

Team Teaching

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Overview

Team Teaching is a common term to describe several variations of a technique to teach a course with more than one instructor. The method shifts the role of instruction from an individual to a team with a primary goal of improving the quality of teaching and learning. Team teaching is one step to constantly adjust the educational system to the changing needs of the students and abilities of the teachers. Although the term and methods have been in existence for decades, the literature on the subject is not as developed as one would expect. Several books and articles have addressed the subject and have discussed some advantages, disadvantages, and considerations when team teaching.

Education experiences unique challenges as well as opportunities. One logical starting point for change is with the faculty. For instance Meyers and Ernst (1995) state engineering educators cannot ignore the real world's shifting focus to interdisciplinary engineering, and they should adapt as well. Recently the National Academy of Sciences (2005) developed a publication "Educating the Engineer of 2020", which mentioned many ideas of co-teaching, just in time teaching, and multi-disciplinary teaching. Industry and various academic institutions feel that it is vital to integrate engineering because most systems existing presently are developed with integrated engineering teams. Similarly, the education process is a team effort with excellent communications between faculties. Davis (1997) contends that allowing the faculty team to synchronize their efforts brings their individual strengths and resources together for the course. Team teaching usually involves discipline specific instructors teaching their area of expertise to the students. However, this requires the faculty to understand and have some fluency in the other discipline. Nevertheless, team teaching a course requires a committed, motivated faculty who are creative and willing to change.

History of Practice

Shafer (2000) and Buckley (2000) point out that team teaching may seem new and untried. However, it has actually been a practice from the Socratic dialogue to public medieval debates. Nevertheless, it has evolved informally over time. Wraga (1997) notes that team teaching was a way to teach larger groups of students during the 1950's as the country faced a post war teacher shortage. Buckley (2000) outlines the motivation for team teaching. Early forms of team teaching, using new technologies such as computers and video, in secondary schools were tried decades ago. At the same time, university faculties were ready to try new methods as the demand to specialize was growing. Faculty realized the narrowness of their expertise. Additionally, there was a growing demand for "the big picture" and how all the material or facts

fit together. Berentsen (2006) states that not all teachers buy into team teaching for a variety of reasons: they have a system that works for them or they may not want to be team teachers.

Variations of Team Teaching

Buckley (2000) defines team teaching widely from a weak method of a teacher who is responsible for a class that just schedules lecturers with no instructor interaction to a stronger example of a group of instructors who attend each others' lectures and interact with the primary instructor and exchanging ideas. There is no template for team teaching that works for all courses. Instructors may be all one or several disciplines, and they may have different roles and responsibilities. Similarly, Wraga (1997) notes that effective team teaching at the college level usually involved two to five instructors attending each class session and interacting with each other. Davis (1997) acknowledges that team teaching really extends beyond the classroom. His emphasis is on the involvement of two or more instructors collaborating in significant ways. Team teaching will vary in the amount of collaboration that actually takes place in general, but also specifically with regard to planning, content integration, teaching, and evaluation. Goetz (2000) further differentiates team teaching into two major categories: two or more instructors teaching the same students at the same time in the same classroom, and instructors working together but not necessarily teaching the same group of students or at the same time. Goetz further divides both of these categories into five or six models with different roles and responsibilities for the teachers.

Benefits

Buckley (2000) suggests that in the ideal team taught course, faculty have overcome the challenge of "connecting learning" and students have the opportunity to see relationships that they don't get to see in other courses as different teachers bring in their expertise and perspective to the course. Davis (1997) emphasizes that teams usually possess a broad range of expertise, so there is a natural tendency to emphasize breadth, including a broad range of topics, because the faculty know about many things. This breadth is one of the advantages of teams. On the other hand, teams can also focus on a single theme, examining it in depth from several different disciplinary perspectives. Traditional teaching, as it has been conducted by individual professors in their own classrooms, has required that each professor do it all, without any help. The assumption is that every professor is good at everything and *needs* to be good at everything. Team-taught courses offer an opportunity to divide up the tasks and bring different talents into play for different functions. With team-teaching, some people can specialize in large group lectures, some can specialize in facilitating case discussions, some can work with students on their writing, and others can assist students in locating and retrieving information. Students have the advantage of dealing with experts in these various roles. Goetz (2000) cites the following advantages: it gives the participating team teacher a supportive environment, allows for development of new teaching approaches, aids in overcoming academic isolation, increases the likelihood of sounder solutions regarding the discipline of problematic students and augments the opportunity for intellectual growth. Wankat & Oreovicz (1993) state that new teachers can be better and more effective when guided. Mentoring works best when the procedure is formalized. Some universities use team teaching of courses to help new faculty in their professional growth.

