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## TEACHING E-BUSINESS WITH LIMITED RESOURCES

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### Abstract

This case study is an initial attempt to assist colleagues at resource-limited colleges to efficiently design and conduct new e-business courses. This detailed case study of the results is intended to assist others at similar schools in creating e-business offerings which result in similarly high levels of student satisfaction, cognitive learning and affective outcomes. E-business is a rapidly evolving and confused area. As a result, a major challenge to instructors is how to support students in learning how to learn rather than to master an established body of information. No one at the present time is, or really can be, an "expert" at e-business. Which means that, particularly at smaller schools, the real challenge is to determine how existing faculty with no formal background in the e-business area can leverage their pedagogical skills to successfully offer new courses in on topics such as electronic commerce (EC) and electronic marketing (EM). To facilitate that process, the following case analyzes in some detail the experience of designing and offering two new graduate business courses at a small (6,000+) state college in the United States. A few, very preliminary, conclusions and recommendations can be made but each should be carefully assessed within the context of other institutions and situations.

### The Challenge Of Teaching E-Business Courses

The two-year period in which this case was conceptualized and developed reflected the external, organizational, and professional challenge of teaching e-business courses.

**External Challenges.** In that time the Web went from future promise to present shock as business-to-consumer dot coms died. Business models were ruthlessly revised and discarded. Business-to-business once touted as the main area of e-business never really launched. Suddenly, the Internet became a place for established large businesses and small niche players to explore new opportunities within the larger context of their conventional business plans. And above all, as Business Week noted, it became a place for the exchange of information. That conclusion is also reflected in the design of these two courses.

**Organizational Challenges.** Along with these external factors, the course organizers also had to deal with some major institutional changes. Originally this project was designed to develop and assess complementary new e-commerce and e-marketing courses to be offered in sequential semesters. Unfortunately, changing curricular demands required that they both be given in the Spring of 2001. In addition, administrative changes meant that the graduate students were not informed quickly enough about

the new courses while at the same time they were aware of faculty proposals to convert the existing Master of Business Studies degree into a more conventional MBA. One result of this changing context was that the enrollment in these courses was less than half of the expected number of 15-20 per course. Thus the e-Marketing course had only seven students (plus one undergraduate who audited the course) and e-Commerce enrolled 11. These numbers severely limited the utility of the evaluation procedures in terms of their ability to guide the design of this project.

The courses were developed under a Distinguished Faculty Fellowship grant of \$10,000. That grant was awarded to support the creation of these courses. However, the courses themselves were designed and offered as part of normal course loads. No release time for the design process was involved.

**Professional Challenges.** The two instructors involved in this project were Assistant Professors of Business Studies with over five years of higher education teaching experience. Their teaching styles and areas of professional expertise differed substantially. One, SZ, is a Management professor who primarily teaches quantitative business methods and has a strong background in technology and business decision making. The other, WP, is a psychologist who was previously a marketing consultant and researcher. As a Marketing professor he mainly teaches consumer behavior and market research. Neither had any formal training in, or direct work experience with, e-business. However, they were experienced users of the Internet as an educational, instructional, and personal resource.

Both had previously taught in Stockton College's Master of Business Studies program. That program serves the needs of an extremely heterogeneous group of students representing both the small business community of largely rural southern New Jersey and the more sophisticated organizations of Atlantic City. These are a demanding group of older adult learners who, sometimes too ruthlessly, seek the skills they can immediately utilize in their own work. They also are quick to express their dissatisfactions both directly to an instructor and indirectly on the Student Evaluation of Teaching form filled out for all Stockton courses.

The following briefly summarizes the basic instructional model used to guide design decisions. That model also led to the selection of range of measurement procedures to assess student perceptions of the course and of the instructors plus cognitive learning and affective outcomes. The data on those measures is presented in some detail as an indication of the potential utility of the individual-focused and group-focused designs used for the first offering of the graduate E-Commerce and E-Marketing graduate courses.

