoming less dependent upon a rigid, predetermined pattern and more willing to experiment.

Some of the teams then found themselves able to adapt the "team" approach to the perceived needs of the children. Here the high degree of communication enabled the team to develop mutuality in thought and philosophy. A team that had reached this point organized each subject in a different manner and varied the approach used within a given subject area from day to day.

For example, one team taught reading with an individualized approach. The children needing help in a particular skill were called together from the three classes for special instruction with one teacher. Following the special instruction they returned to their homeroom.

The children from this particular team were divided into three major groups for arithmetic instruction: those requiring remedial practice or review of the basic skills; those who needed more experiences in applying the basic processes they had already learned; those who could profit most by enrichment activities. One teacher was assigned to each group.

Art was approached from several different standpoints. On some days all children assembled in the multi-use room where instruction was given by the teacher to all ninety children at once. On other days the homeroom teacher continued this instruction, while on other occasions, the children from the three classes were allowed to select the art project they wished.

Social studies found this same team using large group instruction for film presentations, general directions, committee presentations, and culminating activities. Smaller interest groups studied parallel areas of the social studies curriculum simultaneously. Daily committee findings were shared in the homeroom.

Therefore, children from one team were apt to experience many different forms of organization and instructional methods during a single day. The choice of approach was dependent upon what was found by the team to be most effective. Generally, this has been termed the "flexible" type of organization.

Those teams that progressed through the above stages were able to use a flexible type organization to adapt team teaching to the curriculum.

The role of the principal in the experiment was guided by the premise that the success of the team approach lay in his ability to foster five basic conditions:

1. An atmosphere conducive to creative teaching. This was encouraged by emphasizing the experimental nature of the program and minimizing evaluation of staff by principal. Freedom to try new ideas and vary existing plans was encouraged throughout the session.

2. A feeling of individual responsibility for the program by each teacher. The principal expressed confidence that the individual teachers were best able to see changes needed and effect these through team cooperation.

3. Team freedom to use its own ideas and make changes deemed necessary. Each team was given the responsibility for establishing its form of organization and determining the instructional program most beneficial to the children assigned to it.

4. Increased time for team preparation and evaluation. This was accomplished by employing clerical aides to perform routine tasks ordinarily expected of teachers.

5. Each teacher's feeling unique and worthwhile in his team. The principal made conscious effort to enumerate and utilize the strengths and interests of each teacher.

Throughout the experiment, the principal served not only as the administrator of the school, but also as a consultant and a somewhat objective observer who could help strengthen the interpersonal relationships within teams. The principal's efforts were thus primarily directed toward establishing the above conditions he felt were necessary for the maximum involvement of each individual.

It was believed that the teachers were qualified to develop cooperatively a sound educational program and that working together they could make a maximum effort to build a more effective program for the children than they could individually provide.

B. Evaluation of the Organization

Evaluation of the team teaching organization was directed toward an analysis of its impact upon instruction, administrative structure, pupils, and the teachers. Assessment evidence was obtained from those sources most directly affected by the program. Teachers, team leaders, parents and pupils contributed to the findings. Every effort was made to minimize subjectivity by assimilating all available data before inferences and interpretations were made. Sources of these data follow:

1. Teacher daily log
2. Teacher weekly team reaction
3. Principal's daily log
4. Tape recorded one hour session with total staff BEFORE team teaching
5. Tape recorded one hour session with total staff AFTER team teaching
6. Tape recorded one hour session with team leaders BEFORE team teaching
7. Tape recorded one hour session with team leaders AFTER team teaching
8. Parent daily log from experimental and control school populations
9. Parent questionnaire

10. Drop-out comparison of experimental and control schools
11. Teacher observation of pupil adjustment (BEFORE and AFTER team teaching)
12. Teacher preparation time study
13. Teacher questionnaire
14. Teacher and clerical aide task summary
15. Psychological examinations of a representative sample of pupils

1. Program Development

All teams appeared to experience four stages of development which are characterized by (1) organization of program, pupils, and teaching personnel, (2) initial phase of teaching as a team, (3) experimentation with instructional and organizational methods, and (4) application of the team system to the instruction of the pupils.