Challenges

It is well documented in general literature on team and interdisciplinary teaching that the greatest challenge for the instructors is the time and energy required to work as a team (Hughes-Hallett, 1998 and Speaking of Teaching, 2007). The time required prior to the implementation of the team teaching partnership for professional development, the many meetings needed during the running of the program as well as the numerous informal discussions that are bound to arise can be taxing. Ironically, the time factor that is so necessary to team teaching can also be divisive as it may lead to conflict.

Davis (1997) describes that in planning the ideal course, the faculty team needs to make conscious and justifiable decisions about the scope of the course, the sequence of topics, and the appropriate balance of breadth and depth. Additionally, in traditional disciplinary courses, most of these decisions are fairly uncomplicated and are usually made by one person, the teacher. In team-taught courses, the organization can get complicated, and the course coordinator can begin to orchestrate more than teach. Not everyone is expected to do the same thing. Team taught courses must also have rules about who will do what. In the ideal team-taught course, a variety of personnel are used in creative ways, but all the people involved are clear about their roles and know how their efforts contribute to the whole.

Conclusions and Recommendations

The issues concerning team teaching are copious and complicated. No single model of team teaching will automatically result in success for a given teaching situation. Davis (1997) sums with “the ideal team-taught course has a defined structure and actually becomes a small organization. The form of the organization flows directly from its function.” The team partitions its work, defines various roles, and recruits and trains people to perform these roles. The organizational structure of the course is important. Throughout the literature on team teaching, certain important factors seem to be necessary for a successful team teaching program: (1) well matched and like-minded team members, (2) mutual dedication to team teaching and continuing communication, (3) an interest in relating the content or curriculum to real life, and (4) a strong desire to excite the students’ learning. Additionally, the program goals, as well as the roles of the teachers and administration should be well-defined.

Team teaching is simply an instructional model which may not be as popular as more traditional methods. This may be unfortunate, because it can be one of the most effective manners to deal with certain topics, particularly those involving multidisciplinary subjects.

References

Berentsen, L. (2006), “Team Teaching with Academic Core Curricula Teachers: Using Aviation Concepts,” *Journal of Industrial Teacher Education*, Vol. 43, No. 2.

Team teaching allows the students to reap the benefit of gaining empirical knowledge and skills not usually acquired within the confines of the traditional teacher-centered classroom. The article also presents a concise history and review of pertinent literature.

Buckley, F.J. (2000), *Team Teaching: What, Why, and How?* 2nd Edition, SAGE.

Explains how and why team teaching works and provides a comprehensive review of research material with practical applications. The book covers the nature, purpose, types, history, and evaluation of team teaching, as well as the resources needed and the roles of teachers, students, and administrators. The author compares this teaching approach with traditional methods seeking to strengthen its appeal to initiates.

Davis, James R. (1997) *Interdisciplinary Courses and Team Teaching*. Phoenix: American Council on Education / Oryx Press Series on Higher Education.

Davis goes in depth with team teaching. Part I of this book explores in depth the definition and rationale for interdisciplinary courses and the dynamics of team teaching. The focus is on the structure of interdisciplinary courses and the delivery of team teaching at the micro-context level. In Part II, courses are examined within the contexts of the programs where they most frequently reside. His baseline is that many professors persistently, without much self-reflection, go into classrooms (alone because it is their classroom), start talking, and write material on the chalkboard. He argues that the days are over when any conscientious professor can use this as the dominant mode of teaching, when there are really so many viable, well-elaborated alternatives. Team teaching, when effectively implemented, is one of these alternatives. It not only changes the arrangements for learning, it engages the team members in serious and continuous reflection on what they are doing. Ultimately, this reflection may be the most important contribution of team teaching, allowing and requiring instructors to articulate and justify before their colleagues the choice of activities that take place in their classrooms.