Finally some preliminary recommendations based on the experience of offering these courses are presented.

### Basic Instructional Model

As a course design tool, both courses loosely reflect a basic instructional model of the types of cognitive and affective learning that students should exhibit in an e-business course (Kleindl, 2001).

In both courses, the sequence of topics and weekly lectures largely followed the main text chosen by the instructor. Beyond the lectures, two different approaches to instruction were employed within this general instructional model. The e-Commerce course focused on individuals learning separately while the e-Marketing effort stressed work in teams. In Business courses, instructors frequently have a preference for one or the other of these general approaches and it was decided to assess some of the strengths and weaknesses of each in this Project.

### Instructional Process Evaluation

The major summary measure of the instructional process was Stockton College's standardized Student Evaluation of Teaching Form (SET). This form provides end-of-semester information on aspects of the instructor's performance, specific course elements, and on the course as a whole. Within this project no periodic assessments of the instructional process were done during the semester. Stockton does not release data on courses across the college and therefore no direct comparisons can be made between these courses and others given at the same institution. However, the effectiveness scale used to rate course elements does imply a comparison. If students take the scale points at face value, any rating over "4" is "Average" or above, and course elements rated either "7" or "6" are considered by students to be "Very Effective".

**Evaluation Of Instructor.** The main focus in the SET is on the instructor. He or she is evaluated by students on five separate dimensions:

1. Competence in the subject matter of the course.
2. Sensitivity to student's feelings and problems.
3. Response to questions and problems in class.
4. Availability to students outside of class.
5. Instructor's overall performance.

In addition students also rate the "Course as a whole" in terms of summary value to them.

The same scale is used to evaluate up to five, course-specific aspects. For the two courses, those aspects were:

#### Electronic Commerce:

1. The lectures
2. The individual project
3. The texts (McLaren & McLaren (2000). E-Commerce, Turban, Lee, King, & Chung (2000). Electronic Commerce)
4. The hands-on small e-commerce projects

5. The Website Design Workshop

#### Electronic Marketing

1. Kleindl, Brad Alan (2001). Strategic Electronic Marketing: Managing E-Business. South-Western
2. Strauss, Judy and Frost, Raymond (2001). E Marketing (Second Edition). Prentice-Hall.
3. Team newsletter
4. Team presentation.
5. Extent course was up-to-date

Finally, on a separate E-Business Course Evaluation form, the students indicated:

Q10. The overall grade I would give this course is:

A+ A B+ B C+ C D F

This measure was included as a rough validation of the overall course rating on the SET.

#### Measurement Of Outcomes

The measurement of course outcomes is a complex area. In this instance the goal was to use the types of measures typically employed by instructors who are seeking the types of feedback from students that can lead to course modification. A mix of common and independent cognitive and affective measurement techniques were used to assess outcomes in the two courses. The tools selected reflected the basic educational model described above.

**Cognitive Outcomes.** In terms of cognitive learning, those outcomes include basic knowledge of terminology and concepts, the integration of that knowledge in the accomplishment of specific tasks, and the demonstration of critical thinking skills in different types of projects. The set of cognitive, affective and course evaluation procedures is summarized in Table 1. As that Table indicates, the two courses used somewhat different measures. The two designs do share a standardized course evaluation form and questionnaire on affective outcomes. However, knowledge integration and critical thinking were measured differently, in part because of differences in the topic areas in the two courses.

**Cognitive Evaluation.** The specific tools used to assess cognitive outcomes can be found in Appendix C. Those tools include:

**Basic Knowledge.** The students' basic knowledge of concepts and terminology was assessed through multiple choice pre- and post-tests. In the EM course this process involved:

1. Selecting 100 multiple-choice questions per course primarily based on the readings.
2. Choosing equal numbers of questions across major topic areas
3. Randomly assigning questions to the pre- and post-tests

It was hypothesized that there would be considerable variability in the knowledge levels that students brought to the course. This was tested in the pre-test. Interestingly, at the beginning of the semester, the students themselves

indicated that they felt familiar with the area, a perception not supported by this measure.