Rates of team development varied. The two factors found necessary for expeditiously achieving refinement in this development related to (1) team compatibility and mutuality and (2) the establishment of a philosophical and conceptual framework for team functioning. Either factor, in prominence, permitted a delay in the emergence of the other factor when a team achieved the final stage of maturity.

All of the teams initially experimented with some aspects of a modified departmentalized structure. One team continued with this framework throughout the session thus facilitating its comparison to a more flexible organization. Although the departmental system provided some psychological security to the staff, limitations in its functioning were apparent: (1) Communication between its members was usually confined to mechanics of the program such as curricular time allotments, availability of classroom space for specific lessons, and development of instructional material. (2) When specific pupil needs were identified by a team, the departmental framework was less adaptable and therefore the organization had a tendency to become the instructional standard to which the pupils would adjust. A more flexible

functioning permitted the instruction to be governed by the perceived pupil response to a given presentation.

(3) Exposure to a teaching specialist was experienced by the pupils in all of the teams, but its integrated usefulness was enhanced in the flexible team. Departmentalized specialties frequently fragmented the instruction for the child. Program flexibility, on the other hand, could assist the pupil's mind to integrate these learnings through preparatory and concluding instruction by the auxiliary team members. (4) Interactions between groups of pupils were more frequent and intellectually stimulating when flexibility was the rule. (5) Anxieties related to classroom and subject schedules subsided as flexibility in planning accompanied an increased focus upon the children and a decrease in a teacher's commitment to a rigid schedule. (6) Guidance provisions for the individual child were more accessible to the flexible team than to one with greater organizational rigidity. (7) All teams successfully utilized a teacher's perceived strengths and interests. Maximum team effectiveness was in part dependent upon a satisfactory distribution and balance of these strengths and interests. Flexibility permitted increased use of a teacher's assets.

Large group instruction was practiced by all of the teams for various reasons. Its use was relatively ineffective when instructional method was not uniquely adapted to this medium. In contrast, such presentations were found to be most useful when assisting teachers had oriented the children before the mass exposure and had, in turn, given small group follow-up instruction to lend integrative continuity to the presentation. Active individual pupil participation in large group sessions was usually restricted to art technique, group or choral foreign language recitation and similar adaptations. Maturity of the pupil and his ability to persevere such instruction were related.

As teams experienced increased cohesiveness and compatibility, communication between teams decreased. Subtle indications of inter-team competition followed. Much of this competition was considered a helpful evaluative device by the teachers.

Team leaders felt that this inter-team distance would have eventually been minimized. But, it could have been expedited through frequent team leader meetings with the principal. Inter-team cooperation was encouraged through the pooling of developed teaching aids, as well.

Because the school plan was of conventional architectural design, teams were excessively dependent upon one another's adherence to the scheduling of premium, large classroom space. The need for greater flexibility in physical plant design was apparent to all staff early in the session.

General program improvement was seen by the teachers as the resultant of the team teaching organization. The team-developed teaching units presented to the students were perceived to be deeper and broader than if the children had been instructed in a self-contained classroom setting.

2. Teacher and Administrator Involvement

A team's flexibility was dependent upon the adaptability of its members. The successful team member was one whose feelings of personal security did not require rigidity of thought and behavior. This relative freedom from insecurity permitted change and encouraged new and challenging ideas from fellow team members. Such an adequate self concept did not demand frequent and tangible indications of success, but allowed the evaluation of instruction to be continual and abstract (as opposed to concrete).

When these personality characteristics were present, the individual was usually less anxious when lags in team development were perceived. Excessive dependency upon others and upon a rigid schedule was accompanied by an inability to tolerate the frequent frustrations emerging during the initial phases of team development. Those teachers who tended to be disorganized interrupted the required interdependencies and schedules found in a team's functioning.

Teaching competencies and declared subject matter interests played important roles in the achievement of team balance. Team recognition of an individual's

special skills was frequently accompanied by a recognizable increase in this teacher's self concept. The universally able teacher was required to surrender some of her specific interests and competencies in furthering team mutuality. Thus, this compromise permitted another team member to perceive herself as a vital and contributing individual. Such a concession, however, was based upon the assumption that potential assets were inherent in each member.