Goetz, Karin (2000), "Perspectives on Team Teaching." EGallery. Vol. 1, No. 4, August. <http://www.ucalgary.ca/~egallery/goetz.html>

This investigation identifies various types of team teaching, to present views of experienced team teachers, to analyze the issues involved with team teaching, and finally to discuss the advantages and disadvantages of team teaching based upon research literature, teacher experiences, and student perspectives.

Hughes-Hallett, D. (1998), "Interdisciplinary Activities in Mathematics and Science in the United States." ZDM. Vol 30, No. 4, Aug, p. 116-118.

This article argues the need for interdisciplinary teaching in mathematics and science at the university level. It summarizes the different types of activities currently taking place, from minimal coordination to complete integration; each having different advantages and disadvantages.

Hutchings, P. (2000), "Opening Lines: Approaches to the Scholarship of Teaching and Learning," Carnegie Publications, Menlo Park, CA.

This publication is a collection of reports by eight Carnegie Scholars who are working to develop a scholarship of teaching and learning that will advance the profession of teaching and improve

student learning. The final essay by Shulman calls for an increased awareness of faculty for institutional changes in the teaching culture.

Meyers, C. and Ernst, E. (1995) "NSF 95-65 Restructuring Engineering Education: A Focus on Change", NSF, Washington, D.C.

Faculty are role models for students and no role is more important than that of the faculty member as student, learner, and scholar. Faculty development opportunities can take many forms to include promoting significant multi-disciplinary interactions among the faculty through: reduced institutional barriers, team teaching, new university structures, and recognition of multi-disciplinary activities.

National Academy of Sciences (2005), "Educating the Engineer of 2020: Adapting Engineering Education to the New Century", National Academies Press, Washington, D.C.

The report comments on education beyond the baccalaureate, its primary focus is undergraduate education, not on academic engineering research. Research is a part of the engineering education infrastructure that must be preserved, but, at the same time, it must not lead to the neglect of the undergraduate engineering education experience. The report recommends that engineering educators should introduce interdisciplinary learning in the undergraduate curriculum. This report is intended to begin a dialog about reinventing engineering education, but it makes recommendations that are broader than just curricular changes.

Shafer, I. (2000), "Team Teaching: Education for the Future," Available online at:

<http://www.usao.edu/~facshaferi/teamteaching.htm>

The University of Science and Arts of Oklahoma study investigates a new set of guide lines to identify fresh and viable approaches to the problems of higher education and employ interdisciplinary methods of instruction.

Speaking of Teaching (2007), "Interdisciplinary Teaching and Learning: A Panel Discussion with Stanford Faculty," Vol. 16, No. 2, Spring Newsletter.

As a way to foster a discussion about interdisciplinary teaching and learning at Stanford, the Center for Teaching and Learning dedicated a panel discussion to this topic. Some discussion by panel members mentioned team teaching and generated dialogue..

Wankat and Oreovicz (1993), Teaching Engineering, McGraw-Hill, NY.

This book covers a lot of material, a variety of theories and methods, for new or experienced educators. Written mainly for areas of engineering, the material is useful to teachers in other technical disciplines.

Wraga, W.G. (1997), "Interdisciplinary Team Teaching: Sampling the Literature," Chapter 14 excerpt from Dickinson, T.S. and Erb, T.O., We Gain More than We Give. National Middle Schools Association.

A variety of general topics concerning team teaching from reviews of middle school to university level publications and articles. Topics include definitions, advantages, disadvantages, and the necessity of administrative and institutional support for successful team teaching.

Annotated Readings:

Anderson, R.S. and Speck, B.W. (1998), "Oh What a Difference a Team Makes: Why Team Teaching Makes a Difference," *Teaching and Teacher Education*, Vol. 14, Issue 7, Oct, p. 671-686.