**Knowledge Integration.** The ability to integrate course content was measured somewhat differently in the two courses. Here e-Commerce utilized a Midterm and Final that went beyond basic concepts and terminology. The e-Marketing offering assessed this area through a weekly newsletter created by work teams to evaluate how well students integrated what they had learned. Each team published periodic newsletters which was to be based in part on an assigned subset of sources plus a larger set of potential sources. This was seen as an effective way of keeping both students and faculty constantly up-to-date in this fluid area of content. The Basic suggested topic areas were:

- Major Media - Information from sources like domestic or overseas newspapers.
- E-media Buzz – Newsletters and ezines only on the net.
- Websites For You? – Specific sites of particular interest to marketing managers.
- Damned Lies and Web Statistics – Survey and other numerical information.
- How To, Voodoo – Suggestions regarding site designs.

Over the semester, the three teams generated nine separate newsletters which were distributed electronically to the entire class. Each week after the one- one and one-half hour lecture, a Team would present their newsletter to the class and lead a discussion of each topic that they had covered. As part of the presentation, they were expected to access the Web sites that they were analyzing. Here the Instructor was particularly active in raising questions and in linking the material to what had been covered in earlier lectures. After the first set of three newsletters, the class was informed that the standards were going to be more severe for the next three. For the last three, they were informed that the grading would reflect the extent to which they had demonstrated an integration of Web content with the marketing-related concepts they had been taught over the semester.

The nine Newsletters were evaluated by the instructor. More importantly, the other students also assessed them each week in terms of perceived Overall Quality and Utility of the content for them personally using a Newsletter Submission Assessment form. Here the ten point scale was used with 0 = Low and 9 = High. They also were required to write specific comments on the aspects of the newsletter that they found most and least useful and suggested changes for the next edition. This process was intended as a feedback loop to maintain quality despite the changing, more stringent, requirements as the semester progressed.

**Critical Thinking.** Similarly, critical thinking was assessed by individual or group projects in the two courses. In e-Commerce each student analyzed a real e-business case using the concepts and knowledge he/she learned in the class.

The preferred e-business case was the company that employs the student. The project consists of the literature review, the history and background of the company, pre and post e-commerce analysis of the company, along with a set of general conclusions and recommendations. Each student was asked to make two appointments with the instructor to discuss his/her project. The first appointment was for the instructor's approval of the case topic the student has chosen. The other was to discuss the project when the student has the draft of the project done.

In e-Marketing critical thinking was assessed through a Team Project which combined a 30 – 40 minute presentation plus 10 page summary report. Teams were required to:

- Briefly summarize two major, directly competing Web sites.
- Compare and contrast the sites in terms of the strategic managerial and marketing concepts covered in the course.
- Analyze the marketing strategy behind the site.
- Indicate how each Team would revise each site and why.

#### **Affective Outcomes**

Affective outcomes are particularly relevant in e-business courses since a particularly desirable result in this rapidly developing area is the creation of self-motivated learners who will continue their education after the class. A useful taxonomy of the affective domain can be found in Krathwohl et. al (1956). Rough measures of different affective levels were included in the E-Business Course Evaluation Form. These measures are summarized below grouped according to the definitions provided by Huitt (1996). Students responded to these items using a Likert-type scale.

One of the most comprehensive guides to the many complexities of writing and measuring affective objectives can be found in the Guide for Air Force Instructors (USAF Academic Instructor School, 1994).

In addition to the E-Business Course Evaluation, the Responding dimension of the team-oriented aspect of Electronic Marketing was also measured through a Team Participation Rating form. Here the members of each work group rate each other in terms of the socioemotional Operation of Team and task-oriented Quality of Product dimensions.

The standardized Student Evaluation Of Teaching form employed by Stockton college also uses the above seven-point effectiveness scale to assess the general affective area of "Stimulation of interest in the subject matter."

