Ten years ago online learning was nearly unheard of. "Among all U. S. higher education students in Fall 2002, 11% took at least one online course," (Sloan Foundation, 2003, p. 1). "A majority of academic leaders (57%) already believe that the learning outcomes for online education are equal to or superior to those of face-to-face instruction," (Sloan Foundation, p. 3). The growth in online educational opportunities is further documented by data from a comprehensive survey recently released by the Sloan Consortium reporting that 1) over 1.6 million students took at least one online course during Fall 2002, 2) over one-third of these students (578,000) took all of their courses online, 3) 81% of all institutions of higher education offer at least one fully- or blended-online course, 4) nearly three out of four academic leaders say learning online may be better within three years, and 5) two of every three academic leaders report that online learning is critical to their long-term strategy. Online learning is at historically high levels and is expected to grow at an annual rate of nearly 20% (Sloan Foundation). This recent and anticipated future growth presents seemingly unlimited opportunities to discover answers to key questions related to online education delivered by U. S. institutions of higher education.

The expansion of Web-based learning parallels the continuing expansion of the Internet and the World Wide Web. An estimated two million students are taking post-secondary fully-online courses (Galt Global Review, 2001). Millions of other students at all educational levels (primary, secondary, post-secondary and continuing education) participate in hybrid, mixed mode, and Web-enhanced face-to-face courses. This continuing growth in Web-based offerings mandates the need for increased course capacity at the post-secondary level.
Social and communication interactions, involving both student-student and instructor-student, are foundational to learning. Web-based learning requires adjustments on the part of students and instructors for successful interaction to occur. Many on-line courses provide students and faculty with the ability to interact with one another via electronic bulletin boards, discussion boards, e-mail and/or chat rooms.

The Team Project as a Learning Tool

This position paper purports the team project as a highly valuable instructional strategy. The benefits of the team project as a pedagogical tool for collaborative learning are documented in the literature (Bouton & Garth, 1983; Jalajas & Sutton, 1984; Johnson & Johnson, 1984; and Vella 1994). Many students, however, have had the experience of being a part of an ineffective team. What are the necessary components that make for an effective functioning team? Ancona, Kochan, Scully, Van Maanen, & Westney (1999) suggest four dimensions of effective team functioning: 1) performance, 2) member satisfaction, 3) team learning, and 4) outsider satisfaction. Performance is an assessment of how well team members produce output in terms of quality, quantity, timeliness, efficiency and innovation. Member satisfaction is gauged by how well team members create a positive experience through trust, commitment and meeting individual needs. The extent to which team members acquire new skills, perspectives and behaviors mandated by changing environmental circumstances determine team learning. Outsider satisfaction is the extent to which team members meet the needs of outside constituencies, such as financial planning clients (Ancona et al.).

Pedagogical Perspectives

From an instructor perspective, team projects are valuable because students can learn from each other (Newman, 2002). Teams can accomplish more as a group than can individuals working alone. Team projects allow students to create a shared goal for learning and form the foundation of a learning community. Good teaming can attend to differing learning styles and cultural approaches by enabling students to construct their own knowledge and apply their own culturally preferred ways of knowing and doing to the task. Teamwork prepares student for real-world employment and organizational experiences. Additionally, teaming means there are fewer projects to monitor and evaluate, allowing for increased course capacity (Newman).

From a student perspective, teamwork can be an exciting way to learn. On the counter side, team projects also have the potential for alienating team members and provide the potential for lazy/non-productive team members to sabotage projects. An effectively planned evaluation procedure can address the latter issue. Individual and group evaluation procedures, both formative and summative, are essential. The output of a team project must be assessed in terms of mastery of the intended knowledge and skills to be developed. Use of individual and group evaluation procedures can be valuable in determining whether all team members will receive the same grade, an aspect of the project that must be communicated as part of the initial guidelines.

Development and Evaluation of a Team Project

The following steps were used in the development of a 4-phase team project in a graduate level Web-based course in retirement planning and employee benefits:

1) Establishment of teams;
2) Development of an overview of role responsibilities;
3) Initiation of team activity through an assignment that required development of operating procedures and evaluation criteria;
4) Definition of the four phases of the team leaning experience, including:
   a) determination of dollars needed for retirement,
b) development of retirement portfolios at three consecutive stages of the life cycle,
c) determination of tax implications of the developed portfolios,
d) development of a distribution plan for retirement;
5) Design of formative and summative evaluation plans to provide feedback at the four stages of the project and at the conclusion of the project;
6) Faculty intervention in the teamwork process as deemed appropriate and essential.