[Teaching and Teacher Education Volume 14, Issue 7](#), Literature supports the value of team teaching in promoting student learning in higher education. Indeed, data from a study of our team teaching confirm that support. However, definitions of team teaching in the literature are based on a cacophony of voices arising from a variety of pedagogical contexts. Thus, disparate definitions of team teaching are not helpful in explaining why team teaching is so effective in promoting student learning. We provide a solution to this conflict between definitions and praise of effectiveness by noting that the definitions of team teaching are wrong because they appeal to logistics, not pedagogical theory, and by providing a theoretical basis that explains why team teaching can be effective given the bewildering array of circumstances under which it is practiced. We also raise issues about team teaching to propose a thorough study of team teaching.

Collins, B.C. et al. (2000), "Using Team Teaching To Deliver Coursework Via Distance Learning Technology," *Rural Goals 2000: Building Programs That Work*.

This report describes and evaluates various team teaching models that were implemented through the Training Rural Special Educators in Kentucky through Distance Learning (TREK-DL) project at the University of Kentucky. During the project, five courses were taught via distance education, each using a different team teaching approach. Average grades of participating students revealed few differences between on- and off-campus students. Additionally, there were few variations in student course evaluations when comparing team-taught distance learning courses with single-instructor-taught distance learning courses. However, participating faculty identified major advantages to team teaching: (1) team teaching allowed students from diverse geographic regions to share viewpoints and experiences; (2) multiple instructors brought a broader base of examples to the course; (3) exposure to multiple faculty provided opportunities to observe different points of view and a collaborative approach to teaching; (4) instructors became familiar with the work of more students than they would have had they taught their section alone; and (5) responsibilities of designing and teaching a class were easier when shared with another teacher. The use of team teaching appears to be a viable option for the effective and efficient delivery of distance education coursework.

Craig, C.J. (1998), "The Influence of Context on One Teacher's Interpretive Knowledge of Team Teaching," *Teaching and Teacher Education*, Vol. 14, Issue 4, May, p. 371-383.

[Teaching and Teacher Education Volume 14, Issue 4](#), This teacher knowledge study follows Benita Dalton as she moves from context to context as a pre-service teacher, as a substitute and long-term replacement teacher, and as a beginning teacher placed in two school contexts. Situating Benita in numerous settings illuminates the ways in which the particularities of placement influence what is available for teachers to come to know, what is held up as 'good teaching,' and who is authorized to produce knowledge. A case is built that gives value to

teachers' knowing based on the narrative authority of their personal practical knowledge as expressed in their knowledge communities.

George, M.A. and Davis-Wiley, P. (2000), "Team Teaching a Graduate Course. Case Study: A Clinical Research Course," *College Teaching*, Vol. 48, No. 2, Spring, p. 75-80.

Describes the authors' experience team teaching a graduate school clinical research course for students concentrating in secondary teaching. Examines the team planning process, actual team teaching, and team grading and evaluation. Most students responded positively to the approach. Each instructor also wrote a reflective piece on the experience.

Hall, G.E. and Rutherford, W.L. (1976), "Concerns of Teachers About Implementing Team Teaching," *Educational Leadership*, Vol. 34, No. 3, Dec, p. 227-233.

This article is an anecdotal review of a project researching the highly personal experiences and phenomena encountered by individual educators in schools and colleges as they "adopt" educational innovations.

Maorganti, D.J. and Buckalew, F.C. (1991), "The Benefits of Team Teaching," *Research Strategies*, Vol. 9, No. 4, Fall, p.195-97.

Discussion of team teaching focuses on team teaching a course on information search strategy at the Pennsylvania State Berks Campus Library. Course requirements are described, planning for the course is discussed, grading practices are reviewed, and course and instructor evaluations are described.

Murata, R. (2002), "What Does Team Teaching Mean? A Case Study of Interdisciplinary Teaming," *Journal of Educational Research*, Vol. 96, No. 2, Nov-Dec, p. 67-77.

Article uses data from interviews, observations, and evaluations of high school students to study four interdisciplinary teams and examine how teaming informed practice. Data affirm teaming as a best practice and suggest that to begin and sustain successful teaming, high schools should rethink standard practices. Data also confirm that for teaching to be effective, teacher choice, curriculum-driven design, and administrative support are necessary.