This affective evaluation relies heavily on self-report measures. This strategy is inherently less satisfactory than behavioral measures which are collected over a longer period of time. However, that level of measurement was not possible in this case. Thus the measures employed should be treated as only being suggestive of the more advanced affective outcomes.

The first measurement simply collected summary words and phrases which were intended to assess overall positive and negative reactions to the courses. Open ended questions were also used to obtain additional information on business-related learning and on how the student will pursue additional learning in the future.

Finally, some bottom line questions were asked. These were:

- a. Whether the student would recommend this course to others like themselves who are seeking a graduate degree in business.
- b. The overall grade they would give this course.

The last question is a basic validity check to be compared with their summary rating of the course on the Student Evaluation of Teaching.

Such self report measures have obvious limitations. The ones used in this Project are at best rough measures of affective outcomes. However, these are the types of measures typically used by instructors seeking feedback from students about areas where the course was less or more effective at changing attitudes.

## COURSE OUTCOMES

Within the semester both cognitive and affective outcomes were measured. However, while a variety of data was available for both domains, the limited enrollment severely limits the generalizability of these results. In particular the small class size supported greater attention to individual within the e-Commerce offering and more participation by individuals in the e-marketing class discussions. However, it is important to note that smaller classes can have a negative effect on ratings since one student, acting as an outlier, can significantly impact on mean ratings. Therefore, for many of the ratings below, both means and medians are cited.

### Student Evaluation Of Teaching and Course

The results for the two courses on the Student Evaluation of Teaching and E-Business Course Evaluation items are presented in Table 2 (see appendix).

**Course As A Whole.** On average, both courses received an average and median overall grade of "A". On the SET, the mean and median ratings fell in the "outstanding" range. Since both forms were filled out anonymously, it is impossible to calculate a correlation between the measures. However, they are consistent in indicating that these students rated both courses as well above average assuming "average" is somewhere between a "C+" and a "B" or around a "4" on the SET.

No student in either class rated it as less than "Outstanding" (rating of "7" or "6"). All respondent gave the EM course of "7" or "8" as did all but three of those in EC. One EC student gave no overall grade and two others awarded a "B+" and a "B". Their responses to the open-ended

questions suggest that all three wanted more of a "hands-on" course which included an increased focus on internet projects and additional workbook exercises. As the students awarding the "B" and "B+" grades indicated: "Good, less theory more exercises" and "Good, but would be better w/ hands-on Internet". Across the class the potentially most important business-related learning included learning how to set up a Web site (3), how business operations work on the Net (3), and the role on intra- and extra-nets.

**Electronic Commerce.** When students were asked to describe the course in one or two words, the most common descriptors were for EC "informative (3), interesting (2), excellent (2), exciting, challenging" Perhaps the best comment was "Good course considering the fluid nature of the topic". On the SET these students were generally favorable about the overall format and appreciated the PowerPoint lectures, the balance of lecture/tests/assignments, the text (but not the workbook), and the way computers were used in the lab. Most found this to be a valuable learning experience.

**Electronic Marketing.** The most common descriptors for EM were "timely (3), exciting/fun (2), diverse (2), informative". As one student commented: "Technology offers endless possibilities!" Their business learning was mainly linked to how to avoid Web site design pitfalls (5), and the links between marketing and e-Marketing (3), using search engines (2), and e-business logistics and planning. Most indicated "yes" on the question about whether the course was a valuable learning experience. Their reasons included "fresh and up-to-date", "helped me think in a new way" and "Very valuable for a marketer".

**Evaluation of Instructors.** As Table 2 indicates, there were no obvious areas of instructor weakness in either class. The mean and median summary rating of both instructors was in the "Very Effective" range for all of the aspects assessed by the

**Evaluation Of Course Elements.** Table 3 (see appendix) indicates how they rated specific course elements. Additional data was available from the open ended questions on the two course evaluation forms.

