



1-1-1966

An Annotated Bibliography on Team Teaching in Business Education

David J. Theusch

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AN ANNOTATED BIBLIOGRAPHY ON TEAM TEACHING
IN BUSINESS EDUCATION

by

David J. Theusch

B.S. in Business Education, Minot State College

A Research Paper

Submitted to the Faculty

of the

University of North Dakota

in partial fulfillment of the requirements

for the Degree of

Master of Science

Grand Forks, North Dakota

January

1966

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This research paper submitted by David J. Theusch in partial fulfillment of the requirements for the Degree of Master of Science in the University of North Dakota is hereby approved by the Committee under whom the work has been done.

John L. Rowell
Chairman

John C. Peterson

Courtney F. Sibbey

Christopher S. Horner
Dean of the Graduate School

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ABSTRACT

The purpose of this paper is to compile an annotated bibliography of team teaching in business education. The paper is designed and organized to study current literature for the purpose of classifying team teaching.

A thorough search was made for articles, periodicals, and books related to the subject in the library of the University of North Dakota, Dr. John L. Rowe's personal library, and in the writers personal library. The Business Education Index, The Education Index, and the card catalogue were the sources of the references.

All titles of articles that may have had some connection with the subject were placed on 4x5 cards. These cards were then sorted by names of periodicals and by years.

After reading an article, a synopsis was written on the card. The cards were then categorized under the following major headings:

1. Pertaining Directly to Business Education.
2. Pertaining Indirectly to Business Education.

CHAPTER I

THE PROBLEM

The purpose of this paper is to compile an annotated bibliography of team teaching in business education. The paper is designed and organized to study current literature for the purpose of classifying team teaching.

PURPOSE OF THE STUDY

No thesis or dissertation has yet been completed in the field of team teaching. In Order that team teaching may be studied, material must be made available to those who want to do research on team teaching in business education.

DELIMITATIONS

After Examining current professional literature and books, it was decided that the material included in some of them, did not pertain to the field of business education either directly or indirectly; therefore, they were excluded from this paper. Since the human factor was present in the selection of the literature and books, an error may have been committed.

DEFINITION OF TERMS

Some of the terms used in this study are relatively new and must be defined as they apply.

Flexible Scheduling: Adapting the amount of time available for teaching in the day-to-day subject schedule to concentrate more time on certain days and equivalent less time on other days on any given area of subject matter.

Team Leader: A teacher who guides, directs, and coordinates the activities of team members and all students assigned to them.

Team Teaching: A type of instructional organization, involving personnel and the pupils assigned to them, in which two or more teachers are given joint responsibility, for all or a significant part of instruction of the same group of pupils.

CHAPTER II

PROCEDURES

The following procedures were used to obtain and organize the material for this research paper on team teaching in business education.

A thorough search was made for articles, periodicals, and books related to the subject in the library of the University of North Dakota, Dr. John L. Rowe's personal Library, and in the writer's personal library. The Business Education Index,¹ The Education Index,² and the card catalogue were the sources of the references.

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1. Pertaining Directly to Business Education.
2. Pertaining Indirectly to Business Education.

¹Business Education Index (New York: Gregg Publishing Company, McGraw-Hill Book Company, Inc., 1962-1965).

²Education Index (New York: H. W. Wilson Company, 1957-1965).

The cards under the major heading were then categorized further. Appearing under the major heading, pertaining directly to Business Education, were the following subheadings:

1. Basic Business
2. Bookkeeping
3. General
4. Notehand
5. Office Practice
6. Typewriting

Appearing under the major heading --Pertaining Indirectly to Business Education were the following subheadings:

1. Advantages and Disadvantages
2. Methods
3. Research
4. Specific Plans
5. Students
6. Teachers

Some of the articles could correctly come under several categories. Each was, however, simply placed according to its area of main concentration.

CHAPTER III

FINDINGS

Pertaining Directly to Business Education

Basic Business

Carpenter

Business education is one of the subject areas sharing the spotlight in Evanston High Schools experimental "Teacher-Team" teaching.

The use of the teacher-team is an effort to improve the quality of education for growing pupil enrollments despite a continuing teacher shortage. It is an effort to gain the maximum efficiency and effectiveness of personnel and facilities through optimum use of each.

Team-teaching in basic business at the authors school means joint planning by a group of teachers who teach the same subject. The students of all the teachers of the team meet in one large group for some lessons and in smaller groups for others. Teachers best qualified in a particular phase of the large groups; the other members of the team concentrate their share of the teaching load on their individual strong, specialty areas. When teachers of comparable preparation and ability work in a team, it is believed that a superior course is produced. (41)

Menacker

At Marshall High School in Chicago, a business teacher came into an economics class offered by the social studies department for the purpose of supplementing the presentation of a unit on stocks and bonds. After a brief review of what had been covered in the unit by the social studies teacher, the business education teacher proceeded to fill in such gaps as seemed to exist from her point of view. A follow-up study of this teaching technique indicated that the students not only learned the material much better when compared with their performance in other units of comparable interest and difficulty, but also demonstrated increased interest and motivation in the entire field of economics. (142)

Bookkeeping

DeBellis

This article primarily concerns the teacher team program and bookkeeping, a functional example of large group utilization is presented. Readers are reminded that content presented in the lecture and method of presentation are dependant upon the teacher's knowledge and creativeness.

The intent of this article is to provide information and incentive for other districts to try this program as a means of better meeting the needs of business education students and of effectively utilizing the time and talents of the business teacher. (59)

General

Brown

This article answers the following questions; (1) What is team teaching? (2) When was team teaching first used? (3) How are teaching teams organized? (4) In what high school business is team teaching being used? (5) What are the main advantages of team teaching? (6) What are the greatest difficulties in using team teaching? (7) How much planning is needed in team teaching? (8) Do team teachers have more free time than regular teachers? (9) How are classes organized for team teaching? (10) What kinds of special facilities are needed in teaching? (11) How are classes scheduled to provide for team teaching? (12) Are different teaching techniques necessary in team teaching? (13) How do students react to team teaching? (14) Does team teaching result in lower costs of instruction? (15) Do students learn more from team teaching than they do in regular classes? (16) What are the alternatives to team teaching in handling large groups? and (17) What is the future of team teaching? (35)

Christiani

In an endeavor to provide perceptible, concrete and factual service to pupils, "Team Learning" was introduced within the frame-work of an experimentation conducted in the elementary-grade classrooms of a suburban Massachusetts community. (43)

Cook

This article discusses: (1) The meaning of team teaching; (2) the advantages and disadvantages of team teaching; (3) how extensively team teaching is being utilized; (4) how team teaching has been utilized in business education; (5) what some of the implications are for team teaching and guidelines on team teaching. (48)

Lord

Team teaching has presented a new concept in education. One of the basic innovations in this concept is the combined utility of individual study, small group discussion and large group instruction; the per cent of time for each is in the ratio of 40-20-40. The second principal innovation in the team teaching concept is in staff utilization. Advantages and disadvantages of team teaching are discussed in detail. Additional information on team teaching may be found by using the references on team teaching listed in the article. (128)

O'Brien

In a recent survey conducted in California by the Bureau of Business Education of the California State Department of Education, twenty high school districts indicated that they are experimenting with team teaching in business education subjects. Twelve districts were offering business education classes taught by teams of teachers within the business education department, six were using teams of teachers from the business education department and another department, and two were using both of these methods.