For those teachers who could adapt to a flexible team organization, significant benefits were available. These advantages pertained to professional growth, increased communication between teachers, increased identity with the instructional process, and a responsible involvement in making policy decisions. Consequently, the team member transcended the professional isolation of the self-contained classroom and became an expanded contributor to the education of the pupils. Professional and personal gratifications were the resultants of this experience.

Although the team leaders influenced their members in varying degrees, it was evident that a status structure did exist in every team. Some leaders perceived themselves to be catalysts for evaluation and change, whereas others saw themselves as coordinators who tried to encourage team responsibilities to emerge through group dynamics.

Because many of the program responsibilities were assumed by the teams, direct teacher-administrator relationships were less evident than customarily. This relationship readjustment impinged upon personnel evaluation and supervision of instruction. Realistic evaluation of the teacher required the principal to become sensitive to the team's impact upon the teacher and to her contributions to the total team. To be successful, the administrator had to feel comfortable about the inherent increase in distance between himself and the individual teacher.

Teacher aides desired professional experience from their positions, while the teachers primarily anticipated assistance from them. Because the teams were given the responsibility of determining the activities of the aides, the teams were

often frustrated in trying to achieve a mutually satisfying aide program. The clerical aide assistance given the teams was unanimously perceived to be beneficial to the total system.

Because all teaching staff in the experimental school were competent and experienced, the evaluation process had no direct evidence to imply that a generally weak teacher could be significantly assisted through team teaching. The writers have suggested throughout the report, however, that the team organization, in itself, cannot solve personnel and instructional problems for an administrator.

3. Pupil Involvement

Because summer school attendance was voluntary, the population may not have been normally distributed. However, the major student body characteristics were sufficiently represented to permit an evaluation of program adaptability to a wide range of pupil traits. This dispersion of traits permitted an assessment of representative pupil reactions as well.

Primary-school-age children were found to be generally adaptive to the characteristic changes in social and physical environments during the experimental session. A few exceptions were observed early in the term. These negative reactions might have been minimized (or absent) if the period of team experimentation had not been accompanied by teacher anxieties. Teachers used varying methods in preparing the pupils for the changes pertaining to team teaching. Apparently their efforts were beneficial inasmuch as the children, as a group, were somewhat more adaptive than the teachers.

Successful program adaptations were implemented for children manifesting general educational retardation, specific subject matter weaknesses, normal learning behavior, or apparent giftedness. Those children whose personality disturbances were reflected in aggressive and hyperactive behavior frequently found environmental resources for their needs. When teachers discovered that a child's

resistance to learning pertained to impaired social relationships, program adjustments frequently succeeded in minimizing this reluctance. Less successful were the adaptations of some socially recessive or shy children who occasionally experienced difficulty in finding appropriate security within a framework that was initially rather loosely defined.

Due to the nature of the assessment data, it was difficult to appraise the reasons for the pupils' apparent intellectual stimulation as observed by the staff. It is assumed that much of this visible excitement for learning was a by-product of similar feelings within the staff. Heightened staff morale may have been related to the unique characteristics of the administrative organization, reactions to their participation in an obvious experiment, or a combination of both of these factors.

In one aspect of the evaluation process, team teaching was compared to a conventional school organization through an analysis of pupil behavior and questionnaire responses from a sample of parents. No apparent differences existed between the two schools in the following areas: weekly reports of pupil attitude toward school, measured reading achievement, and parental impressions of their children's preferences for summer school activities. The experimental program manifested a slightly better ability to hold pupils throughout the summer as reflected in drop-out rate comparisons.

At the close of the session, all parents in both schools were sent a questionnaire in which their reactions to the two programs were elicited. No perceptible differences were found between the two school parent populations in (1) their expectations from the summer program, (2) satisfaction with their child's summer education, (3) opinions regarding the length of the session, (4) their child's evident ability to make friends during the session, (5) apparent child attitude toward his teachers, and (6) their child's daily after-school behavior during the session as compared to that exhibited during the regular school year.

Psychological examinations were administered before and after the session to a representative sample of students who attended the experimental school during the regular school year. Thus, team teaching, and not a change in school setting, would be the primary variable responsible for any changes which might occur in the internal personality and achievement manifestations of these children.