**Electronic Commerce.** The lectures, personal project and Website Design Workshop all were rated around "6" which is in the "Very Valuable" range. The texts, however were only "valuable". The course aspects that they indicated were "distinctive" were "real life experience" and "The project" and "teaching the Website" plus this being an "interesting subject(2)" which included "Web design". Their major recommendations included more emphasis on how to search the Net, more hands-on and workbook activities, and, most commonly, additional opportunities for group discussions and student interaction through e-mails or Web Caucus.

**Electronic Marketing.** To these students, the most valuable course aspect was the extent the course was up to

date followed closely by the Newsletters. This is not surprising given that was a main function of this course aspect. Also "Very Valuable" was the team presentation. Both texts, on the other hand, were rated considerably lower.

They were generally positive about the course format with a particular liked the lecture & presentation approach, the open discussion, the handouts, and, most importantly, the Newsletters. One student even suggested "Maybe even add one more". The distinctive course aspects included "online applications" and "Newsletter helped tremendously" as did the "trend analyses". Another commented that they course taught them to rely on more than one source of information and also acted to "Promote skepticism and forces thorough research". The recommended changes included more visits to Web sites, an earlier emphasis in the newsletter on marketing concepts and a different book. One student indicated that he or she "Wish the course 4 hrs nightly – the time flew!!!" These students had few other specific recommendations for change and their general feeling during an end-of-semester discussion in class seemed to be "little is needed".

**Summary:** These results are both gratifying and a bit frustrating. As designed, both courses appeared to have effectively met the needs of the students quite well. So well, in fact, that they do not provide much information on how to improve the design nor on which course elements are generally superior.

Both of the professors who taught these courses are experienced college and graduate business instructors who were among the first to teach in Stockton's new Master of Business Studies program. It is interesting that the ratings both received for these courses are quite similar to those received for other graduate courses that they have taught in the MBS Program. A possible implication here is that these course designs did support the transfer of prior teaching expertise to this new content area. That is an important implication for other instructors interested in making the same transition. A second implication is that either of the two disparate approaches employed here to teach different aspects of e-business can be effective in an introductory graduate course in this area.

**Cognitive Outcomes:** As noted above three levels of cognitive outcomes were assessed – Basic Knowledge, Knowledge Integration, and Critical Thinking. While conceptually somewhat separate, in reality the cognitive goal is for students to exhibit, and link, all three.

Basic Knowledge. Multiple-choice tests were used to assess this area. In the EC course, there was an expected increase in the mean scores between the pre- and post tests but this did not occur for the EM offering. The EM results are unusual and appear to reflect a number of different factors. After the pre-test two of the seven enrolled students indicated that they were phobic about multiple choice tests

and never did well. They did very poorly on the pre- and post-examinations. The reliability was somewhat low (Kuder-Richardson Formula 20 reliability coefficients were .77 and .88). Most importantly, the students had no motivation to study for the post-test. It did not count for their grade and the entire class indicated verbally that they felt humiliated as graduate students to be taking an undergraduate examination. In addition, the questions were based on the texts and the students down rated both texts and indicated that they did not read either since the key material was being effectively covered in the lectures. Finally, they felt that the area was changing so rapidly that present definitions and many of the concepts were no longer really relevant.

**Knowledge Integration:** Midterm And Final. In the EC course, the Midterm and Final went beyond an emphasis on terminology to include. The results are noted above. Of particular importance was the size of the improvement over the semester.

**Electronic Marketing.** In this course the main cognitive measures were the pre and post multiple choice tests of concepts and terminology, the weekly team newsletters, and the final presentations.

**Team newsletters.** The single most important cognitive task in the EM course was the weekly newsletter prepared by each Team and distributed electronically before each class. Over the semester, the three teams generated three sets of three separate newsletters. The mean Personal Utility and Overall Quality scores for the three sets of newsletters are presented in Figure 2 (see appendix).