Five junior colleges reported experiments in team teaching in business education subjects. Two junior colleges offered business education subjects taught by a team of business education teachers; one junior college was using a team of teachers from the business education department and another department; and two were using both methods. (157)

Wood

A small class of 21 students was used for this experiment. Instructions were kept as simple and as standardized as possible to make it easy for the different people. As one teacher presented the lesson, the other two moved casually from desk to desk making certain there were no questions. By the second week, the routine was so well established that one instructor was free to work with the students who had been absent the day before. In the fourth week another phase of team teaching was explored. On Monday, Wednesday and Friday, 35 minutes was reserved for production typing and 15 minutes was spent on skill building. The schedule was reversed on Tuesdays and Thursdays. All of the students in this small group benefited from team teaching. (217)

Notehand

Rubenow and Thomas

In September, 1961, a Notehand class consisting of 100 prospective college students was begun at Rich High School East Park Forest, Illinois. The course was continued successfully throughout the entire school year. It was found after this class was offered and during the time it was offered that:

(1) At least two teachers are a necessity for a class of this size. Having two instructors trained in shorthand or notehand, is most desirable. (2) An interested English teacher would be a definite asset to a large notehand class if only one notehand teacher is available. (180)

Hurley

The author of this article expounds on: (1) the use of audio-visual aids in social studies; (2) team teaching in English; (3) tape recorders in Latin; and (4) tapes in office practice. (106)

Iannizzi and Robinson

At Central High School, Valley Stream, New York, they have experimented with single-subject team teaching in the advanced office practice class. The findings of the experiment were: (1) The methods of teaching, student grouping, teacher and pupil activity will vary according to the purpose and the content of the particular lesson. (2) Contrary to the belief held in some areas, team teaching does not mean that all teaching is done by one of the members of the team nor does it mean that one teacher must necessarily do all the teaching of one unit. (3) Time must be made available for advanced preparation. (4) Team teaching does not lessen your importance of the work you must perform in many cases it increases both. (5) Not all teachers are suited to team teaching. (6) After the experiment it was believed that the conditions of team teaching do more to invite superior teaching and increased learning than do conventional methods. (107)

Iannizzi and Robinson

An experiment in which of the three most common patterns of team teaching, the one selected was the single subject team.

In this experiment the first step was to complete and reinforce all background material. As soon as this was done, they initiated a project that brought them as close to a realistic office situation as conditions would permit. The Ian-Rob Advertising Company was theoretically incorporated; and the teachers, as president and general manager began to hire employees. The accomplishments of the experiment are then listed in the article under the headings: (A) the co-operative program; (B) Activities; (C) Responsibility and (D) Classroom organization.

(108)

Typewriting

Bergner

After almost four years of team teaching in the area of typewriting I, those in Arvado, Colorado are so pleased with this technique that they plan to continue it. This article goes into detail on the following features of the team teaching they used: (1) Physical Facilities; (2) Personnel; (3) teaching schedule; (4) clerk's assignments; (7) a list of six advantages of team teaching for teachers; (8) a list of five advantages of team teaching for students; and (9) four disadvantages to team teaching. (29)

Parzych and Parzych

This article is concerned with team teaching in typing. It is a experiment in which during a summer school session lasting six weeks, the team teachers were expected to cover a regular one-semester term class. The objectives of the course were to teach good basic techniques of typing. The course content is discussed in detail progressing week by week.

Further the techniques, basic understandings, tests, grading, and behavior of the students was discussed in detail. (162)

Phillips

This article dealt with the problem of how to handle 160 typewriting students in a two-hour class in three typing rooms that held only 40 typewriting tables and chairs in each

room and how team teaching was applied to this situation. The physical setup and the material to be covered in the course are covered in great detail. The team of teachers discovered that there were both strengths and weaknesses to the program, but the strengths seems to outway the weaknesses. (169)

Tedesco

The team teaching program at Cupertino High School, Sunnyval, California has equaled, if not exceeded, the results of the standard teaching practice. The rate of speed in the experimental classes was closely related to that of the control group. However, the knowledge of usage, procedures, and techniques in typing I under a team teaching program showed a decided benefit to students. The results of this experiment are interpreted as showing that team teaching has advantages over regular classroom organization. (198)

Tedesco

Team teaching has been incorporated in the area of typing and general business. Due to the success of these two programs team teaching has also been started in shorthand. A team teaching program is best utilized in a lecture type situation such as general business. Here the team member can make full use of his preparation time out of his class, while the other member is lecturing on a specific unit. The team situation allows the instructor to choose the subject he feels best qualified to present. This procedure brings to the student a well informed teacher. Some of the other items discussed

in this article were: (1) Layout and equipment. (2) Experimental results of team teaching, that showed teaching has advantages over regular classroom organization. (3) Modified scheduling and (4) Television as a teaching Technique. (199)

Pertaining Indirectly to Business Education

Advantages and Disadvantages

Anderson and Mitchell

The emergence of team teaching, and of other grouping plans that assume variable class sizes and conditions, has aggravated the problem of flexibility. There are three reasons for desiring flexibility in schools that are to house team teaching programs: (1) conventional size spaces that are adaptable to both large group and small group instruction are needed; (2) uncertainty as to the future characteristics of team operations requires further maneuverability of space layouts; (3) some communities, hesitate to commit themselves permanently to the team teaching pattern, insist that it be possible at minimum expense to return to the conventional egg-crate arrangement. In this case, it is obvious that the people want to be able to have their cake and eat it too.

Buildings designed for the conventional program of "cells and bells", operative in most of today's schools, represent an unsuitable environment would be to build each school so that it can accommodate both the conventional cells and bells program and the nonconventional program being developed. However, the total space requirements of the "we want both" solution would result in such increased building costs that it would probably be unacceptable to the taxpayers. (13)

Anon.

The phenomenal aspect of team teaching is not so much the concept itself, but the strong administrative support

behind the idea. Administrators do not have to be sold on team teaching; they are for it. As many school plant designed for immediate or future team teaching testify, and as curriculum reorganization and teacher recruitment patterns emphasize. (15)

Blount

The advantages accruing to members of teaching teams are many: (1) maximum utilization of teaching competencies; (2) sharing of information planning, responsibility, and evaluation; (3) provision for more extensive preparation of lessons; (4) avoidance of duplication of effort; (5) commitment to curriculum innovations; (6) recognition of outstanding teaching ability; and (7) greater flexibility in grouping students. The disadvantages are many too: (1) lack of agreement on educational objectives; (2) rapid exposure of unsuccessful teaching practices; (3) failure of or rejection of leadership; (4) personality conflicts; and (5) inordinately large amounts of time devoted to detailed planning and revision of curriculum. (37)

Carrigan and Haynes

The author describes many of the difficulties which await any school considering the inauguration of a team teaching program and the ways that pitfalls in team teaching may be avoided if the suggestions he gives are taken into consideration. (51)

Carrigan and Haynes

This author describes the factors to consider which

may be helpful in avoiding some of the pitfalls in developing team teaching. In the final analysis each new team program must grow from the specific context in which it will function and be planned by those who will put it into action. The purpose of the ideas mentioned by the author are to provide some small stepping stones toward discovery of new and better programs which will improve instruction and learning in our schools. (52)

Gillers

The authors fear is that Boards of Education throughout the country will seize upon T.V. and team teaching as an alternative to training and financing an adequate staff and will introduce the era of the "little electronic school house" after little or no consultation with the teachers and supervisors. We would then be on our way to the moon with all the hatches bolted and no ticket of return. The long battle to reduce class sizes and effective pupil-teacher ratio would be lost to the T.V. eye. (81)

Marsh

These are the advantages of team teaching: (1) The class has an opportunity to hear well prepared lectures and see demonstrations by superior teachers. (2) Time can be spent working with the gifted child as well as the slow learner on an individual basis. (3) Absence of one teacher will not disrupt classes. (4) Outside guests would be more willing to speak before large groups. (5) More time can be

given to teachers for preparation of lessons. (6) the teacher is relieved of much of the routine clerical burden. (7) In some cases an additional classroom will be made available by combining teachers. (136)