Paulsen, M. and Feldman, K. (1995), "Taking Teaching Seriously: Meeting the Challenge of Instructional Improvement," *ASHE-ERIC Higher Education Report*, Vol. 24-2.

This article focuses on the varieties of informative feedback from such sources as colleagues and consultants, chairs, students, that are facilitated by a supportive teaching culture and that drive the process of instructional improvement. One important set of activities, programs, and projects in this expansion is the renewed use of team teaching. Faculty collaboration and team teaching benefit instructors by developing their teaching abilities, intellectually stimulating them, engaging them as learners, and more closely connecting them to the institution.

Sandholtz, J.H. (2000), "Interdisciplinary Team Teaching as a Form of Professional Development," *Teacher Education Quarterly*, Summer.

Although a commonly used term, team teaching has a variety of operational definitions. For example, the term may refer to (1) a simple allocation of responsibilities between two teachers, (2) team planning but individual instruction, or (3) cooperative planning, instruction, and evaluation of learning experiences. These varying operational definitions of team teaching result

in varying amounts of collaboration among teachers. Clearly not all team teaching approaches offer equivalent opportunities to foster collaboration and enhance teachers' professional development. This article compares four approaches to team teaching implemented in a collaborative teacher education partnership at the University of California, Riverside. Over a five-year period, the partnership experimented with varying methods of team teaching at the high school level. However, the basic definition remained constant: joint planning, joint instruction, and joint evaluation. The initial aim in developing and implementing a team teaching component was to enhance the professional growth of student teachers. Therefore, the primary goals of the team teaching component were directly related to student teachers' professional development: (1) to increase collaboration; (2) to encourage experimentation with new teaching strategies; (3) to enable observation of colleagues in a natural setting; and (4) to foster collegial analysis of instruction. In this article, the author describes the partnership's decision making process, documents the four approaches to team teaching, discusses benefits and drawbacks, and identifies key areas to consider in designing team teaching components aimed at fostering professional development.

This series from Team Teaching may seem dated, but are still relevant for basic team teaching material.

- Borg, W.R. (1966), "Research on Team Teaching: Study of Human Interaction Variables in Successful and Unsuccessful Teacher Teams," Team Teaching, Vol. 1, No. 2, Oct., p.1-2.

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

- Friedli, R.L. (1967), "Curriculum Development in Teaching Team," Team Teaching, Vol. 1, No. 9, May, p. 3.

When building curriculums for children, members of development teams should go beyond team organizational problems and become aware of the individuality, the gregariousness, the differing patterns of physical and mental growth, and the varying experiences of children as well as the need for flexible grouping practices, learning reinforcement, and problem-centered curricular relevance.

- Wood, R.E. (1967), "Frustration, Turmoil and Discomfort in Team Teaching," Team Teaching, Vol. 1, No. 9, May, p. 1-2.

The most important prerequisite to group creativity in curriculum development is a climate of free inquiry, free expression, and objective criticism. An atmosphere such as this develops from the personal security, active participation, and creativity of each team member. A period of negative feelings caused by frustration and failure when the individual educational philosophies of team members are criticized and torn apart is necessary to the eventual unification of the team;

when the pieces are reassembled into a group philosophy, the team can create a new curriculum which will be a team product.

- Bench, V. (1967), "Concepts of Team Teaching," *Team Teaching*, Vol. 2, No.1, Sep, p. 2-3.

Three types of team teaching concepts, varying in teacher-to-teacher and teacher-to-student relationships, grading techniques, and facilities can be identified. For the first type, teachers plan a curriculum together and then teach this curriculum in their separate classrooms. For the second type, teachers plan together, share the teaching of major concepts to large groups, and work autonomously with their own students in smaller groups. For the third type, teachers plan the curriculum together, share large group lecture presentations, and work together with the students on an individual basis without reference to a class of their own.

- Boren, W.R. (1969), "Team Teaching: How To Incorporate It into Our Schools," *Team Teaching*, Vol. 3, No. 3, Apr, p. 3.