In the first round, the mean Overall Quality and Personal Utility peer ratings for the three teams were similar at 7.2 and 7.3 on a scale with a maximum value of "9". The mean of the third set of three newsletters was higher on both ratings and Overall Quality increased by close to .7 of a scale point and Personal Utility by .4. The increase in the mean peer ratings is a bit surprising given that the standards were increased for each round of newsletters.

**Critical Thinking.** The two courses assessed critical thinking in terms of performance on specific projects. The form of the project reflected the individual versus team oriented designs.

**Team project** All three EM Teams did "A" level work in their end-of-semester project and presentation. Each effectively compared two directly competing Web sites in terms of the key concepts discussed during the semester. Perhaps the best example of the potential of this technique was the team choosing to analyze ESPN.com and CBS Sportsline.com. They analyzed:

**Introduction**– The sites were being compared from two points of view – marketers and experienced sports consumers. In particular there

was to be an emphasis on the different strategies to maximize “stickiness”. The main topic areas were. **Statistics** – Specific July 2000 Media Matrix statistics were appropriately cited. The relationship of the sites to CBS and Walt Disney Internet Group was discussed and included cbsportline.com information.

**Customer Relationship Management** – Each site was analyzed in terms of a variety of CRM variables. This discussion included an evaluation of site design elements, access times and success at community building. The latter is discussed in more detail later in terms of “Seven principles of success for online communities”.

**Channel Conflict** – The focus here was not on conflict but rather on how the sites complemented, and utilized, other aspects of Disney and CBS.

**Promotions** – Different promotions were analyzed in detail and some deficiencies noted particularly for the CBS site.

**Cross Channel Marketing** – Links to specific sports events were noted.

**Branding** – ESPN in particular was analyzed because of the ability to create a “master brand in sports information is only a continuation of their already renowned television department”. This is linked to specific target demographics and the effective use of multimedia.

Finally, this team correctly noted that the relative strengths of the two websites involves the flow of information and specific example, the Dale Earnhardt crash at the Daytona 500, analyzed. They also briefly summarized the superiority of ESPN compared to CBS Sportsline in terms of the above variables. All in all this represents a fairly sophisticated analysis of the two sites and is particularly impressive given that one of the team members was an undergraduate and another was a women with relatively little interest in sports. None, at the beginning of the semester, was knowledgeable about the Net and only the female member had completed most of the coursework for her MBS. The other two teams did almost as well with, for example, the Amazon vs. Borders comparison including a detailed SWOT analysis, a web page analysis, multiple citations to recent articles. They effectively summarized why Amazon.com is the “Gold Standard” for B-to-C sites.

#### Final Grades

**Electronic Commerce.** The final grades included 6 “A”, 3 “B”, and 1 “C” grades. The main reason some students received the lower grade was due to the lower grade of their final project.

**Electronic Marketing.** All of the students received an “A” at the end of the semester because they had exceeded the stated requirements of the course. This would not have been true if the multiple-choice tests had counted toward their grades. Also, the one student flirting with a “B” because of

poor attendance and participation was graded higher because his team did the best job on the analysis of competing sports Web sites. The “carrying” of a weaker performer is a common problem with team-oriented courses.

#### Affective Outcomes

A variety of items assessed different possible affective outcomes (Table 5 in appendix). The most general item was the one on the SET that assessed student ratings of the extent of “Stimulation of your interest in the subject matter.” Both courses were rated as “Very Effective”. However this item, and on seven others, the EC affective ratings were lower than those obtained for the EM offering. However, the mean and median ratings of interest in taking other e-business courses at Stockton were identical for the two courses. Much of this disparity may reflect the individual versus team-oriented nature of the two course designs.

Theoretically, a team-oriented course, if successful, should have a greater impact on feelings since it involves considerably more interaction between students.

**Receiving.** Attendance at both courses was satisfactory given that these are working graduate students who occasionally have to go out of town or attend to business affairs during class time. Only one student in each course missed what appeared to be an inordinate amount of class time. The patterns on Q5 and Q2 indicate that EM was somewhat more successful than EC in achieving Receiving outcomes.. Those students rated the course somewhat higher in terms of supporting understanding of the general role of the Internet in business. This suggests that EC might have focused a bit more on general business applications and a bit less on technology. The higher ratings on Q5 relating to the attainment of personal learning goals probably reflects that EM was teaching a more circumscribed area of content that was directly related to the needs and interests of a relatively homogeneous group of students.