Morlan

Public pressures and criticism of what public schools are doing may tend to push educators into projects of one kind or another. Take team teaching as an example. Before we rush headlong into this type of program, many considerations should be carefully examined: (1) Do the personnel involved in the team teaching project have the necessary training and skills to handle communication media for large groups? (2) Are large group lectures followed by small group seminars of supervised work periods? (3) Is the released time provided for those persons presenting the large group lectures, so they will have adequate time for preparation? (4) Do those involved in team teaching merely divide up the responsibilities for various lectures or do they plan together what is to go into each of them? (5) Does the administration provide necessary financial assistance? (6) Is there a research design to the team teaching project, so one can tell if this approach to learning is more effective than other approaches used in the past. (146)

Polos

Team teaching is today's educational bandwagon. Schools are scrambling for the distinction of "teaming"

simply because it is the thing to do. In all this frenzy the legitimate purposes, methodology, and limitations of team teaching have become quite cloudy. It is important at this time to review objectively this technique and bring it back to proper focus. This seemed to be the intent of the author. (174)

Morris and Weiss

This article considers some of the basic assumptions of the "team approach" and raises the question---Are they valid?

One of the basic assumptions in using this approach is that each member will stimulate and be stimulated by his fellows. A second assumption is that individuals will feel "free to contribute unique information" which, when combined with all other information, results in a "team" outcome. A third assumption is that the "team approach" will result in a "program" more acceptable to the "team" and the larger group. Finally, teams appear to be more successful when each member holds the same "prestige position". (211)

Wetzler

Team teaching is an organizational approach that is one way of exposing more students to varied learning experiences and to outstanding instructors. It should not be thought of simply as a division of responsibilities. The care and selection of the team is important, but unless detailed planning is done with constant ongoing evaluation, there is little chance of success. Those persons who will experiment

with team teaching may find it to be a most interesting experience for strengthening a college classroom when they try this. (213)

Methods

Anderson

One model of co-operative teaching requires an extensive co-involvement of a number of teachers in the range of instructed related functions: planning, actual work with the same children, and evaluation. Perhaps the most typical teaching teams pattern in current use is the semi-hierarchical team. Here, the members of the team are officially joined together in a close working relationship, the administration having designated various roles for the members, but all members having essentially equal status. Other ideas discussed in this article are, departmentalization, non-grading, and multi-age patterns, non-professional aides and pupil groupings. (10)

Anderson

Three examples of team teaching in action are discussed in this article, along with the prerequisite conditions to be considered for team teaching, which are: (1) the budget for clerical services of the kinds--audio-visual aids, textbooks, and supplies, and other expendable materials should be much higher than the state and national averages; (2) the community and the school district should have enjoyed a harmonious and constructive working relationship for a number of consecutive years; (3) there should be a history of sincere interest in, and efforts toward, the rewarding of superior staff service; and (4) the school district and its officers should, over recent years, have developed rather strong ties. (11)

Anon.

This article covers the following topics in detail:

(1) the american high school after a decade of challenge--the setting for an appraisal; (2) a perspective on innovation in education; (3) the curriculum, the team and the school: an examination of relationships; (4) planning for team teaching: the human consideration; (5) a new design for individual learning; and (6) some glimpses of high schools of the future. (18)

Battrick

The mechanics of establishing team teaching procedures in the junior high school organization should constitute no more than a manageable problem of scheduling. It would mean essentially an extension of the block-time concept now employed in many junior high schools. (25)

Berg

If team teaching is to be successful, certain groups must assume responsibilities. First, the teacher must provide his share of the team effort. Second, the student has a responsibility, and in the large group we have the opportunity to share this. The teacher should nurture the student's desire to learn, but the final responsibility is the student's. The teacher who can make the student aware of this has the key to motivation. Third, the principal has the responsibility to develop a good instructional program since his

primary objectives is to improve instruction. He must offer the professional leaderships and be alert to new methods of instruction. A positive approach by the principal should see that the teacher has material support. (28)

Bowes

The minimal team teaching program originally envisioned these steps: First, and most obvious, the need for a common conference was recognized and rammed through administrative machinery. Second, the need for flexibility was so clear that the lecture hall was made available at any time it would be needed. Third, play down the enrichment factor in favor of lessons that would advance the content of the course. Fourth, and most difficult, bring four classes together for any kind of common experience. (33)

Cunningham

Several types of teams are now operating—the team leader type; the associate type; the master teacher-beginning teacher type; and the co-ordinated type, to name a but a few. There are several administrative problems involved in any type of team teaching. These include the problems of obtaining faculty support, selecting team members, protecting staff relationships, appraisal, providing instructional space scheduling, and providing special facilities. The administrator who wants to tool up for team teaching should anticipate each of these. (54)

Dean

The team teaching is new. The term itself, first appeared in Education Digest in 1957. The team-teaching idea has been in practice for so little time in so few communities that conclusive evidence of its effectiveness has not had time to accumulate. (58)

Giltinan

Following are the steps taken to set up this team: First, to select the kind and number of students that might be successful. Second, to determine course content. Third, divide lessons into units and distribute the work. Fourth, decide which of the activities in the units were adaptable to large groups of students and which ones would require smaller-group work. Fifth, select the equipment for a team. (82)

Giltinan

From the method of team teaching described in this article it was found that: (1) Students do not necessarily have to be closely supervised in discussion, but can come up with some excellent ideas completely on their own, if given a chance to talk to each other. (2) Students are more frank and honest when discussing topics with fellow students without the teachers constant presence. (3) The discussion groups teach students to express themselves more logically, more coherently, and more economically, and to make better use of their time. (4) Students can get to know each other better by participating in different groups within the class.

(5) Higher-ability students and those of lower ability seem to enrich each others experiences when working together in the same small group. The better students develop understanding and often get new ideas from the others, and the lower ability students gain better work habits and new ideas, too. (6) Even the shy student learns that expressing his own ideas among people interested in the same things is a profitable experience. (83)

Goodlad

The purpose of this article was threefold: First, to set forth some of the conditions and assumptions underlying instances of school change; second, to define and describe co-operative teaching and to analyze some of the factors motivating it; and, third, to respond to the questions: To what extent do the changes of curricula organized around basic concepts programmed instruction, non-grading, team teaching, innovations in school plan design, and the use of electronic data processing in education represent fundamental reform? Is the heart of american education beating any more vigorously? Is our educational enterprise guided by a new spirit or by an old one that has become more compelling? (85)

Hahn

In this experiment, since the strengths appeared to outweigh the weaknesses--and many of the weaknesses might possibly be conceived as strengths--the experimenters felt

that the experiment was sufficiently successful to continue. The major strength of the experiment, as determined by an analysis of the results of the use of the evaluative instruments, appeared to be the interaction among the professors and between students and professors. (89)

Hemeyer and McGrew

There are several ways of organizing teams of teachers for instructing large groups. Team teaching is the term often applied to any plan that involves more than one teacher. However, a distinction should be made between two ways of using teaching teams. One method is called co-ordinate teaching, the other associate teaching. These methods are discussed by the authors of this article. (101)

Michael

Varied patterns of team organization are emerging. By far the most prevalent in secondary schools is the organization of the single subject team. In a number of elementary schools and some junior high schools, the common element is not the subject but a student group. There is also an inter-disciplinary team in few secondary schools.