Three projective instruments, the Bender-Gestalt Visual Motor Test, Draw-a-Family, and Drawings of Self and Teacher, yielded no statistical significance of difference in the before-and-after studies. In all three studies however, a slight gain in measured internal organization and social perceptions was found.

Manifest anxiety was measured through the Digit Span test. Again, statistical significance of difference was lacking, but gains in the group's performance during the session indicated that these children did not manifest increased anxiety during the term as measured on this instrument.

Three subtests of the California Test of Personality were included in the evaluation. Modifications were made in the answer sheet and the administration of the test to accommodate the youngest of the participants. CTP Sense of Personal Worth data found the children making significant gains, as a group, on this test when comparing the "before" and "after" results ($P=.0818$). The differences in test results between the two administrations of the subtests, CTP Freedom From Nervous Symptoms, and CTP School Relations, were not statistically significant ($P=.2802$ and $P=.1586$).

At the conclusion of the session, the 31 children in the sample were asked to indicate their "favorite" teacher during team teaching. Seventeen, or slightly more than half of this group, indicated preferences other than their homeroom teacher. Hence, team teaching provided these children an exposure to an adult with whom they could more easily relate than if they had been taught in a self-contained classroom.

Those children comprising the representative sample were observed by all teachers with whom they had had contact during the session. These teachers' observations were

compared to those who had taught the pupils the previous year in a self-contained setting. The pupil-adjustment questionnaire responses of these two groups of teachers were in basic agreement.

Although a slight gain in measured reading achievement was found at the end of the session, statistical significance was lacking; CAT Vocabulary ($P=.4472$), CAT Comprehension ($P=.5686$), and CAT Total Reading ($P=.4592$).

An analysis of the assimilated qualitative and quantitative data found that the children committed to a team teaching system were not adversely affected by the organization's functions. Conversely, many intangible benefits were given the children by the staff in a team teaching organization.

C. Applications Available to a Conventional Structure

If it can be assumed that benefits to staff and pupils accrue from team teaching, then similar advantages can be derived from some applications of the team teaching concept to a conventional school organization. These applications are ranked in the order of predicted gains available to its participants.

1. Homogeneous grouping through organizational flexibility can provide intensity of instruction in a specific subject area. These groupings would cut across conventional classroom pupil assignments. A modified or limited team organization would probably be required of the staff if multiple homogeneous grouping is implemented. Increased communication between staff and pupils at a refined level is seen as a concomitant of this structure. Example: Children needing specific instruction in phonics might assemble with one teacher during the reading program while other children work on comprehension or vocabulary building with the other teachers.

2. Parallel study of related topics by small groups of students would find the groups frequently reassembling and communicating their findings with one another. When this application is employed, the groupings would again ignore conventional

pupil assignments and thereby encourage improved communication between teachers and many different pupils. Intellectual stimulation can accompany such cooperation. Example: The study of areas in science such as weather, might be approached through the formation of student groups to prepare experiments illustrating the basic principles of air pressure, wind, cloud formation, and water cycle.

3. Master teacher (specialist) presentations to a large group of pupils could assist pupils and teachers alike. To be of optimum benefit, this procedure should find the teachers assisting the specialist in planning the presentations and providing their classroom groups with preparatory and supplementary instruction for purposes of integration. This method can be employed at the frequency considered in the best educational interests of the pupils.

4. Child-centered interest grouping can be evolved within a classroom or through a combination of several classes. When combining classes, the teachers would be required to become mutually prepared for and involved in a cooperative program. (Pupil identity with instruction was a by-product of this procedure during the experimental session.) Example: The art program on a grade level could be designed to offer a choice of art activities situated in different rooms, clay modeling in one, papier-mâché in another, torn paper murals or wet chalk in a third.

5. Teacher-assigned groups from several classrooms could share in the study of a specific area. Having accomplished some depth in their studies, a rotation of these groupings would lend depth exposure to the over-all intent of the instructional unit. Fragmentation of learnings could be minimized through frequent cross-grouping and semi-culminating activities. Example: The children who had an opportunity to study the Indian tribe of their choice went into depth of research and became "experts" on their particular tribe.

6. Subject matter specialists from within a faculty could serve as consultants to the remaining school staff. The self-contained classroom structure

would be maintained but theoretically teacher competency could be enhanced through frequent discussions with and assistance from the specialists.

