A micro team teaching project was designed to give student teachers an increased responsibility for planning, executing, and evaluating an instructional program; to provide classroom teachers who had not previously taught in a teaching team with the opportunity to learn about the dynamics of team teaching through organizing teams of their own; to enable school systems to try team teaching without reorganizing an entire school; and to provide professors of education with first-hand experience in examining the dynamics of team teaching. The plan (identified as "micro" because it took place in a self-contained classroom) provided for two teams of two student teachers and one experienced teacher each; each team was responsible for developing a cooperative organization for planning, carrying out, and evaluating an instructional program for a group of 25 or 30 fourth graders. Bi-weekly seminars and field trips were also part of the project's structure. The project was replicated the following semester. In this pilot study, no provisions were made for an experimental research design. Rather, a series of observations were made describing what took place among the undergraduates, faculty members, public school personnel, and school children involved. Inferences were made about changes in attitude and behavior of teachers. (Included are six pages of observations and recommendations.) (Author/JS)

FINAL REPORT ON RESEARCH

Submitted to Programatic Support for Research

through Wisconsin State University

La Crosse, Wisconsin

Title: MICRO TEAM TEACHING

                                (funded under the title: SIMULATED TEAM TEACHING)

Field of Focus of
the Program: Pre-service and In-service Field Experience in Team Teachin

Duration of Activity: August,1, 1967 to June 30, 1968.

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ABSTRACT OF REPORT

Purpose

The major focus of the proposed project was to assist colleges of education in upgrading their student teaching programs by providing students who were not engaged in intern type team teaching with a micro team teaching experience within the local school system. Briefly, the proposed project was structured to achieve the following goals:

1. To give student teachers increased responsibility for planning, executing, and evaluating an instructional program for a group of children.

2. To provide classroom teachers who had not previously taught in a teaching team with the opportunity to learn about the dynamics of team teaching through organizing teams of their own in their own self-contained classrooms.

3. To enable school systems to try team teaching organization without reorganizing an entire school or school system.

4. To provide professors of education with first-hand experience in examining the dynamics of team teaching in the elementary school.

Procedure

This plan provided for two teams consisting of two student teachers and one experienced teacher in each team to reorganize their operation into a micro team teaching organization. The plan was identified as micro team teaching because it took place in a self-contained classroom. Because of the variety of viewpoints about team teaching this investigator limited the conception of team teaching to a type of staff organization in which a group of teachers accepted the responsibility for developing a cooperative organization for planning, carrying out, and evaluating an instructional program for a group of pupils. The teams had to make operational an organization of team teaching which reflected this

conception.

Research Design

The nature of this pilot study was such that no provisions were made for an experimental research design. No attempt was made to develop any instrument to measure teacher competency or to relate the team organization to pupil achievement. A review of the literature reveals that even among schools which have been engaged in team teaching for a considerable period of time there is no conclusive evidence to indicate that increased pupil achievement or greater teacher competency results from this type of organization.

Observationa

A series of observations were made and grouped into the following two categories: (1)the university setting, and (2)the public school setting. In these categories were subdivisions describing what took place among the undergraduates, faculty members, public school personnel, and the children in the micro teams. These observations support the continued development and extension of this project.

One of the most exciting developments in school organization has been the meteoric rise of the theory and practice of team teaching. This development, although not completely new, has recently received heightened visibility because of the increased complexity of the process of education. With curriculums in the various subject areas becoming more dynamic, and with instructional innovations within the content areas becoming more diversified, it is no longer reasonable to expect elementary teachers to be current in all areas of curriculum and instruction, or be perceived as the same types of generalists as in the past. Yet, along with this reality, has been held the belief that for children it is necessary to incorporate within their schooling the security engendered in the self-contained classroom. The result has been a duality concerning the role of the elementary classroom teacher. Is she to be a generalist as in the thirties, or a specialist in light of the new knowledge generated in the sixties? This issue, although far from being resolved, has provoked educational leaders to develop plans which would accommodate the beliefs held by both positions. One of the organizational plans developed to synthesize this polarity of positions was team teaching. From its beginning in 1957 at the Franklin School in Lexington, Massachusetts, the practice of team teaching has been one of the major thrusts in instructional reorganization.