There are a few minimum essentials that must be present if the success of any type of team organization is to be insured. There must be a common planning time for team members when they are free from other assignments and responsibilities. There must be adequate rooms in which to

work and teach. Schedule arrangements must be devised which make it possible to assemble appropriate student groups to carry out the purposes of instruction. A carefully planned program of evaluation of both teaching and learning must be executed. (143)

Nelson

The experimental objectives as set up were to provide for: (1) a profitable association among the team teachers through interdependent resource persons; (2) a profitable association between team-teachers and the class members through interaction with large groups of students. The proceeding objectives were implemented by activities which took cognizance of four student groupings and followed the suggestions set forth in the trump study. (148)

Nelson

The high school program described provides: (1) flexibility of scheduling, enabling the individual student to proceed at rate realistic for him; (2) correlation of subject matter, both interdepartmentally and intradepartmentally; (3) greater opportunity for a highly individualized type of instruction, as well as an opportunity for individual student study commensurate with ability and maturity; (4) more efficient and effective use of teacher time, as teachers will be relieved of clerical duties, administrating, and grading standardized tests, showing movies, arranging television viewings, and the like. (151)

Reasoner and Wall

Ultimately, the success or failure of any organizational pattern is dependent upon the amount of communication and the nature of the interaction within the teaching staff. Although physical facilities occasionally play a role, they seldom determine the eventual success of a program. Instead, positive outcomes are related to the extent to which teachers share their ideas, philosophies, and perceptions about children and their commonly achieved evaluation guideline. In team teaching, teacher compatibility which encourages communication is a uniquely important requirement.

(178)

Research

Bleifeld, Gurney, Reese, and Tink

This article summarizes the presentations given on team teaching made by Maurice Bleifeld, T. C. Gurney, James E. Reese, and Albert K. Tink. (32)

Bush

You are out of fashion this season if you have no "experiment" in team teaching or similar type of project. The number of schools reporting that they are experimenting with classes of variable size, flexible schedules, and team teaching appears to be large, but we need to beware of seizing each new educational idea and riding it to death. (39)

Cook and Taylor

The plan developed contemplates housing 720 pupils in a cluster-type school of three units, each unit to accommodate 240 students. Each unit has been designed to provide the educational experiences for a group of students enrolled for a two year period. Each year, the new group of seventh graders will be assigned to units for two years. A team of seven teachers will be assigned to each unit to plan and develop the educational program. The team will be assisted in evolving this plan by a group of specialists who will serve the entire three-team school. The physical education, homemaking, practical arts, and foreign language programs required facilities that could not be developed in each unit.

(49)

Lambert

The author discusses the following topics in detail:

- (1) team structure; (2) team members; (3) planning for teams; (4) personality and team phases; and (5) evaluation. (125)

Lobb, Noall, and Slichenmyer

This article concerned with the summary of the presentation of team teaching made by M. Delbert Lobb, Mathew F. Noall, and H. L. Slichenmyer. (127)

Pitruzzello

That team teaching has modified organization for instruction in literally hundreds of secondary schools has been established by the National Association of Secondary-School Principals sample survey and by the author's observations in the field. On the opening of school in September, 1961, a sizable number of schools joined those already employing team teaching. The continued interest of organizations such as the N.A.S.S.P. and the inevitable sharing of information within the profession through conferences and journals will insure adequate reporting of the progress of team teaching and the directions it takes. (170)

Pitruzzello

Lloyd Michael presented the history of the staff utilization study under the 1955 N.A.S.S.P. Commission and also the work of the committee which succeeded the Commission in 1960. Three items that most attract attention in his remarks

are: (1) Membership and activities of the new committee. (2) The appointment of three staff associates and the service they have been rendering. (3) Announcement that results of the questionnaire on staff utilization were available. (171)

Shaplin

This article discusses the topics: (1) team teaching, defined; (2) the team as a small group; (3) possible managerial functions and goals; (4) possible technical functions and goals; and (5) the future of co-operative teaching and team organization. (182)

Singer

This survey has confirmed Committee suspicions indicating a wide, unsung spread of staff utilization practices. Remembering the 40% return on the questionnaire and the fact that such active states as Massachusetts, Florida, Connecticut, and Utah among others, remain unsurveyed, one might project the guess that systematic team teaching occurs in more than one thousand secondary schools in the entire nation and that occasional teaming exists in some four thousand schools nationwide. (184)

Specific Plans

The Fund for the Advancement of Education

Six schools were involved in the Norwalk Plan. Important characteristics of the Norwalk Plan included the following: (1) 75-90 pupils at a grade level constituted a Norwalk Plan Group. (2) Each group had access to at least three classrooms plus any other facilities available. (3) Pupil groups were provided for by teacher teams consisting of a team leader, co-operating teacher and a non-professional teacher aide. (4) Team leaders received approximately \$1,000 and co-operating teachers \$500 in addition to their regular salaries as teachers. (5) Insofar as possible, the teachers taught in areas of their greatest competency and interest. (6) Grouping of pupils was highly flexible, with pupils grouped differently by subject. (7) Extensive use was made of the overhead projector. (8) Tape-recorded supplementary lessons were used widely, particularly in the reading, spelling, and arithmetic areas. (4)

The Norwalk Board of Education

This recognition of the Norwalk Plan of team teaching and other school improvements was one of the highlights of the period of this report.

Dr. Glen Heathers of New York University, was asked to assist with an analysis of team teaching as it was functioning during 1962-63. This analysis was based upon written reports submitted to team leaders with help from other team members and from their building principals. The results of evaluation

studies, following the pattern of recent years, tended to be favorable though not conclusive.

This report states further that team teaching began in Norwalk in only two grades--the second and fifth. On advice of Dr. Judson T. Shaplin and Dr. Robert H. Anderson of Harvard, these grades were selected because they represented the middle of the primary and intermediate school spans.

This plan seemed to be working well, and as early as 1959-60, teams were requested in grades ranging from second through sixth. By 1960-61 the Norwalk Plan had spread into junior high and the next year teams were organized at the senior high level. Team teaching of the educable retarded was initiated at both the elementary and secondary school levels in 1962-63. (5)

Adams

During this experimentation something was learned about independent study; what students to involve, what subject areas work best, the appropriate time allotments, and the necessity for followup. Answers to the structuring of the curriculum and the programming of students for effective use of large, small and intermediate grouping were given. One statistical analysis of a team teaching experiment in the district has shown increased learning as a result of the team approach. (6)

Aden

There should be specific recommendations for team teaching. First, there should be careful planning by the administration and by the participants on the team. Even small items may be misunderstood or wreck the team effort. Second, members of the team should be carefully chosen both from the viewpoint of psychological adjustment to the pupils and to each other. As wide an area as possible, within the area covered by the class, should be covered by the academic background of the teachers. A wide range is preferable in this case instead of overlapping. Of course, the depth of knowledge should also be considered. Third, the best possible methods of teaching should be employed. The dynamics of group work should be very carefully studied. Fourth, there should be a great deal of planning so that the pupils may have the advantage of team teaching, instead of teaching by separate individuals. (7)

Anon

In Norwalk, Conn.'s Naramake School, team teaching works. It works because the system is operated by teachers who understand it by team leaders and a principal who respect it. And it works because these people have the space and equipment they need.

Naramake's teams meet once each week after school. In addition they hold regular morning meetings, 15 minutes before school opens.

But team meetings, followed by a return to conventional classrooms and methods, don't accomplish much. Naramake's teachers are blessed with a school built to facilitate their use of large and small group instruction, individual study and the like. (21)

Bjelke and Georgrades

Among the several team teaching and flexible scheduling programs in operation in the Centinela Valley Union High School District, one of the most promising is the four-period block at Hawthorne High School. During the 1962-63 school term, 90 ninth-grade pupils were scheduled to participate in this all-morning program, which was comprised of three academic subjects (algebra, English, and world geography) and a supervised study hall. Three teachers and a part-time aide worked together in one large lecture room equipped with projector screen and sound amplifier. Since this departure from traditional curriculum design is comparatively new, the current effort to analyze and evaluate its effectiveness must be considered somewhat grassroots in nature. The findings which are presented in the article are sufficiently positive to warrant further experimentation and evaluation. (30)

Collins

For two years prior to the opening of Cordova High School in 1963, extensive studies in new developments in teaching methods and curriculum were initiated at Folsom High School to assist in developing educational specifications for Cordova High School. Teachers, department chairmen, and administrators were given opportunities to experiment and to research better ways of teaching children.