7. The employment of aides may assist in relieving the teacher of those responsibilities not directly related to the instructional process. If the work of the aide is accompanied by increased teacher stimulation and professional growth due to some additional organizational technique, then the aide can make an important contribution.

8. Teams of teachers may be assigned or encouraged to plan materials and lessons without the shifts of children related to this work. Such an application is likened to an on-going committee.

It is assumed that additional applications are available to the conventional organization. Combinations of these applications may lend depth to their use. The team-lecturer idea occasionally used at the secondary level could be considered an application of team teaching. If a modification of team teaching behavior is expected to lend depth to a program, it should be accompanied by an increase in communication between teachers and pupils.

Large group exposure to one lecturer in and of itself is not considered an application of team teaching by the writers. They are unable to make the deduction that team teaching is an organizational technique which contributes to economy in money or staff time. Quite an opposing conclusion emerged from assimilated research data in this study.

CHAPTER X

SUGGESTED GUIDELINES FOR ESTABLISHING A TEAM TEACHING PROGRAM

1. Before team teaching is attempted, a period of study and investigation should be undertaken into the available research. The participants must be aware of the strengths, weaknesses and requirements of the team approach.
2. There should be staff agreement upon the shortcomings of the existing conventional situation that might be improved through a team approach.
3. All participants should be cognizant of the specific objectives of the proposed team teaching program. The objectives which they hope to achieve should be formulated in such a way that they might be used in the teams' periodic evaluations.
4. The staff should study the variations employed in other situations and discuss some of the modifications which might be used to good advantage to achieve the objectives set forth.
5. Community orientation to the proposed changes in organization will encourage parent support for the program.
6. Staff members must be selected on the basis of their desire and ability to work in a cooperative situation. Each team member must be able to acknowledge his weaknesses to his peers and in turn have sufficient ego strength to seek improvement in his weak areas. Criticisms of others must be balanced by the ability to assimilate criticisms of one's own ideas and performance.
7. Each staff member must have a reasonably well-integrated personality and an adequate concept of self. Several personality characteristics are believed to be essential: (1) relative freedom from dependency needs, (2) ability to support the ideas of others, (3) individual

flexibility, (4) ability to organize ideas and follow established plans, (5) tolerance for frustration, (6) an ability for introspection, and (7) an optimistic approach to experimentation.

8. The team leader should not only possess the above-mentioned personality characteristics, but in addition should have a comprehensive academic background which enables him to see the total educational process and its evolvement. He should have insight into the personal needs of the team members, be able to give support when it is needed, and be an accepted leader among his peers.
9. The two most important factors to be considered in the assignment of a teacher to a team are believed to be: (1) the teacher's compatibility with other members of the team and (2) the teacher's contribution to the balance of the team's subject area strengths.
10. Clerical assistance should be provided for each team to relieve the teachers of routine clerical tasks.
11. An atmosphere conducive to the creative use of teaching talents must be established by the principal. Teachers must be encouraged to develop their individual talents and explore new ways of utilizing the skills of others.
12. The principal must have faith in the democratic process and express this faith by delegating appropriate responsibility and authority to the team leaders and the teams. He must also be able to support the staff in the decisions made within the framework of their delegated responsibilities.
13. Teachers must feel a personal responsibility for the status of the program. To achieve this, they should be given the freedom to select the methods and materials to be used and be encouraged to make those changes in procedure which they feel are necessary.

14. A teacher must feel that he/she is an integral member of the team with particular talents, strengths and interests that will enable him/her to offer a unique contribution to the team effort.
15. The principal's role should be one of setting the general tone or atmosphere and coordinating the over-all program as it develops within the school. This coordination and supervision can be accomplished by working with the teachers in the team situation, presenting issues and ideas, and encouraging depth of thought in the plans that are made.
16. The principal must have ongoing communication with each team. He must know the specific problems and the future plans of each team in order to offer pertinent suggestions and raise valid questions.
17. The team leader's responsibility should be to capitalize upon the ideas, suggestions, and talents of each team member in the development of an organization tailored to meet the needs of the pupils assigned. The team leader should serve as a catalyst within the team when necessary and encourage contributions from each of the team members. Basic leadership must be assumed by the team leader; too many leaders may adversely affect compatibility and impede the functioning of the team.
18. The teachers on the team should meet daily to plan the learning experiences of the pupils and evaluate the progress to date. In this way, the day's program can be appraised and adjustments made for the following day.
19. A more meaningful educational program will result when members of the team plan together the activities to be conducted and the instructional methods to be employed. Through such cooperative planning the teachers can benefit from the background of others and relate the subject matter to the experiences of the children.