What is team teaching? As with other conceptions in education there is no general agreement among educators as to its meaning. There are almost as many descriptions of team teaching as there are people describing it operation. From the very simple type of teaching by teams in which two or more teachers exchange classes on an informal voluntary basis to the more structured type of cooperative organization in which a group of teachers plan, instruct, and evaluate a program for a group of pupils, there is a wide range of conceptions about team teaching. Consequently, with these realms of meaning about team

teaching, there are also several general approaches to the instituting of team teaching in a school, contingent upon the meaning associated with the concept of team teaching. There appears to be a relationship between concept and means of innovation; more complex meanings involve more complex means of innovation.

From a review of practices, it appears that the training of experienced teachers in the operation of a team has been generally limited to one or any of a combination of the following approaches:

1. Meetings -- Inservice meetings describing team operations in which the teachers are exposed to the general operation of team teaching by a consultant or enthusiastic administrator.

2. Trial and error -- A method by which teachers of a grade level or grade levels are set to their own devices for establishing a plan for team teaching.

3. Summer workshops -- Special workshops on a university campus at which teachers spend one, two, or three weeks learning about the team teaching operation.

For the inexperienced teacher, about the only two approaches to training in team teaching available in the past have been: (1)the intern program -- a program designed in some cases to orientate the pre-professional to team teaching by placing the student teacher in a team operation as part of his student teaching experience; or (2)method courses -- courses which include some limited team teaching. It appears, therefore, from casual observation that there have been only a few approaches to preparing experienced and inexperienced teachers for team teaching, yet according to Robert Anderson the need for people qualified in team teaching is increasing.[1] Team teaching is occuring

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[1] Robert H. Anderson, Teaching in a World of Change, (New York: Harcourt, Brace, and World, Inc., 1966), p. 71.

at all grade levels and spreading each year to more and more schools. It is
reasonable to infer, in light of these observations, that in the future other
means will need to be developed to train teachers for these positions.

The general purpose of this study was to develop and implement another ap-
proach to orientating, simultaneously, experienced and inexperienced (pre-profes-
sional) teachers to the theory and practice of team teaching. This plan pro-
vided for two student teachers and one experienced teacher to reorganize their
instructional operation into a micro team teaching organization. The plan was
identified as micro team teaching because it took place in a single self-con-
tained classroom. Instead of 75 children in the team group, only 25 or 30 were
involved; instead of three adjoining classrooms, only one room was used; instead
of three or more experienced teachers on the team, only one was experienced.
Because of the variety of viewpoints about team teaching, this investigator
limited the conception of team teaching to a type of staff organization in which
a group of teachers accepted the responsibility for developing a cooperative
organization for planning, carrying out, and evaluating an instructional program
for a group of pupils. The teams had to make operational an organization of
team teaching which reflected this conception and which was compatible with the
unique personalities of the team members. Unlike many of the intern programs in
Wisconsin in which student teachers become part of an ongoing teaching team made
up of three or more certified staff members, this plan enabled pre-professional
and certified teachers who, once they understood the theory of team teaching, to
develop their own team teaching operation. In other words, there were no slots
for these people to fill in an existing or ongoing team organization.

Along with the general purpose of the study to train people in team teaching,
the project also attempted to use the team teaching operation as a vehicle for
helping experienced and inexperienced teachers gain practice in applying be-
havioral objectives in the cognative and affective domains in preparing for and
evaluating instruction. For this purpose a series of lessons was planned using

simple behavioral objectives at first, and more complex objectives later. At
the end of each semester the teams were to teach lessons which had both a cogni-
tive and an affective dimension.

Finally, the project was designed to help the college supervisor learn
about the potential power of team teaching in teacher training programs.

Briefly, the specific objectives of the project were:

1. To provide student teachers in elementary education with a type of pre-
   professional experience which would be compatible with current trends
   in classroom organization.