In response to requests from the teaching staff, the administration arranged workshops during the summer of 1964 for department personnel to plan a new curriculum and a new approach. As the 1964-65 school year opened, several additions were made to the Cordova Plan. One of the most notable improvements and advances was the combining of the English and social science departments into a department of unified studies. (45)

Cordry

Flexible scheduling, means varying the amount of time in the day-to-day subject schedule to concentrate more time on certain subjects on certain days and equivalent less time on other days. It still will add up to 275 minutes a week, or the equivalent of five 55-minute periods in the subject.

Those at Fremont think it offers sufficient worthwhile features to warrant the extra work in partly revising class schedules. They think it is going to be a lot harder to plan the schedules, but that it will be worth the effort in breaking away from their traditional five-periods-of-55-minutes setup. (50)

Darling

The first criterion of team teaching in the elementary school is that it involves a distinct group of teachers. The second criterion is that considerable time must be allotted for co-operative planning. A third criterion is that team members vary in their competencies and interests and that the team capitalize on these individual differences. A fourth criterion is the necessity of differentiation of responsibility. The fifth and most obvious criterion for team teaching is that the size and composition of any learning group should fit the nature of the activity and the objectives sought. (56)

Duval

A team teaching program has been introduced at McKnight School, University City, Missouri. The author expounds on this team teaching project and feels very strongly that team teaching does work. He makes the suggestion that other schools should use a variation of this team teaching project to fit their own situation. (68)

Fisher

The team consists of two to four teachers. Each has her own class and meets with this class except on the scheduled occasions when all of the classes assemble for specially planned lectures or discussions. These joint meetings may be held once a week or once a month. The teachers plan their work together. Each is individually responsible for certain phases of the work for the entire group, distribution of duties being made, of course, in accordance with the particular interest and abilities and talents of each team member. Co-operative efforts and exchange of ideas to enrich every unit of work are important features of this plan. (73)

Glanz

The team system has been used at the College of Basic Studies of Boston University for nine years. The data reported in this study provides an objective indication of the team approach at the College of Basic Studies.

As used at the College of Basic Studies, the team approach provides for close, informed student-teacher relationships. The faculty is divided into units, each unit composed of five instructors, drawn from five major divisions of the college. Instructors from a given team occupy the same office. This arrangement facilitates student-faculty contact and promotes co-operative curriculum development and instruction. Each student is assigned to a section of 20 to 27 students and each team of instructors are responsible for several sections. (84)

Gross

The team leader directs and coordinates the activities of team members and all pupils assigned to them. He is a master teacher, chosen for this assignment after demonstrating superior instructional competence and excellence in personal relationships. His major responsibilities are to maintain a full teaching load, to call team meetings, to meet with the principal and other team leaders, and to oversee and coordinate the instructional program his team is responsible for maintaining. The team leader receives 10 percent more salary than he would receive as a regular teacher.

(87)

Harrison

Team teaching was provided for at South Junior High School in West Chester, Pa. Team teaching helps to individualize the program. Four teachers were given rooms together--two rooms on each side of the hall. These pupils, therefore, have to walk but a relatively few feet most of the time in passing from class to class. This means that these pupils get to know each other and the teachers know them. A conference room for the team of teachers to use on school time was provided near the office, guidance suite and library where all necessary records are easily available. The result is a

personalized form of education where four teachers thoroughly know the some 150 pupils and work together as a group to give these pupils the education and individual attention each needs. (95)

Harrison

Two key words, "unique" and flexible are the watch-words as Muskegon Senior High School moved into a team teaching program in 1962 with 240 carefully selected volunteer tenth-grade students. The program is unique by being constructed to fit in with the traditional approach given to the 660 other tenth-grade students, and to all eleventh and twelfth grade students. The program is also devised to leave team teaching students free in the middle of the day to pick up desired electives from the traditional program. (96)

Hathaway

The rapid accumulation of knowledge with its many conditional truths makes it more imperative than ever before that education develop within the student the ability for inquiry and the desire for self instruction.

Ridgewood High School, Norridge, Illinois, is striving to develop these skills and attitudes through team teaching and staff utilization.

The commission on the Experimental Study of the utilization of the Staff in the Secondary School under the National Association of Secondary School Principals and financed by the Ford Foundation has proposed some sweeping changes in the organization of the secondary school. (97)

Hayes

The Pittsburgh Public Schools selected team teaching as the type of organization around which to build a program of compensatory education. The Pittsburgh Team Teaching Project was the result. At the outset, it was recognized that the difficulties of children who come from deprived areas cannot be alleviated significantly by the school working in isolation from the community. The flexibility of mind which team teaching tends to create among both teachers and administrators make it especially useful as a means of working in a co-operative relationship with the community. The composition of the team tends to have a number of built-in plus factors for the improvement of instruction for the culturally disadvantaged. (98)

Jensen

At the end of the first project year the team members of the Roosevelt Junior High School preferred the team techniques to the traditional organization. This opinion stemmed from the realization of the superior preparation made possible through group planning and utilization of the collective time and talents of the team. The mass-teaching techniques appeared to team members to have to have unusual possibilities wherever large groups are taught. Areas exist in almost every subject--matter field that can be effectively taught in large groups; however, nearly every subject field

requires teachers to give students individual attention. The team-teaching technique, as employed in this study, suggests procedures for using large group instruction to affect an economy of time, and better utilization of buildings and materials, while at the same time meeting the individual instructional needs of children. (111)

Jensen and Noall

The experiment in the utilization of teacher time through the use of a teaching team in the Roosevelt Junior High school in the Duchesne County School District, gave positive results in favor of the educational achievements of pupils when compared with control schools which were taught according to the traditional method.

A revision of the class schedule pattern in the school permitted a team teaching approach in instruction, a re-deployment of teachers for large and small group instruction, the grouping of pupils in classes of variable sizes and abilities for instructional purposes, and an efficient method of meeting the needs of pupils. (112)

Johnson and Nesbitt

The final year of the staff utilization project in Snyder saw several major changes in the plan of operation. These changes were based on findings from data collected during the first two years of the study. The changes are those dealing with personnel, scheduling, and the use of modern aids in the teaching-learning situation. (114)

Johnson and Lobb

The purpose of this study in Jefferson County, Colorado, is to determine the effects of team teaching and schedule modification on the educational progress of the students in the secondary schools. This is part of a larger challenge to identify a way of improving the utilization of the staff. Some of the patterns which have been developed in the past and which have served a useful purpose are no longer adequate for today's educational task. It is essential that education constantly assess the instructional program and implement necessary changes with a minimum of delay. Involvement in solving critical problems in education can be one of the greatest motivating factors for professional persons in the improvement of instruction. Actual participation in research hastens the discovery of answers; but even more important, it drastically reduces the time required to place these answers into productive educational practice. Jefferson County, Colorado, School District R-1 is dedicated to the unceasing quest for better procedures and approaches. The study described here is a part of this program. (116)