20. The principal should meet frequently with the team leaders, as a group, as well as with the total school staff to insure adequate communication, coordination, and continuity within the school.
21. The role of the teacher aide, if one is to be employed, needs to be clearly defined. If it does not include teaching, it is suggested that the aides not be selected from teacher aspirants, unless they understand that their tasks will primarily involve those activities which may be routine and mundane, yet which are important to the program.
22. It is important that basic audio-visual equipment be made available for the team. Teachers should be able to use it when it best fits into the program so that they will not have to arrange the team schedule to accommodate the use of the equipment by several other teams.
23. Ideally, physical facilities should permit flexible utilization of space. The school plant should be able to accommodate both small and large groups each day if so desired.
24. The children should be well-oriented to the procedures to be followed. Time should be taken to instruct them and demonstrate where they are to go and the manner in which they should proceed.
25. Teachers should probably be given definite assignments and responsibilities for subject areas during the initial phase of team teaching. The talents, strengths, and interests of the team members should determine these assignments.
26. Greater initial success will probably be experienced if the team moves into the program gradually, beginning perhaps with one subject only. Other areas can then be added as the students and staff members become adjusted to the change in procedure.
27. Every effort should be made by the teachers to identify and become closely

acquainted with as many individual children as possible. The strength of the pupil-teacher relationships and the ability of staff members to identify individual pupil needs may ultimately determine the effectiveness of the program.

28. The depth of rapport and communication among team members is the major determinant of the quality of the program. Daily team meetings are one of the primary essentials in developing team compatibility.
29. After developing a theoretical framework or a series of guidelines, the team should experiment with several forms of organization to develop a variety of approaches to teaching. This then will enable the team to later select the one approach which will be the most appropriate in a given situation.
30. The program should be designed to provide a certain amount of flexibility in the scheduling of classes to allow for varying time requirements. The schedules initially set up should also be reviewed periodically as the curriculum needs change.
31. It should be possible to group pupils according to various criteria. In reading, for example, children might be grouped according to reading achievement level. However, in other subjects it may be more appropriate to assign the students according to achievement in special areas, according to general ability, or pupil interest in particular phases of study.
32. When teachers periodically act as observers or co-teachers in the class where a specialist is at work, each team member can be fully aware of the material covered and the methods employed. The knowledge and skill of all teachers is thus developed to a greater extent, and a greater degree of consistency and mutuality of thought develops.
33. Some provision should be made for the exchange of ideas and experiences

among teams as well as within the team. Teams with a similar problem should meet together to pool the resources toward the solution of this problem.

34. Time should be spent each day in the homeroom to allow children and teachers to identify themselves as a self-contained group. In addition to the basic administrative tasks which need to be conducted, such a period provides the teacher with an opportunity to instruct the children in those areas deemed necessary for a particular presentation and which otherwise might not be covered to a sufficient degree. It may also serve as the time when various educational experiences might be discussed to broaden the children's understanding.
35. Evaluation of the personnel by the principal must be done within the framework of the team. The principal from his observations must know whether the teacher is carrying his/her share of the load or whether he/she is overly dependent upon the team for direction and guidance.
36. The team's behavior should be directed towards the achievement of a series of short-term goals as well as towards the major objectives. The short-term goals may be merely specific problems, frustrations, or shortcomings to be overcome. Periodic evaluation of the team's progress with respect to these goals and objectives is essential in order to insure a dynamic program. Evaluation of the total organizational method should involve staff, parents, pupils, consultants, and the administration.