2. To provide a limited number of juniors with opportunities to engage in
   another type of pre-student teaching field experience as teacher aides.

3. To provide university personnel with the opportunity to learn more about
   the dynamics of team teaching while working as part of an elementary
   school team.

4. To enable practitioners in the field to gain experience with another
   type of classroom organization under controlled conditions.

5. To assist public schools in developing plans for other types of class-
   room organization.

Procedures

Time Schedule

May, 1967   Two fourth grade teachers in different school, who in the past
                 supervised student teachers, were asked if they would be willing
                 to reorganize their student teaching supervision to a micro team
                 teaching organization. They were willing.

Early July,   A meeting was held with the superintendent, assistant superinten-
of the same
year   dent, supervisor of elementary education, and business manager of
                 the La Crosse Public Schools for the purpose of getting their

endorsement and support for this project. There was unanimous support.

Late July   The chairman of the Department of Elementary Education at Wisconsin State University-La Crosse, having been apprised of the progress of the preliminaries, was asked to identify students who would be student teaching in the fall and who might be interested in participating in this type of project. These people could be from either the primary or intermediate teacher education program.

August   The students who were recommended were sent letters which briefly described the nature of the project and asked them to indicate . their willingness to participate if selected. Four letters were sent out; four positive replies were received.

September   Two student teachers, one primary and the other intermediate, were assigned to each of the two supervisors. The six of them, together with the college supervisor and the elementary consultant for the public schools, held a series of seminars to learn about the concept of team teaching and to develop their own plan for micro team teaching.

Training Operations

Since both teams were working with fourth graders in what had been a self-contained classroom, the pairing of a primary and an intermediate student teacher with the experienced teacher was done to simulate the notions of specialized training of the various members of the team. Through this arrangement it was possible to designate each team member, who because of training and/or interest had, relatively speaking, a specialty, as the team leader in one of the areas of the curriculum. The team leader was expected to generate ideas in the development of objectives and procedures for his particular content field or fields,

while the other members served in a supportive capacity. Each team member was
at some time engaged in directing the teams as well as in being directed. Since
this project was designed to give each member of the team as much experience as
possible in all areas of team planning, each member was expected to provide, on
occassion, leadership in all areas of the curriculum.

The essential feature of this project was the emphasis upon team planning.
This was where the greatest departure from the regular student teaching occurred.
In addition to the daily planning sessions which were to occur before and after
school, every Friday morning each team was to spend four hours in a planning
session. At these planning sessions the major portion of the time was to be
spent: (1)evaluating the past week's instruction; (2)making decisions about the
curriculum objectives for future instructional units; and (3)developing broad
instructional plans for achieving the week's objectives. (The identification of
who will teach what to whom, when, and where was part of this phase of the opera-
tion.) Although the teams essentially covered each of the three planning opera-
tions, each team was to develop its own type of planning procedures. These
procedures were to be developed cooperatively and were to reflect the personality
constellations of each team. Each semester the general planning procedures were
to be developed informally by the teams. Friday planning procedures were to be
held on the campus of the university rather than in the schools, in order that
observers might sit in on these sessions. Two regularly assigned substitute
teachers were hired to teach on the morning of the planning sessions. Class-
room disorganization was minimized by using the same substitutes each week.

To minimize the involvement of the teams in routine non-teaching responsi-
bilities, secretarial help was to be provided to type tests, record data, and
reproduce materials. Sophomores enrolled in the introductory course in elementary
education were to be utilized as teacher aides. This was instituted to give the
team members an opportunity to direct and supervise non-teaching personnel who,

in a field situation, would be part of the team organization.