Johnson

At the Golden Senior High School, an experiment in schedule modification combined with the teaching team approach is being tried. One assumption of the experiment

is that the traditional scheduling pattern, developed primarily for administrative convenience, does not provide for the best utilization of time available or of the unique capabilities of the staff. Therefore, the experiment called the Golden Plan, because of the name of the first high school in Jefferson County involved in this proposal, may well be called the Golden Plan in its own right if it succeeds. (117)

Johnson

Research answers questions, but, as it broadens and matures the view of those involved, it indicates new areas which require study. Such is the case in Jefferson County, Colorado. The purpose of the 1959-60 study is to continue the investigation of promising means of improving instruction and utilizing the staff in the secondary schools. Research is being conducted in the areas of schedule modification, symbiotic teaching terms, interdisciplinary teaching terms, intradisciplinary teaching terms, use of material and resources, independent study by students, attitudes of pupils and teachers, and adaptability of teachers. (118)

King

Although the team teaching experimental units in the Claremont Program have shown considerable education potential, it would appear to be far too early to freeze their designs. Each hypothetical structure carries within itself the characteristics which may lead to its own destruction. Experience

in the field over a period of years will be necessary to decide whether or not team teaching is to be a firm part of the "new education". The degree to which teachers, students, administrators, and parents find an understandable and profitable relationship to team teaching will have much to do with whatever success it may achieve. (124)

Larmee and Ohm

Some of the findings of this project were: (1) Teaching teams can flexibly organize large portions of the school day along lines dictated by the many dimensions of the teaching-learning process; (2) a continuous flow of precise information about the progress of individual students, in the learning process is essential to the flexible grouping of students, scheduling of classes and flexible use of team personnel; (3) administrative expectation for teacher collaboration will tend to increase the amount of teacher collaboration taking place; (4) teaching teams can be expected to avoid collaboration in areas where congruency of educational values does not exist; and (5) the use of large formats can eliminate some unnecessary duplication of presentations and frequently can free material for different use at other times of the day. (126)

Loretan

In September, 1959, three seventh-year classes in one large Manhattan Junior High School became part of a

program of team teaching. Reading was selected as the area of instruction because the school, located in the midst of a disadvantaged community, had many poor readers among its population. Each week a group of approximately 120 youngsters reported to the auditorium for a lesson in basic reading skills. On another day during the same week, a follow-up lesson was given by the teachers of these classes in the regular language arts room. On still another day, small-group instruction was provided for those students who continued to exhibit difficulty in mastering the skill. (129)

McCollum

Some advantages of team teaching are: (1) teachers may use their strengths to a better advantage; (2) more time is available for lesson planning; and (3) better presentation results through better preparation. However, some of the disadvantages are: (1) first-year teachers come to depend on older teachers and clerks too much; (2) turnover in teacher personnel keep the "teacher teams" in a constant orientation and training phase; (3) scheduling blocks of time for any given subject is very difficult; and (4) teaching seems to become more subject matter centered than student centered. (131)

Mahoney

Some staff members of the Norton Mass., schools were very much enthused about the exciting things they were hearing from the "team teaching" projects under-way throughout the country and set about to see how these techniques could be

utilized in the local situation. Investigation revealed three things: (1) Team teaching meant something quite different to each school system employing it. (2) It was experimental, wherever, it was used and little could yet be said about its total effectiveness. (3) Most experiments were quite costly, some of the more promising ones subsidized by foundation or university grants.

These three conclusions determined the design of the experiment the Norton system was eventually to devise.

(134)

Mayer and Wooridge

Team teaching was introduced in one high school and one elementary school of the West Clermont Schools at Amelia, Ohio--a part suburban of Cincinnati--in September, 1961. Both buildings were traditional schoolhouses, but adjustments have been found possible to facilitate the work of the teaching teams. Detailed drawings have been completed for a new elementary, each designed specifically for team teaching. These buildings were scheduled for completion in the Spring of 1963.

From their visits, conferences attended, and readings, and from their brief experiences, they were convinced that team teaching holds much promise because: (1) the talents of several teachers are pooled together; (2) a more balanced curriculum and better prepared lessons are

presented--teachers cannot go off on a tangent and spend too much time on a favorite topic; and (3) working as team members and teaching large groups encourages teachers to do their very best. (141)

Nesbitt

The Snyder Project is an organized, creative search for new ways of increasing the quantity of learning and the quality of teaching in the secondary school. It proposes to test the hypothesis that teaching the same students in large groups (70-100) part of the time and in small groups (12-15) and individually the remainder of the time is more economical of both money and teacher time and more productive educationally than the methods usually associated with teaching classes of 25 or 30. Use is being made of closed-circuit T.V., radio, tape recorders, and overviews with teacher-made visuals.

Although the project deals with new approaches to teaching and learning, the subject matter involved is not experimental. Teachers of identical subjects have been scheduled to meet classes at the same periods so they can work as teams in planning and teaching. Each teacher has the usual teaching load; however, provision has been made for clerical assistance, special aids and intensive supervision. The experiment is operating within a traditional framework.

(152)

Noall and Ross

The data gathered during the first year of the experiment using a teaching team approach to instruction in United States History and Language Arts in Wahlquist Junior High School, support the hypothesis and sub-hypothesis described in this report. Tests in the subject areas given near the end of school indicate that the pupils learned as much in this program as did eighth-grade pupils in regular programs in other schools. In fact, there was no significant differences in the learning outcomes as shown by the standardized tests.

The county director of secondary education, the principal of the school, and the team teachers endorsed the program for its better utilization of time and competencies of teachers. It also provided for a more productive system of education for the pupils in the experimental organization as compared with eighth-grade pupils in a comparable situation in other schools. (155)

Otterness

This survey reveals that Minnesota school systems and faculty members are highly interested in team teaching and are willing to attempt experimental programs in it. Most of this experimentation takes place in secondary schools, especially in the social studies and history subject areas.

According to the survey, major strength is the good and efficient use made of teacher competency. Major weakness is difficulty in the scheduling of classes. Larger building facilities are also needed for team teaching. (158)

Pannwith

The word project has taken on a new connotation at Evanston Township High School. Like other projects conducted at the school previously, the present ones have been designed for the purpose of improving academic instruction. The added dimension to the meaning of project, however, has been to incorporate into each experiment, the aim of better utilizing teacher time and talent, providing more adequately for pupils' individual differences, and making wider use of audio-visual aids. Staff-utilization has become synonymous with project in Evanston.

Peterson

The Easton Team Teaching Program has two major objectives: (1) To make optimum use of teacher time by offering a flexible instructional program which provides opportunities for teams of teachers to present large-group lectures, small-group seminars, and tutorial seminars, and tutorial services to students when needed. (2) To provide a program of student grouping which allows the subject matter to be geared as closely as possible to individual student ability; one which allows the school to offer advanced courses on a college

level for its superior students, seminar types basis, and at the same time provided teachers with the opportunity to work singly and in small groups with those students requiring extra help and attention. (165)

Peterson

The Easton Team Teaching Program was designed by the superintendent of schools and the joint school committee, with the aid of the Temple University Educational Service Bureau, to: (1) Provide individual attention to students within a large comprehensive high school. (2) Make the most effective use of teacher time and talent through the use of large group instructional techniques. (166)

Polos

In the Claremont Plan, the topics which received a major amount of attention were: (1) the functioning of the teaching team; (2) the method of selection, status and compensation of the "lead teacher"; (3) the need for and scheduling of a planning period for the team; (4) the teacher-pupil ratio as it relates to the loads of other teachers and the traditions of a particular school; (5) the problem of scheduling students for regular courses and certain electives; (6) the nature and type of inservice education; (7) the implications of the "team" idea for administration; (8) the selection and structuring of the small-school groups

of students; (9) the sound approaches to the problems of good public relations; (10) the use and recruitment of "citizen aides"; and (11) the initial costs and the relative expense of the plan. (173)

Ramstad and Stone

The results of the California survey show clearly that there is considerable interest and activity in staff utilization. More than fifty per cent of the schools returning the survey reported programs under way, and many more indicated plans for launching an increased number of activities during the coming year. It is also clear that each school is introducing those aspects of staff utilization which seem most readily adaptable to the particular school.