Team teaching, which provides added professionalism, increased teaching skill and specialization, and individualized learning, can be incorporated into schools by developing a firm philosophical rationale and commitment and by proceeding with sound planning and action. This involves considering the need for the understanding and support of the principal and teachers, open and honest criticism between teachers, expert help in planning a program, acceptance of educational change, and space for a variety of teaching activities.

Warwick, D. (1971), *Team Teaching*, Crane, Russak & Co., Inc. New York, NY.

This book presents the basis, history, and patterns of team teaching and ideas about implementing it. Team teaching is seen as reasserting the importance of people and their relationships or reactions to one another within the context of the school. The book then traces the historical development of team teaching in England and the United States; discusses various factors, staff deployment, slow learners, and the flexible school, as well as implementation theory for team teaching.

Welch, M., Brownell, K., and Sheridan, S. (1999), "What's the Score and Game Plan on Teaming in Schools?" *Remedial and Special Education*, Vol. 20, No. 1, p. 36-49.

A Review of the Literature on Team Teaching and School-Based Problem-Solving Teams
Articles on team teaching and school-based problem solving teams (SBPSTs) published in refereed journals from 1980 to 1997 were reviewed. The review was designed to (a) identify the types of published articles on team teaching and SBPSTs, (b) review articles on team teaching and SBPSTs published in refereed journals, (c) summarize the conclusions of published articles, (d) draw conclusions regarding the current research trends, and (e) present suggestions for continued research in teaming outcome research. This review begins with a characterization of team teaching and SBPSTs, followed by a description of the review process. Results indicate that most articles are anecdotal reports or technical guides for implementing both models. Results also suggest that research of both models lack experimental designs and generally report student-based outcomes. This review concludes with a discussion of the results and suggestions for continued research efforts.

Wenger, M.S. and Hornyak, M.J. (1999), "Team Teaching for Higher Level Learning: A Framework of Professional Collaboration," *Journal of Management Education*, Vol. 23, No. 3, p. 311-327.

Team teaching can facilitate student development skills to analyze robustly and think creatively. This article presents a brief discussion of team teaching, develops a framework to link team teaching to cognitively complex learning objectives, offers insights for team teaching protocols when applying this framework, and discusses faculty and student experiences. Those with experience in team teaching are offered ways to explore the boundaries of this pedagogical form. Those new to team teaching will find the framework useful in overcoming difficulties frequently of concern when first participating in a teaching team.

Wilson, V.A. and Martin, K.M. (1998), "Practicing What We Preach: Team Teaching at the College Level," paper presented at the Annual Meeting of the Association of Teacher Educators (Dallas, TX, February 13-17, 1998).

A look at three areas of integration: coordination of course content among three disciplines, team teaching of strategies common to all disciplines, and coordination of integrated course assignments. Faculty roles in the teamwork include co-planner, muse, cheerleader, critic, and teacher's aide. Teachers also integrate teaching of assessment, curriculum integration, multiple intelligences, national and state standards, classroom management techniques, and lesson planning. Prerequisites for this successful team teaching have included similar philosophies concerning students and teaching/learning processes, a strong psyche, flexibility, commitment to the process of team teaching, commitment to the process of continuous improvement, and trust. Benefits for team teachers have included mentoring, generation of creative ideas, pushing each other to higher standards, acting as sounding boards, supporting risk-taking, reflective teaching, and fun. Benefits for students have included effective modeling of collaborative teaching, experience with multiple perspectives, and improved teacher-student relationships. Problems have included the amount of time the project takes, an increase in vocal and written comparisons of teachers by students, and lack of team teaching role models for students during field experiences. Despite any limitations, the benefits outweigh the problems.

Winn, J.A. and Messenheimer-Young, T. (1995), "Team Teaching at the University Level: What We Have Learned," *Teacher Education and Special Education*, Vol. 18, No. 4, Fall, p. 223-29.

The team teaching experiences of teachers at the higher education level are recounted. The differences in the teaching of the courses are examined and context, content, and learner factors that impact team teaching are identified. Ways to facilitate and prepare teachers for team teaching at the university level are discussed.