

# The Challenges of Team-Teaching Electronic Commerce

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## Abstract

Many business schools have developed courses in Electronic Commerce (EC). Because of the nature of the topic, EC courses may include content from various business disciplines. As a result, selected courses may benefit from the use of a collaborative, team-teaching approach. This paper discusses the challenges of developing an EC course that will be team-taught by faculty members from the Information Systems and Marketing areas.

**Keywords:** Team teaching, electronic commerce, course development, interdisciplinary education

Business schools across the nation are looking for ways to incorporate E-commerce into their curriculums. A select few schools, such as Creighton, Carnegie Mellon, and Texas Christian University (AACSB 2001), have developed EC majors and/or minors to provide students with a comprehensive business based view of the EC process. However, most schools either lack the staff and resources for such an extensive approach or cannot strategically justify the addition of an EC major. Nevertheless, most schools unable to develop majors in e-commerce have added courses to their curriculum addressing a wide variety of Internet and EC issues. One of the struggles that *these* schools have faced is the issue of overlapping content that develops when EC courses are developed and housed in either the Marketing or Information Systems departments and in most cases - both.

One possible solution to this dilemma is to develop a team-taught course that focuses on strategic EC issues that exist in both academic areas. The authors of this paper have been assigned to develop an EC course that combines elements of both information systems and marketing and their interactions in the creation of a corporate EC Strategy.

There are many challenges involved in the development and implementation of such a course. This paper provides an overview of these challenges, provides a

perspective on the possible developmental directions that could be chosen and relays experiences gained by the authors of this paper as they undertake the creation and implementation of the team-taught course.

## 1. TEAM TEACHING

Many universities have used team teaching to offer students an integrated approach to education or to offer different perspectives and ideas about a particular topic. Team teaching offers several possible benefits but also many challenges to both students and faculty members. Similar projects have identified many of these advantages and potential pitfalls. Based on student feedback, Bakken et al. (1998) report that students learned how different concepts related to one another and are able to gain different viewpoints and ideas from multiple instructors. By collaborating effectively, faculty may also set an example for students to follow in their own collaborative work. Feedback from another course (George and Davis-Wiley 2000) identifies additional benefits. Students commented on the additional attention they received (“twice the attention and opportunity to ask questions”), the added entertainment value (“you don’t have to listen to the same person for three hours”), and the increased likelihood of establishing a student-teacher relationship

(“with two teachers, I was more likely to have a rapport with one of them”).

However, these studies also identify potential problems students may face in team-taught courses. George and Davis-Wiley (2000) report that students felt “uneasy about grading” and “unsure about two sets of expectations”. Bakken et al (1998) describe similar issues regarding student complaints about tests being more difficult to study for, assignments being explained differently, projects outcomes being unclear, and tests not reflecting course content.

For faculty, reports of team-teaching experiences identify additional benefits and drawbacks. Smith et al. (2000) describe the advantages of intracoordinated team teaching, a process where teachers observe and evaluate one another’s lectures and facilitate classroom discussions. The authors state that this methodology honed their teaching skills and broadened their learning base and research issues. The collaborative teaching experience also resulted in professional growth for the faculty involved (Bakken et al. 1998; George and Davis-Wiley 2000). Whether these successes are representative of most team teaching efforts remains unanswered. Nonetheless, the authors identify several tips for other collaborative teachers.

George and Davis-Wiley (2000) describe many obstacles to collaboration including issues about teaching loads, ego of faculty, professional sharing, coordination, and communication. The authors identify twelve points to consider in undertaking a team teaching project. These points are summarized in Table 1.

**Table 1: Points to Consider in Team Teaching (George and Davis-Wiley, 2000)**

1. Agreeing on expectations and teaching plans
2. Taking extra time for planning and evaluation
3. Determining appropriateness of lecture interruptions
4. Making evaluation criteria clear to students
5. Assuring that all deadlines, assessment and other issues are consistent
6. Leaving egos at the door
7. Being prepared for the amount of work involved;
8. Being flexible and willing to learn from colleagues
9. Being humble and willing to accept fault
10. Working out differences in private rather than in the classroom
11. Accepting the partner as an equal
12. Enjoying the experience to learn and grow from it.