Bi-weekly seminars and field trips were also part of the project's structure. Topics covered by these seminars included: curriculum decision making within the framework of a school district's curriculum, the development of behavioral objectives in the cognitive and affective domains, pupil evaluation, and the evaluation of team members. To deal with the subject matter of the seminars, consultants from the school district and the university were brought in to assist the teams. Each member of the teams either purchased or was provided with the following books: Team Teaching by Shaplin and Olds; Change and Innovation in Elementary School Organization by Maurie Hillson; Taxonomy of Educational Objectives, Handbook I: The Cognitive Domain, Benjamin Bloom (editor); Taxonomy of Educational Objectives, Handbook II: The Affective Domain, David Krathwohl (editor). Field trips to schools engaged in team teaching gave the teams a chance to compare and contrast their methods of operation with some teams operating in the field. These trips were designed not only to give the teams other insights into the process of team teaching, but also to reinforce positively their own self-image about their operation.

The students in the project were required to develop and teach cooperatively as a team a lesson or series of lessons utilizing as many levels as possible of the taxonomies of educational objectives. These lessons were to culminate the team teaching experience for the student teachers.

Prior to the replication of the study the second semester, the teams were to evaluate the general characteristics of the project. These strengths and weaknesses of the project were to be noted and were taken into account during the second semester when the project was replicated.

Observations

The nature of this pilot study was such that no provisions were made for an experimental research design. No attempt was made to develop any instrument to

measure teacher competency or to relate the team organization to pupil achievement. A review of the literature revealed that even among schools which have been engaged in team teaching for a considerable period of time there is no conclusive evidence to indicate that increased pupil achievement or greater teacher competency results from team teaching. Research designs to compare team teaching with conventional teaching organizations are still on the drawing board as a problem needing solution. To many investigators, this problem will not be resolved until the problem of measuring teacher competency is resolved.

In the absence of a testible quantitative evaluation, a series of observations were made by the principal investigator about what actually took place and what resulted from the project. Inferences could be made about changes in attitudinal behavior of teachers.

Two general categories, the university setting and the public school setting, were identified as a means of classifying the observations which precipitated out of the study. Those observations identified with the university were classified as follows: (1)the students in teacher education, (2)the elementary education faculty, and (3)the instructional media development. Those observations identified with the public school setting were identified as: (1)the inservice experience for teachers and administrators, and (2)the effect these experiences had on the children. The outline which follows describes the observations made in each of the subdivisions of the two settings.

University Setting

1. The students in teacher education

    1.1 Student teachers on the teams

        1.11 They had practice every week in initiating ideas about instruction for the entire team.

        1.12 Within the framework of the school district's curriculum, they made decisions about the scope and sequence of the subject matter in

relation to the characteristics of a particular group of students.

1.13 They had practice in developing key lessons for the entire group of

students in the team. (A key lesson is the kick-off lesson for a new

unit, and is designed to arouse interest and identify problems for

study.)

    1.111 They identified the roles of the other members of the team

        during the lesson.

    1.112 They became more adept at making rational decisions about

        instruction.

1.14 There seemed to be a change in their self-image.

    1.141 After four or five weeks they demonstrated confidence in them-

        selves as teachers of children.

        1.1411 They appeared to get involved in teaching sooner than in

            the conventional program.

        1.1412 They appeared to overcome sooner than in the conventional

            programs merely playing the role of teacher. They were

            less mechanical and artificial, and more flexible in

            relating to the needs of children.

    1.143 The became less defensive as the semester progressed about

        receiving criticism from other members of the team.

1.15 They had practice in directing secretarial help and teacher aides.

1.16 The follow-up of the eight student teachers in the project disclosed

the following:

    Five accepted team teaching positions, one of whom was hired

        as a team leader, and another of whom was given an experi-

        enced teacher fellowship to begin work on his masters degree

        while teaching in the team teaching program.

    One is teaching in a self-contained classroom.

One has not accepted a position at the time of the writing of
this report.

One married and is not teaching.

1.2 Students in elementary education who were not part of the team

1.21 Sophomores

1.211 They got involved in serving as teacher aides in the public
schools. They helped to develop visual aids and to evaluate
written work. They tutored children and observed team teaching.

1.212 Over one hundred sophomores were involved in these activities.

1.22 Juniors and seniors in pre-professional courses observed the teams
in the schools and in the planning sessions. (More than thirty visitors
observed the planning sessions.)