PART 4
APPENDIXES

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APPENDIX A

PERSONNEL INVENTORY

Date: _____

1. Name: _____ 2. Birthplace: _____

3. Major: _____ Minor: _____

4. Degrees Completed: (Circle) AB MA Ph.D. Ed.D.

5. Credentials held: (Circle) General Elementary Pupil Personnel
General Secondary Supervision
Admin. Supervisory Administration

6. Approximate number of units beyond AB degree _____

7. Grades taught: (Circle) K, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, ____, ____

8. Years of teaching experience (Total) _____

9. Years of experience in grades 1-3 _____

10. Years of experience in teaching Summer School: Grades 1-3 _____ Grades 4-6 _____

11. What do you consider to be your strongest subject areas?

- 1. _____
- 2. _____

12. Number in sequence these subjects and activities you enjoy most. (Put "1" opposite the subject or activity which you enjoy the most, "10" opposite the one you least enjoy.)

| | | |
|----------------------|--------------------------|---------------------|
| _____ arithmetic | _____ physical education | _____ arts & crafts |
| _____ social studies | _____ music | _____ folk dancing |
| _____ reading | _____ language | _____ dramatics |
| _____ science | | |

13. Have you ever traveled in Mexico? (Circle) YES NO

14. List any special hobbies or interests which you feel are applicable to your teaching:

15. Indicate on the reverse side of this sheet what you feel should be the primary objectives of the summer school program: (Briefly)

APPENDIX B

TEAM TEACHING EVALUATION

Name _____
Team _____

This questionnaire has been developed to get your reaction to the general program of team teaching as well as to a number of specific aspects. This information will without a doubt be considered to be the most important data of all. Therefore, I hope that you will respond as honestly as you can without fear of hurting anyone's pride. Your frankness has been greatly appreciated throughout the summer and I hope you will feel free to put down any comments or reactions you feel would be helpful.

GENERAL PROGRAM

1. Were you generally able to cover the teaching material you felt necessary?

Yes _____ No _____

2. How did the program for the children on your team compare with what you would have given them if you had had them in a self-contained classroom?

Better program _____ About the same _____ Poorer program _____

3. Do you feel that you have been able to become sufficiently acquainted with the children in your homeroom?

Yes _____ No _____

4. Do you feel a beginning teacher would find it easier or more difficult to work in a team situation than in a self-contained situation?

Easier _____ About the same _____ More difficult _____

5. Under this program, did you find it easier or more difficult to get help when you needed it?

Easier _____ About the same _____ More difficult _____

6. In comparison with the first week, how do you now feel about the possibilities of team teaching?

Disappointed _____ About the same _____ Encouraged _____

7. How much value has it been to you professionally to have worked this summer with a team?

Of little or no value _____ Of some value _____ Of great value _____

8. Check the phrase or phrases which best describe how you feel regarding the role of your team leader and of the principal.

| | Principal | Team Leader |
|--|-----------|-------------|
| Made too many decisions | | |
| Did not make enough decisions | | |
| Easily accessible | | |
| Too authoritarian | | |
| Too Laissez-faire | | |
| Did not give enough direction | | |
| Gave good direction and guidance | | |
| Recognized and used strengths of staff | | |

Comments:

PUPILS

1. What seemed to be the attitude of the children during the day?

More attentive than normal _____
 About the same _____
 Less attentive than normal _____

2. Have you seen some evidence to indicate that some children have perhaps been disturbed by changing teachers and groups?

Yes _____ No _____

3. Out of the four hours, how much time each day do you feel a teacher should have with children from her homeroom?

Less than 10 minutes _____
 10 - 20 minutes _____
 20 - 30 minutes _____
 30 - 60 minutes _____
 At least an hour _____

4. Of the children from other classes which you have instructed in a classroom situation (not multi-use room), what percentage do you feel you can call by name? _____

5. Did you find it easier or harder to reach an underachieving or disturbed child?

Easier _____ No difference _____ Harder _____

6. From the standpoint of the pupils, what do you feel is the greatest value or advantage of team teaching?

AIDES

1. Did you feel that the attention and effort spent on orienting the aides and working them into the program was justified in terms of the job they did?