## 2. ELECTRONIC COMMERCE

While collaborative teaching presents many challenges regardless of the topic, EC presents additional challenges. Because EC is such a broad topic that is of

interest to all business students, as well as students from other academic disciplines, courses are often multidisciplinary in nature. Dhamija et al. (1999) describe their experiences in conducting a multidisciplinary EC course that involved the development of an online marketplace. While the authors describe a successful, rewarding course for both students and instructors, they also offer some lessons for future courses.

One challenge in teaching to an interdisciplinary audience is the differing skills that students possess upon entry to the class. The authors faced the dilemma of teaching at a level that introductory students could grasp while still challenging advanced students. The authors suggest using an introductory text along with more advanced readings for students seeking more detail about a topic. Regarding courses that use a market-based project, the authors struggled with student incentives for participation in the market simulation. The authors recommend including a profit-based measure as part of the students’ grades.

Nearly all EC courses that include computer-based projects face struggles related to computer resources. Dhamija et al. (1999) recommend advanced planning and budgeting for computer and system administrative resources. Some of the problems that the authors describe include: unexpected computer crashes; unclear procedures for interfacing with university technical staff; objections by students regarding access to university server’s common gateway interface (CGI) folder; limited Web access, particular for remote access; computer distractions during course presentations; lack of time to develop and participate in EC market; and closed nature of the market that excluded outsiders from participating.

The course being developed by the authors of this paper is based, in part, on the course described by Dhamija et al. (1999). The course is open to all students, and thus will serve an interdisciplinary audience. Potential students will most likely be marketing majors, Information Systems majors, a variety of other Business majors, and a select few Liberal Arts and Science majors. The course will be taught in a computer classroom and will involve a hands-on project. Thus, we are likely to face each of issues described above. The next section describes some additional questions and issues that we are confronted with as we develop this course.

## 3. COURSE CREATION ISSUES

The development of the course, from its very inception up to the point at which material for the course is selected and designed, has a number of important issues that must be addressed for the creation of a collaborative EC course. These issues are described below.

### **Faculty Selection and Development**

Faculty for a team-taught EC course must have the capabilities, the willingness, and the temperament for the course to be successful. Because of the multitude of issues describe previously, faculty who are not flexible or who lack the ability or desire to collaborate are unsuitable for the assignment. Even among qualified candidates, team teaching presents additional considerations. First, What teaching load is required of the faculty? Does it count as one course or 1/2 a course (in the case of two team members)? What impact does the faculty members' participation have on their respective departments? What training do faculty members need to develop the course? How will training, development, software and other expenses be funded? How will faculty be assessed (student evaluations, peer evaluation, etc.)?

### **Curriculum Issues**

For new courses, particular those that aimed at multiple disciplines, it may be challenging to integrate the course into the curriculum. Of course, many fundamental issues must be determined such as course credit hours, credit toward major or minor requirements, along with a course title and description. The course may be cross-listed or housed within one or more existing departments. Beyond these fundamentals, it is important that the course content be differentiated from existing courses but also be relevant to its target audience for practical as well as accreditation purposes. This may force existing courses to alter their content or even face elimination. For example, an existing EC course in Information Systems may need to change to adapt a more technical nature after the new course is implemented.

### **EC Course Development Issues**

Aside from the issues related to team teaching, there are a number of issues that all teachers of electronic commerce must face. As described previously, EC courses can face formidable technical issues. Courses may be offered in traditional classrooms or in wired classrooms with computers for each student. This decision to use a wired classroom may impact the course size and may also be subject to college-wide needs for the use of electronic classroom with existing courses.