**Responding.** The performance of the EC students on their Personal Projects and the EM students on the Newsletters, and the high ratings of these course aspects suggest that the desired outcomes were attained for this affective area. In addition, in the EM course, the peer ratings indicated that only one student was seen as not adequately participating in the teamwork during the semester.

**Valuing.** Both courses received mean and median ratings over “6” on the items (Q8, Q9) recommending that the course be offered in the future and indicating that they would personally “recommend this course to others like myself who are seeking a graduate degree in business”.

**Organization.** Both courses were perceived as effective in this area as well. The students indicated that they felt that their learning about the Internet would be useful to them both in their business pursuits and in their personal purposes outside of business. In EM the only two students who only

checked "Agree" on the business related item may have been the two government bureaucrats in the class.

**Characterization by Value.** Most importantly, these students on average strongly disagreed with the statement "I am **not** interested in taking other e-business courses at Stockton". This result is a bit surprising given that these were the first two courses to be given in the general area of e-business. Some students may have been somewhat reluctant due to the news that the college's proposal to convert the MBS to an MBA had been turned down by the state. One implication was that they would have to take fewer future courses to graduate. Also, many of the students in both classes had completed, or were close to completing, their coursework requirements when they took this course.

In both classes, students typically "strongly agreed" or "agreed" that they expect to continue to learn about either EC or EM in the future. These results are consistent with their high ratings noted above on how effectively the courses stimulated their interest in the subject matter. In EM two of the students indicated only weak agreement with the statement about their expectation of continuing to learn about e-marketing while the others were more confident in this area. These results suggest that these students might have benefited from a personal project of some kind.

**Summary.** Both courses were successful across the five domains in obtaining desired affective outcomes for these students. This is a particularly important finding given in such a rapidly changing area motivating students to continue their own learning is probably more important than the content they actually mastered during the semester. In particular the e-Marketing ratings are surprisingly high and may also have been positively biased by the small number of students in the class. As noted above, affective learning is often easier within a small group that bonds together.

### Conclusions and Preliminary Recommendations

In many ways this Project was both exhilarating and frustrating. The frustration grew out of the rapidly changing nature of e-business and the unexpectedly low enrollments. However, despite these impediments, if the evaluation scales used are taken at face value, overall the students saw these courses as both "Very Effective" (ratings between 6 & 7) and of high quality ("A" grade). Unfortunately, in general the ratings are so high that they do not provide a great deal of information on how to improve these alternative approaches to course design. A few, very preliminary, conclusions and recommendations can be made but each should be carefully assessed within the context of other institutions and situations.

**Individual- Vs. Group-oriented Course Designs.** In this instance the instructional process and outcomes measures suggest that either approach can benefit students interested in the e-business area. This is good news since instructors

tend to be more comfortable with one over the other. Either approach, if effectively done, apparently can generate above average levels of student satisfaction, content learning, and motivation for future study of e-business.

**Individual Vs. Group Projects.** Again, both approaches facilitated desirable levels of satisfaction and learning. There are indications that individual and group projects may meet different needs. Individual projects support students in learning which is directly related to their future business pursuits. A group project may or may not do the same but can meet social/affiliative needs and the need for immediate feedback from peers as learning progresses.

**Newsletters.** The Newsletter seemed to be a particularly powerful way of supporting students in learning what was current and of interest to others like themselves. The feedback of immediate peer ratings and recommendations was intended to maintain perceived quality and utility as the grading standards were raised over the semester. They had that effect but also apparently increased performance in both domains, a happy outcome. From the instructor's standpoint, the newsletters also have the advantage of shifting some of the responsibilities for creating a "timely" course onto the students. This is an important consideration given that present faculty often have multiple responsibilities and have limited time to "keep up" with what is happening in the fluid e-business area.