2. University faculty involvement

2.1 Principal investigator

2.11 An opportunity was provided for him to learn about team teaching
procedural structure and about training people for team teaching
positions. He noted the following:

2.111 Highly structured planning procedures were characterized by
strengths and weaknesses.

2.1111 There was a strong commonality of opinion about what
the team members planned to do. There was a clear
picture after the planning session of each one's re-
sponsibility for the coming week's lesson.

2.1112 There was greater conscious application of learning
theory to instruction with emphasis upon how learning
takes place.

2.1113 Students felt they needed more flexibility in planning
in order to focus on major problems.

      2.1114 Students felt they spent too much time in developing

           behavioral objectives, and too little time in discussing

           the general plans.

2.112 Loosely structured planning procedures were characterized by

    strengths and weaknesses.

    2.1121 There was a climate of constructive self-criticism.

    2.1122 There were flexible planning procedures with emphasis

        upon the learners' interests.

    2.1123 There was a continuous attempt at identifying curricu-

        lum issues.

    2.1124 There was little conscious attempt to apply learning

        theory to instruction.

2.12 Goals of team teaching.

    2.121 Different procedural operations achieved similar goals, i.e.,

    meeting the needs of children, providing for individual dif-

    ferences, developing creative stimulating lessons, possessing

    greater control of instruction through greater control of

    evaluation.

    2.122 Teachers engaged vigorously in the process of self-renewal by

    continuously researching and examining new information related

    to instruction and learning theory as well as to the subject

    matter.

2.13 Programming student teaching

    2.131 A plan was developed to lead the team through a series of

    operations which moved the team from simple instruction to more

    complex types of instruction. (See Appendix A.)

    2.132 The team members broadened their backgrounds through a series

    of required reading. (See Appendix A.)

2.2 Elementary education faculty members

 2.21 They were kept informed of the activities and progress of the teams.

 2.22 They were encouraged to have their students observe the teams.

 2.23 They were asked to recommend students as team teachers for future teams.

 2.24 The organization of team teaching in the plans for a new undergraduate curriculum in teacher education is being considered.

3. The development of instructional media.

 3.1 A fifteen minute video-tape of both teams engaged in planning for instruction was developed during semester II.

  3.11 The tape will be used to orient new teachers to the team teaching planning operations, as well as to explain planning to students in education and to experienced teachers.

  3.12 The tape will be used to explain curriculum decision making for in-service groups.

 3.2 A series of still photographs were taken to show the nature of team teaching within the classroom.

Public School Setting

4. Inservice application for experienced teachers on the team.

 4.1 The teachers in the team manifested a change in behavior. As one teacher said, "After this experience, I'll never be the same, -- and I'm glad!"

  4.11 A strengthening in teacher attitude about the value of behavioral objectives was observed.

  4.12 The teachers became more adept at using textbooks as a point of departure for instruction, rather than as the sole means of instruction.

 4.2 The teachers had success in operating a teaching team.

  4.21 They were able to engage in teaching activities which previously they

had no time for.

4.22 They were able to describe team teaching to other teachers.

4.23 They were able to get other teachers interested in participating in this form of classroom organization.

4.24 They were willing to become engaged again in this project if it were to be continued.

4.3 The team provided an inservice experience for teachers and administrators within the district and in neighboring districts.

4.31 The classrooms and planning sessions were open for visitations and observation by teachers and administrators.

4.32 The operation demonstrated that team teaching could operate in buildings without the necessity of removing walls, installing teaching offices, or purchasing expensive equipment.

5. The effect the project had on the children.

5.1 The children in the classrooms involved in the project were observed by the teams to have shown considerable growth in skills, understanding, and attitudes.

5.2 In a survey made of these children about team teaching, what follows is a sample of their comments:

"More individual help"

"Fewer children in a group; those who needed more help got more help; those who could go faster were able to"

"More help in handwriting because one teacher was left-handed and two teachers were right-handed"

"Teachers can learn from each other"

"Don't get sick of having just one teacher"

"This project should continue in fifth grade"

"Different knowledge on the parts of the three teachers"

In summarizing these observations, the investigator has reviewed them in light of the project's five specific objectives stated previously in this paper:

1. Yes, the project did provide student teachers in elementary education with a type of experience which was compatible with current trends in classroom organization.