Faculty must determine in advance the software and network requirements. As described by Dhamija et al. (1999), EC projects often require special considerations involving web servers and network access. One issue faced by all EC projects is the software used. Professional EC software may be difficult to learn, expensive or inappropriate for Non-IS majors. Conversely, web editors such as Netscape Composer or Microsoft FrontPage do not offer the ability to create fully functional EC services. While other Web resources are available, such as V-Store or Yahoo Stores, these services only offer templates that limit the ability of students to customize their content and are

difficult for both faculty and students to control. Such resources are also beyond the control of instructors. Given the nature of EC today, the possibility of changes to or elimination of these resources must also be considered.

If faculty are able to adopt a software package, the system must be evaluated by university computing services to assure that the software is compatible with existing systems and can be supported by university staff. Faculty must also decide whether to choose a particular solution for students or to allow students to choose their own software or web site. Although a standard solution may not be best for all student projects, instructors may have a difficult time supporting a wide variety of software.

Once the basis for the course has been decided and the facilities and prerequisites have been finalized, then the material for the course must be selected and agreed upon by the members of the teaching team. The balance of content taken from each discipline (Marketing/IS balance in this case) is an important decision that must be made not only as a determination of content, but also as a test of instructor teamwork. Faculty must also agree on the balance of theoretical and practical content within each topic.

The content of the course will stem in part from the textbook chosen. Like many business courses, book publishers have developed textbooks with comparable content that are offered in multiple disciplines such as Internet Marketing or Information Systems. Fortunately, in recent months, several textbooks have been developed that focus on EC from a broader multidisciplinary perspective. Beyond the choice of a textbook, many supplemental readings or EC cases can be selected. Thus, faculty members must agree on a textbook, a series of readings, or a combination of the two to present the course material.

Faculty must also determine how classes will be conducted. Possible choices include combinations of traditional lecture format, discussion and interactive content, guest speakers, and computer-based task-oriented periods. Most existing EC courses include some form of hands-on project. The focus of this project differs and may include the development of a business plan along with an EC site. Students may also participate in a simulated online marketplace. Team or group selection and their subsequent individual responsibilities may vary within such projects and need to be determined by the course designers. Students could be assigned roles within project teams based on their experience, interests, skills, or even major. Similarly, faculty could assign different projects based on student roles. For example, a group of students might be assigned as web masters, web developers, marketers, venture capitalists, etc. While these varied roles can lead to an interesting course, it may also make

student assessment more difficult, particularly when a course has more than one instructor.

#### **Course Administration**

The amount of work involved in the creative process is extensive, but can pale in comparison to the issues that arise during the actual implementation and continuing administration of the course. This is the part of the process where it is imperative that the teaching team is prepared and in accord about the goals and objective of the course. Issues that must be faced related to course administration include the division of course responsibilities, determination of teaching schedules, and procedures for student assessment. Faculty may have different styles of developing syllabi, grading assignments, testing students, and conducting course lectures. Technological resources such as shared network folders, email, and shared web sites can help the collaborative process but also add to the responsibilities that instructors must deal with in a team teaching environment. The instructors must agree on a way to communicate electronically and divide responsibilities for maintaining the course web site, grade files, course materials, and other teaching resources.

#### **4. CONCLUSION**

The prospect of designing an EC course is both an exciting and challenging venture. There is great reward in having the chance to provide a group of students with an in-depth multi-disciplinary view of the EC strategy process so that they might utilize that knowledge in their future endeavors. This reward should be more than enough motivation to help the team of instructors overcome the aforementioned difficulties that are inherent in the collaborative creation process.

In many ways, the creation of this EC course parallels the state of the E-Commerce industry. Both are areas that are fairly uncharted in terms of the optimal start-up procedure. Both areas have tremendous potential for success if done properly. In both cases, strategic planning can make the creation process more successful by determining a structure and identifying potential problem areas before they arise and cause major problems. Finally, in both cases, the marriage of good ideas to hard work and preparation is the key to ultimate success. This paper has been designed with the purpose of helping those who find themselves at the beginning of the EC course creation process. As the authors continue throughout the creation and eventually the implementation process, we will share our trials, tribulations, and success factors.

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