It should be noted that team teaching and the use of teacher aides have not been adopted without extensive local planning. The comments accompanying the returns indicate that the finding of improved ways to redeploy staff and students for better educational opportunities is solidly rooted in co-operative experimentation involving staff, students, and community. (176)

Reasoner

This article tells of a recent study in California's Mt. Diablo Unified School District clearly demonstrating a positive relationship between the important dimension of teacher communication and the effectiveness of team teaching

as an organizational technique. The investigators in this study say that it is both practical and possible that: (1) An administrator can both anticipate and predict outcomes. (2) An administrator can identify the kinds of teachers who will be effective in a team teaching situation and help to provide an environment conducive to positive outcomes. (177)

Shalowitz

West Rockville Junior High School of Montgomery County, Maryland, introduced team teaching in 1961. The author feels that both the "differentness" and the intrinsic qualities it has makes it superior to other methods of teaching. (181)

Smith

Split-week courses were developed at Verdugo on an experimental basis in an attempt to make the program more flexible, to allow for more electives, and to see if some courses could be taught effectively if scheduled only two or three days a week. Teacher-experimenters had to build courses of study, sometimes from scratch, and considered their classrooms as laboratories. Units were tried, amended, rejected, expanded, blended according to student reaction and the results obtained. (187)

Stone

The O'Farrell Junior High along with four other secondary schools in San Diego, has participated for two years

in an experimental project under the N.A.S.S.P. Commission on Staff Utilization. Purposes of this project include extension of the influence of experienced teachers over a large number of students, recruitment of additional personnel to the teaching profession, more adequate induction of new teachers to the school system, and general improvement in the instructional program through making available to students the resources and skills of the several adults constituting the teaching team. (194)

Taylor

During the school year 1957-58 the faculty of the Claremont Graduate School, working with representative school superintendents, curriculum directors, principals, guidance workers, and teachers, developed a conceptual model for a teaching team which embodied within it the "school within a school" idea. Consequently, a definite plan for the development of teaching teams was proposed which included the forming of four to six teachers into a teaching team and assigning 125 to 175 students to them. Students were to remain with the teaching team for a two year period of time. (197)

Varner

For the past two years an experiment in team teaching has been conducted at St. Paul's Johnson High School. Motivated by the need to find new methods of handling increased

enrollments with existing facilities and staff, the St. Paul Public School administration requested and received the support of the Louis W. and Maud Hill Family Foundation in financing the team teaching program. (203)

Vins

A survey study of team teaching procedures in public secondary schools enrolling 150 or more students in Arizona, Colorado, and New Mexico has been completed. The major findings of this survey were: (1) At least one-fourth of all public secondary schools of 150 or more students in the study area are or have been engaged in some form of new teaching procedure which their principals recognize as "team teaching;" (2) Principals do not agree upon a single definition of team teaching; (3) There is no unanimous agreement about the relative significance of the various objectives sought by the schools in their use of team teaching; (4) The safest conclusion concerning practices in team teaching is that few, indeed, have found general acceptance; (5) In methodology and the use of aids to instruction there was little evidence of greater variety than one would find in a conventional instructional program; (6) in a small minority of the schools there is no attempt to produce groupings of students beyond that achieved by a comprehensive high school, and (6) only

few more than a third of the principals reported any systematic effort to compare student achievement in team teaching and conventional teaching on a pre-test, post-test basis. (204)

Ward

Three townships have been consolidated into a little village school located in Bright, Indiana.

Their co-ordinate teaching has worked well in a situation in which they were forced by existing conditions to do something. They feel it has proved to be a good way of broadening the pupil. It has created a teacher-pupil learning situation in which boys and girls are learning to the best of their ability, and teachers are teaching to the fullness of their capacity. (207)

White

In 1961, the author became a participant in the evaluation of a well planned and executed experimental team-teaching project which was completed by the Wausaw Senior High School biology staff in the spring of 1962.

The most important result to be reported is that team teaching compared favorably with nonteam-teaching approaches in the learning of the subject matter of biology. Students seemed to like and express enthusiasm for varied approaches and frequent exchanges of teachers responsible for learning. The enthusiasm and professional attitudes displayed by the biology teachers of Wausaw were witnessed by observers such as the author. (214)

Students

Conner

From a students point of evaluation, it was found that they unanimously found the lectures valuable; they preferred having a lecture interspersed with aids of some kind; they felt that they had received a broad interpretation of literature; they liked the change from the usual classroom situation; they found note-taking valuable; they approved the weekly meetings; they felt the quiz program as a finale was informative and challenging. (46)

Diesman

The author visited many high schools that were outstanding in their team approach: All recognized varying levels of ability and interest and were attempting together to meet the needs of students, some by ability grouping and others through program by choice. (63)

Gibboney

This study is concerned with whether elementary pupils selected by their teachers as having relatively high mental health status and relatively low mental health status differ with respect to the several components, categories, and total score of the Mental Health Analysis. The correlation of teacher ratings of mental health status to the respective parts and total score of the Mental Health Analysis was also studied.

(80)

Nagle

The advantages of team organization are: (1) There is created a small organization which assumes the responsibility for the growth and development of boys and girls assigned to the team. (2) The integration of subject material is facilitated when team teachers plan their work cooperatively. (3) Horizontal articulation occurs through team meetings. (4) The guidance aspect of the team organization is one of its strongest points. (5) A differentiated program and concern for individual differences is provided more easily through the cooperative effort of team teachers than through a departmentalized program. (6) The team is an instrument for in-service training. (7) Teachers and pupils working together develop a feeling of unity and belonging. (8) The team schedule provides for longer periods or "blocks of time" which afford opportunities for conducting activities not possible in short 45-minute periods. (9) Although no statistical proof is available it is the belief of educators using the team concept that a higher level of achievement is attained in all the academic subjects.

(147)

Teachers

Anon

High-school teachers are certified to teach in one subject area only. However, there is much overlapping of subject matter in the high-school curriculum. Although teachers in one area necessarily are familiar with the content of the other areas, especially when those areas relate to their subject, it would be unreasonable to expect them to be expert in those peripheral matters.

This set of circumstances--a curriculum with numerous areas of overlap and teachers, each one of whom is trained especially in one area only--suggests the application of the team teaching idea in the high school. (17)

Arnold

We must not jeopardize the success of well-planned and carefully conducted educational experiments, which are essential if we are to meet the educational challenges now facing the schools in vastly improving the efficiency of learning and teaching. Bandwagon imitators have discredited many promising innovations in the past. Team teaching (when its sound objectives are understood thoroughly and its procedures well planned) offers promising answers, but it is not something that can be done easily or without thorough preparation, planning, co-ordination, and dedicated co-operation. (23)

Bahner

This author shows that professionally trained teachers, given freedom to develop improved educational practices, rise to the occasion and modify traditional practices in line with their educational beliefs. (24)

Blake

It is probable that many of the difficulties present in cooperative teaching situations are similar to the problems encountered in any small group which exists within a larger organizational framework. Small group research may be applied effectively to a number of aspects of cooperative teaching. It has implications for the selection of personnel; for analyzing relationships among members of teaching teams; for identifying the leadership and membership roles that are most desirable; for resolving the problems of conflict between team and non-team teachers; and for increasing the effectiveness of the teaching team in the total instructional program.