2. No, the project did not provide juniors with an opportunity to engage in another type of pre-student teaching field experience as teacher aides-- (sophomores were used as teacher aides)..

3. Yes, university personnel did have an opportunity to learn more about the. dynamics of team teaching.

4. Yes, practitioners in the field did gain experience in working in another type of classroom organization.

5. Yes, the project did provide some assistance to the public schools in developing plans for team teaching.

Recommendations

If this program is to continue and become a part of the ongoing student teacher program, the following recommendations are made:

1. Develop more teams in other schools at a variety of grade levels. Give the experienced teacher new to micro team teaching maximum supervision, and the teacher who has had micro team teaching experience minimum supervision by the university staff.

2. Develop among two experienced micro teams within a building an "intra-" micro team situation which more characteristically resembles field teams. This would bring team teaching out of the self-contained classroom and into the total school's program.

3. Identify within the public school setting a leader experienced in team
   teaching to serve as a team teaching coordinator who would teach in a team
   part-time, and serve also as a link between school and university in much
   the same way as a clinical professor.

APPENDIX A

Outline for Micro Team Teaching

SEPTEMBER (FEBRUARY):
1. Readings.
    1.1 Review child development with emphasis in characteristics of child from
        ages 9-11; See Gesell's book.
    1.2 Review concepts and generalizations about principles of learning.
    1.3 Begin reading Bloom's Taxonomy of Educational Objectives, Handbook I:
        Cognitive Domain.
    1.4 Current magazines (Saturday Review).
2. Activities.
    2.1 Study cumulative records.
    2.2 Explore school and equipment.
    2.3 Observe critic and students.
    2.4 Plan as a team.
    2.5 Teach a psycho-motor skill in P.E., art, or music.
    2.6 Plan daily lessons with team.
    2.7 Teach each of three reading groups.

OCTOBER (MARCH):
1. Readings.
    1.1 Bloom's Taxonomy of Educational Objectives, Handbook I: Cognitive Domain.
    1.2 Norris Saunders, Classroom Questions.
    1.3 Read articles on discovery learning -- the teaching of concepts and dis-
        covery of generalizations.
    1.4 Read 2 books of own choice (fiction or non-fiction).
    1.5 Saturday Review.
2. Activities.
    2.1 Continue teaching psycho-motor skills in arithmetic, science, etc.
    2.2 Plan units as a team.
    2.3 Teach in the cognitive domain.
        2.31 Levels 1-3.
            2.311 Knowledge.
            2.312 Comprehension.
            2.313 Application.
        2.32 Levels 1-6.
            2.321 Analysis
            2.322 Synthesis
            2.323 Evaluation.
        2.33 Mid-term exam.
            2.331 Psycho-motor skills.
            2.332 Cognitive domain.
    2.4 Teach all three reading groups.

NOVEMBER (APRIL):
1. Readings.
    1.1 Three current best sellers (fiction or non-fiction).
    1.2 Saturday Review.
    1.3 Krathwohl's Taxonomy of Educational Objectives, Handbook II: Affective
        Domain.

2. Activities.
   2.1 Review teaching a psycho-motor skill.
   2.2 Review teaching a cognition.
   2.3 Work through the levels of the affective domain.
   2.4 Critical evaluation of team members.

DECEMBER (MAY):
1. Readings.
   1.1 Three current best sellers (fiction or non-fiction).
   1.2 Saturday Review.
   1.3 Krathwohl's Taxonomy of Educational Objectives, Handbook II: Affective
       Domain.
2. Activities.
   2.1 Continue critical evaluation.
   2.2 Integrate the teaching in the cognitive and affective domains.
   2.3 Final exam: Teach two sequential integrated lessons using the cognitive
       and affective domains in social studies and/or science.