Criteria for An Effective Team Project

Effective team projects are intricately tied into course objectives and assessment. They are not an “add-on,” but rather an integral part of the course. Such projects allow for varied learning styles, communication modes and cultural differences. Expectations need to be shared early in the course, and the instructor should provide sufficient structure and continuous feedback to help learners be successful. Team projects need to be relatively large so they can be divided into smaller parts to facilitate completion in phases. The size of the project needs to be such that it requires the efforts of several learners rather than individual efforts only, and each phase should build on the previous phase. A successful team project requires a work plan that outlines the project concept, team member responsibilities, a defined schedule, multiple means of communication and a defined process for evaluation.

Challenges

Team projects present a number of challenges from the instructor’s perspective. Instructors use different approaches to meet these challenges; the author used the strategies described here. The first challenge is building effective virtual teams. What is the recommended process? For this Web-based graduate level family financial planning course, students enrolled represented seven different institutions in seven states. Keeping in mind the guideline of balance with respect to institution and gender, the facilitator randomly assigned students to teams.

A second challenge is determining the instructor’s role in ensuring that required work is equitably distributed among all team members. For the team project described here, responsibilities were developed for the roles of team facilitator, financial planner, recorder, and evaluator. Each team worked within the Blackboard platform, with the activated functions of discussion board, email, file exchange, and chat rooms. Deadlines for the development of operating procedures and for each phase of the project were established with all assignments submitted to the assignment board. The person having the first birthday of the year served as team facilitator for the first phase of the project.

Another challenge is determining assessment procedures to assure that work is evaluated fairly and accurately. How important is the outcome in the assessment and is a group grade fair? For this project, the evaluator role shifted with each phase of the project, allowing each team member to serve as an evaluator once throughout the project. The evaluator submitted the group evaluation based on the criteria determined by the team prior to the beginning of the first phase of the project. At the conclusion of phase four, each student completed an individual self-evaluation and an evaluation for every other team member reflecting on all phases. (The form used for this summative evaluation is included in the appendix.) The use of individual and group evaluation procedures was an effective strategy in determining whether every member of the team should receive the same grade.

And finally, establishing parameters for the instructor to use to facilitate effective intervention strategies presents yet another challenge. The goal is to assure that intervention is used when necessary but not too frequently or with too much direction. An approach found to be helpful was asking clarifying questions of every team member to determine whether intervention was
needed, or if additional information and clarification would suffice. The amount of intervention needed varied by team.

Student Comments About Team Projects

When students were queried as to the one or two aspects of the course that promoted the most learning, a significant number of responses indicated the team project. Specific responses about the team projects included the following:

- “A good working group for the project…”
- “Reading is fine, but doing is better.”
- “The team project was very enriching as it is always a benefit to gain insights of others.”
- “The interaction in the team project had the most potential. I connected with one of my teammates and really developed good interaction with him.”
- “The team project was the meat of the course for me. That is where I learned the most.”

Conclusions

The team project can be a powerful tool for effective learning, increased course capacity, and a quality learning experience for all learners. Rapid growth in the number of students taking online courses, the predicted future growth of such courses, and the recognition by academic leaders of online learning as critical to a long-term pedagogical strategy depicts the current academic environment (Sloan Foundation, 2003). Such an environment creates an opportunity for faculty in post-secondary education to develop and test creative instructional strategies for effective learning and increased course capacity. The Web-based team project approach described here strengthens the argument supporting this instructional strategy as a useful tool for effective learning, increased course capacity, and a quality experience for learners.

References


# Appendix

**Summative Evaluation Form for Team Project**

Reflect on the four phases of your team project. Complete the first score card for yourself and the ones following for your other team members using a 1-4 ranking as follows:

4 = Excellent  
3 = Good  
2 = Fair  
1 = Room for Improvement

## I. Self-Evaluation

1. Team play _______ 4 _______ 3 _______ 2 _______ 1  
2. Contribution to the process _______ 4 _______ 3 _______ 2 _______ 1  
3. Willingness to seek needed information _______ 4 _______ 3 _______ 2 _______ 1  
4. Effective communicator _______ 4 _______ 3 _______ 2 _______ 1  
5. A positive force for the team _______ 4 _______ 3 _______ 2 _______ 1  
6. Satisfaction with outcome _______ 4 _______ 3 _______ 2 _______ 1  
7. Level of learning _______ 4 _______ 3 _______ 2 _______ 1

## II. Team Member Evaluation

1. Team play _______ 4 _______ 3 _______ 2 _______ 1  
2. Contribution to the process _______ 4 _______ 3 _______ 2 _______ 1  
3. Willingness to seek needed information _______ 4 _______ 3 _______ 2 _______ 1  
4. Effective communicator _______ 4 _______ 3 _______ 2 _______ 1  
5. A positive force for the team _______ 4 _______ 3 _______ 2 _______ 1

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