A list of relevant studies is included in this article. Some of the findings included have been well tested and validated; others are less well substantiated. Although some of the studies mentioned have been performed with informal groups, all of them seem to have relevance for the various types of cooperative teaching organization. (31)

Bush

It is important to realize that while the initiative and enthusiasm in many of the new developments, particularly in team teaching, should come from teachers, they may flounder, without strong sympathetic administrative support and encouragement. The kinds of arrangement necessary in team teaching are much more complicated than those for traditional programs. They call for a higher degree of skill. Teachers will need all possible encouragement and help that administrative leadership can provide. It is easy to focus too much attention on teams and the teachers in them, both from the standpoint of those teachers, other faculty members and the public. (39)

Cunningham

The observer of a teaching team would not ignore the guides and principles governing effective teaching in the conventional organizational pattern. Certainly most of the principles appropriate to conventional teaching arrangements are appropriate to the team setting as well. There are, however, some differences that should be kept in mind in judging the team operation. Several of these considerations have been described in this article. (55)

Eakin

The Bethel Park elementary schools have had an independent reading program for approximately ten years, but it had been organized on a self-contained classroom basis. The

utilization of the team teaching idea in the reading program has met with enthusiastic approval from the faculty, and future standardized test results should show increased pupil benefits derived from the type of organization described by the author. Careful study will be made of the standardized test results before and after the introduction of the team teaching technique. (69)

Elliott

Coming in the near future is the establishment of team teaching as a method of training student teachers. This may lead to a wide-spread system of off-campus training.

The problems of effective off-campus teacher training are myriad; it is more than the old dilemma of town and gown. In many cases, the procedure has been to assign the student teachers to an individual teacher off-campus. Often, this assigning has been casual and with few strict specifications for the in-service teacher charged with the responsibility of initiating the student teacher. (70)

Fink

This article attempts to point out: (1) the characteristics of successful team teachers, (2) the identification of teachers with such characteristics, (3) the appropriate training procedures for team member, and (4) the aspects of training that should occur before and the aspects of training that should occur during the teacher's involvement in team activity. (72)

Heathers

The essence of research on school practices is systematic inquiry, based on evidence, that takes account primarily of three things: educational outcomes, feature of the instructional program, and causal relationships (established or hypothesized) between program features and educational outcomes. Keeping this in mind and stating many studies that have been done in the field of team teaching the author goes into detail on the following items: (1) Research findings on cooperative teaching; (2) pupil achievement; (3) pupil adjustment; (4) parents attitudes; (5) teachers attitudes; (6) costs of instruction; (7) catalyst for change, and (8) introducing a cooperative teaching program. (99)

Howe

This article examines the relationships among the curriculum, the staff, and the operating school. Carefully planned reassignment of staff duties in the context of various types of teaching teams to achieve gains toward definite ends may help us solve some of our curricular problems. Team teaching is frequently oversold and underthought about, but it still holds some hope of advancing education. But this will happen only where team organization is conceived as a means to more significant end. Properly used, team approaches to teaching and learning can help us to make most efficient use of the resources we have in

a continuing attack on problems of accelerating change. But we must keep before us the dangerous possibility that team activity will develop into activity for its own sake and nothing else. It is the job of school administration to see that this does not happen and that time and effort devoted to co-operative enterprises avoid trivial problems and center on the significant ones. (105)

McCurties

The main trouble with the one-room school of the old days was that it was also a one-teacher school. In this article, the authors describe the surprisingly gratifying outcome of what at first appeared to be thoroughly unpromising emergency solution to the problem of a missing classroom--the placing of two classes and two teachers in the same classroom. The result is not chaos but better and more flexible teaching. (132)

Marks

One can see that the general flow of development is from routine activities to those which call on the knowledge and skill of a well educated and resourceful person. The teacher-assistant's academic background and concurrent professional education course work combine to enable him to work intelligently with the master teacher. The dividends of such a program are two-fold. The students profit from the enhanced skill and reach of the master teacher. The

teacher-assistant profits by his actual participation and involvement in the classroom, which create a high degree of motivation and add meaning to his concurrent academic and professional course work. (135)

Mitchell

If the teacher is anxious to use his time, his energy, and his talent most efficiently to insure the highest quality of education for his students, he would do well to study carefully the implications of "team teaching." The term is being used to describe several patterns of organization: (1) the classroom teacher plus a television teacher; (2) the classroom teacher plus a tape recorder or a teaching machine or a trans-sonic educator; (3) the classroom teacher plus an aide, clerical or paraprofessional; (4) the classroom teacher plus a specialist in art, music, or physical education; (5) the classroom head teacher plus less experienced assistant teachers; (6) a group of equally well-qualified teachers with different special abilities. (144)

Nelson

There is some concern in regard to the preparation of teachers who are willing and able to assume the role of a team member. Administrators are experiencing the problem of desiring experimentation in team teaching in their schools but are confronted with reluctance on the part of teachers to partake in such a program. Teachers themselves have expressed an interest in initiating the team approach to the classroom situation

but feel more secure in using traditional pattern and hesitate from lack of experience with the team.

Two main answers to this problem suggest themselves: One involves in-service training for staff members already in the schools, and the other involves the teacher education program at the college level. Through such activities as institutes, qualified lectures, and source documents, in-service training can orient the teacher to the team. (150)

Nimnicht

This article is concerned with: (1) the concept of large-group instruction; (2) a well designed program; and (3) multiple class teaching.

It states that team teaching has improved teaching in our schools, but, team teaching needs to be improved. It may be that, in developing and improving large group instruction, we are doing an extremely good job of something we should not be doing in the first place. We need to reconcile team teaching procedure with what we know about learning. (154)

Parzych and parzych

This article is concerned with team teaching in typing. It is a experiment in which during a summer school session lasting six weeks, the team teachers were expected to cover a regular one-semester term class. The objectives of the course were to teach good basic techniques of typing.

The course content is discussed in detail, progressing week by week. Further the technique, basic understandings, tests, grading and behavior of the students was discussed in detail.

Peterson

After six years of team teaching the author has found that not only do new programs require careful structuring, but that continuous follow-up is essential to maintain acceptable quality. In inaugurating or assessing a program, however, it is necessary to have criteria against which the program can be evaluated, and specific controls which can be put into effect at any time they are deemed necessary.

By keeping a careful eye on administrative intent, teacher attitude, and student reaction, they were able to get off to a favorable start, and they were pleased to see annual improvement as the program gained impetus. (168)

Ploghoft

One of the most widely espoused of the "basic philosophies" supporting team teaching contains these principal tenents: (1) teachers differ greatly with references to knowledge and skill; (2) the hierarchy contained in the teaching plan provides a means for recognizing exceptional teachers; (3) young children in self-contained classrooms run the risk of overidentification with the mother or father substitute, the teacher; (4) pupils may suffer an educational

loss if they work one year with an inferior teacher; in the team situation, they work with several teachers; and (5) team teaching provides an effective orientation period for the new teacher. (172)

Smith

The advantages of team teaching given by the author are: (1) teachers can specialize; (2) teachers have more time; (3) grouping of students is flexible; (4) teachers learn from each other; (5) teachers have fewer clerical duties; and (6) students benefit from large classes. (189)

Willerding

This type of team teaching has professors of education teamed with a mathematics department lecturer. Reasons for this arrangement are stated by the author.

The following observations were made of this form of team teaching: (1) The students liked this method of presentation. (2) The two departments, education and mathematics, find greater co-operation and understanding has developed between them. (3) The number of students electing to take a mathematics course has substantially increased. (4) The attitude of the students toward mathematics has changed favorably. (5) These student's background in mathematics has improved considerably. (6) The grades of the students during the last three years have become appreciably higher in mathematics than they were prior to the team-teaching experiment. (216)

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