Yes _____ No _____

2. Below are listed some of the tasks to which the aides were assigned. From your experience indicate those which you feel teacher aides could handle during the regular year to a satisfactory degree.

| | Yes | No |
|-------------------------------|-----|----|
| Conduct morning exercises | | |
| Work with remedial groups | | |
| Assist in art program | | |
| Help individual children | | |
| Assist with classroom control | | |
| Prepare ditto materials | | |
| Rewrite material | | |
| Correct papers | | |
| Supervise yard | | |

Others:

3. In your opinion, how important are the teacher aides to a team teaching program?

Essential _____ Desirable _____ Unnecessary _____

4. In your opinion, how important are the clerical aides to this program?

Essential _____ Desirable _____ Unnecessary _____

5. What do you feel has been the major value of the teacher aides to you as a teacher?
-

TEAM TEACHING

1. In comparison with a regular program, to what degree do you feel that you were able to use your own strengths and interests this summer?

To a greater degree _____ About the same _____ To a lesser degree _____

2. If it were possible would you like to work with your present team members for the entire year?

Yes _____ No _____

3. Would you be willing to work in a team teaching situation during the regular year?

Yes _____ No _____

4. Would you be willing to work in a team teaching situation during a portion of the regular year, rather than the entire year?

Yes _____ No _____

5. Do you now feel relaxed and comfortable when planning with others or do you feel it is still somewhat of an emotional strain?

Relaxed _____ Emotional strain _____

6. Were your weak areas balanced by the strengths of other team members?

Always _____ Sometimes _____ Usually _____ Seldom _____ Never _____

7. Do you feel you might have done a better or a poorer job with another team?

Better job _____ No difference _____ Poorer job _____

8. Did interpersonal relations among team members aid cooperative planning?

Always _____ Usually _____ Sometimes _____ Seldom _____ Never _____

9. Were you able to work out problems, conflicts, and concerns satisfactorily?

Always _____ Usually _____ Sometimes _____ Seldom _____ Never _____

10. Did you feel that you were a vital, contributing member of your team?

Always _____ Usually _____ Sometimes _____ Seldom _____ Never _____

11. What do you feel would be the ideal number of teachers to have on a team?

2 3 4 5 6 7 8

12. From the standpoint of the teacher:

a. What has been the greatest value or advantage? _____

b. What has been the greatest disadvantage or drawback? _____

c. What has been the greatest source of frustration or irritation? _____

APPENDIX C

PARENT QUESTIONNAIRE

Dear Parents,

We would like to ask your assistance in helping us to evaluate our primary summer school program. It would therefore be greatly appreciated if you would respond to the questions below and have your child return the form to school.

Thank you for your time and cooperation:

1. What type of program did you hope your child would get this summer?

Instruction in basic subjects _____
An enrichment program _____
A program of arts and crafts _____
Other (Specify) _____

2. Were you satisfied with the program your child received?

Yes _____ No _____

3. Which phrase best describes your child's general attitude towards his summer school experience?

Enthusiastic _____
Enjoyed it _____
Neither positive nor negative _____
Disinterested _____
Negative _____

4. Place an "L" (for Liked) opposite the one aspect of the program which your child liked the most. Place a "D" (for Disliked) opposite that aspect which your child disliked the most.

| | |
|-----------------------------|-----------------------------------|
| Arithmetic _____ | Physical education _____ |
| Reading _____ | Study of Mexico _____ |
| Educational films _____ | Study of Indians _____ |
| Art & crafts work _____ | Spanish _____ |
| Assemblies _____ | Folk dancing _____ |
| Other _____ (Specify) _____ | Working with other teachers _____ |

5. How do you feel about the length of summer school?

Too short _____ Just right _____ Too long _____

6. How easy was it for your child to develop new friendships this summer?

Easier _____ About the same _____ More difficult _____ No indication _____

7. Which phrase would best describe your child's attitude toward his teacher?

Very warm relationship _____
Positive _____
Indifferent _____
Critical _____

8. When your child returned home from school each day, how did his behavior compare with that shown during the regular year?

Happier and more relaxed _____
About the same _____
More tense and irritable _____

9. Which term best describes the number of new interests your child developed this summer?

Many _____ A few _____ None _____

10. Based upon your child's experiences this summer, would you send him to a similar session again in the future?

Yes _____ No _____

11. When your child was shifted to different teachers during the day, what was his reaction?

Enthusiastic _____
Positive _____
Indifferent _____
Negative _____
No indication _____

Indicate below any suggestions you have for next year's program.