**Multiple-Choice Tests.** Clearly, when a multiple-choice testing format contributes materially to a student's grade, it facilitates content learning. However, if students are not motivated in some direct way, the above results suggest that little content mastery will occur. This is particularly true if the instructor constantly emphasizes that little of what was "fact" a year ago is valid today or tomorrow. A separate problem found in both courses is that graduate students react negatively to this testing format and many feel somewhat insulted to be tested like undergraduates.

**Use Of Textbooks.** The weakest aspect of the course was clearly the texts. The instructors felt they were the best available but even the best were not really satisfactory to these students. This raises the happy possibility (for students, not publishers) these e-business courses can be effectively taught without a textbook. Instead some compendium of recent articles supplemented by weekly handouts and students seeking information on the Web may be sufficient, at least until the entire area stabilizes.

**Transfer Of Teaching Skills.** Perhaps the most important finding of this Project is that these designs support the effective transfer of present teaching skills to this new area of business. Neither of the instructors was an expert in the area (if such exists) or had previously taught any e-business courses at either the graduate or undergraduate level. Yet both were able to facilitate high levels of satisfaction,



cognitive learning and affective outcomes in a demanding group of adult learners.

**Bottom Line.** A major goal of this project was to determine if two courses could be successfully offered in a new content area despite major resource limitations. These results suggest that existing faculty with decent teaching skills can effectively utilize either of these designs, or probably some combination, to teach e-business at the graduate level. It seems probable that they also can be relatively easily modified to meet the needs of undergraduates as well.

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**Table 2**  
**Student Evaluation Of Instructor and Course**  
**(Means And Medians For Each Course)**

Rating Of Instructor (Scale is 1 to 7)	E-Commerce		E- Marketing	
	Mean	Md	Mean	Md
1b. Instructor' s competence in the subject matter of the course	6.4	6	6.7	7
1c. Instructor' s sensitivity to student' s feelings and problems	6.4	7	6.5	7
1d. Response to questions and problems in class	6.3	6	6.5	6
1e. Availability to students outside of class	6.3	6	6.2	6
2. Instructor' s overall performance	6.4	6	6.7	7
4. Course as a whole.	6.3	6	6.7	7
10. The overall grade I would give this course is (8= A+, 7 = A, 6 = B+, 5 = B)	6.9	7	7.4	7

**Table 3**  
**Rating Of Course Elements**

Electronic Commerce	Mean	Md	Electronic Marketing	Mean	Md
The lectures	6.0	6	The Kleindl text	4.5	4
The personal project	6.1	6	The Strauss & Frost, text	4.6	4
The texts	5.2	5	Team newsletter	6.7	7
The Website Design Workshop	6.0	6	Team presentation.	6.3	6
			Extent course was up-to-date	7.0	7

**Table 5**  
**Ratings of Affective Outcomes Items**

Course Evaluation Item (Scale is 1 to 7)	E-Com merce		E- Mar keting	
	Mean	Md	Mean	Md
2. This course has given me a clearer understanding of the general role of the Internet in business.	5.7	6	6.6	7
3. I am <b>not</b> interested in taking other e-business courses at Stockton.	2.1	2	2.1	2
4. I expect to continue to learn about this area in the future.	5.6	6	5.9	6
5. In general, I achieved my personal learning goals for this course.	5.0	5.5	6.3	6.5

6. As a result of this course I can now more effectively use the Internet for personal purposes outside of business	5.4	6	6.0	6.5
7. What I have learned in this class will be useful to me in my own business pursuits.	5.4	6	5.6	5.5
8. I would recommend this course to others like myself who are seeking a graduate degree in business.	6.0	6.5	6.8	7
9. This course should be offered again in the future. Do not change:	6.0	6.5	6.9	7
SET – Stimulation of interest in subject matter	6.44	6	6.67	7

Fig. 2

