INTEGRATING MANAGEMENT CURRICULUM: LINKING COURSES WITH FRONTPAGE

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Abstract

This paper discusses a small Western undergraduate school's attempt to continue the integration of courses within its management major. Specifically one vehicle, Microsoft FrontPage, is used to tie together and build the skills/knowledge learned within Management Information Systems (MIS), Marketing, Strategy, and Human Resources Management courses. Using Microsoft FrontPage allows for continued MIS skill development while improving communication within upper-division courses and outside audiences. Teacher/student reactions and implications for additional courses are identified and explained.

INTRODUCTION

While investigating ways to improve students' ability to communicate ideas and improve grading workload, a small Western undergraduate institution's Introduction to Marketing course implemented a novel approach to accomplish both. What was discovered not only communicated the required course content within a final presentation but also served to assist the continued department curriculum integration of our management major. In addition, this approach was successfully continued, adapted, and used throughout other upper division major's courses. This paper's purpose is to offer this interesting approach and other course integration ideas that may assist in better curriculum design development.

THOUGHTS ON CURRICULUM INTEGRATION

A greater level of cross-functional integration is needed in business school programs to match businesses' dynamic and multifunctional problems (Schlesinger, 1996). Often in management education management is not viewed as a process or series of complex integrated decisions but rather as distinct, functionally organized steps (Porter &

McKibben, 1988). With this deficiency cross-functional integration must be emphasized as modern business does not present problems and issues in nice, neatly packaged functional boxes such as marketing, finance, accounting, MIS or strategy (Porter & McKibben, 1988). As such courses, majors, and curriculums have been structured in ways that allow students to graduate having difficulty making necessary connections between disciplines. The journey for business school programs to shift toward crossfunctional integration is a difficult one. Programs are already organized and staffed into functional disciplines being driven by school or accreditation body functional requirements. Faculty desires and interests also steer the schools program's functional nature. Thus to begin course/curriculum integration in a school or department business program requires effort, work and faculty members willing to look "cross-discipline" opportunities to link courses together.

Curriculum integration has been described occurring on four levels. The first level is where students take a set of courses directed toward a peculiar major from different Despite being easy to accomplish, departments. inexpensive and not administratively demanding, this level may be the least effective in obtaining interdisciplinary Students can be given an institutional opportunity to meet and share insights from disciplinary courses as in a capstone course but achieving integration is largely left up to the students at this second level. At level three, faculty join with students implying courses are being created on interdisciplinary topics often requiring multiple teachers from different disciplines. Finally the highest level of curriculum integration is integrating material from various fields into a new, stand alone, intellectually understandable entity (Armstrong, 1980). integration in education does not develop as a linear Most integrated curriculums/interdisciplinary programs will use disciplinary course combinations, multidisciplinary formats, and interdisciplinary approaches (Klein & Newell, 1996).

Business programs have facilitated integration using several means from revising functional courses to include integrative material, integrative capstone seminars and projects, course learning or academic career portfolios, to field or work experience programs (Klein & Newell, 1996; Integrative methods necessitate Schlesinger, 1996). achieving a balance among breadth (ensuring a wide base of knowledge), depth (ensuring quality of the needed knowledge) and synthesis (ensuring integration of knowledge) of disciplinary course material (Association of Colleges, 1990). As such, care must be taken in trying to cover too much content (breadth portion) when integrating courses. A narrower topic or "piece" of a discipline may leave more time to apply and examine diverse perspectives and/or skills when attempting to integrate one or more disciplines. Choosing an appropriate blend for integrated study requires the balancing of faculty expertise and student interest (Klein & Newell, 1996).

For integrative courses to hold student interest thought needs to be given to the educational experience and essential qualities to promote its desired benefits. Six important qualities of educational experience are suggested when constructing interesting integrative courses and curriculums for students (Dressel & Marcus, 1982). The first quality is relevancy having real world application and relating to overall course goals. Secondly, the experience must hold the interest of students and have elements that arouse intrinsic motivation. The third quality of the experience must allow and encourage originality and creativity, which is supported by the fourth quality of requiring thought and the exercise of reasoning. Collaboration and cooperation with others is the fifth through defining the problem, collecting information, considering possible solutions, and developing an acceptable one with colleagues and peers greatly enhances the student experience. Finally, balance and unity of interrelationships between earlier and present experiences must be planned/executed to meet integrated course goals and objectives. The goal is each course provides an interesting and productive experience in learning, and in increased insight into the meaning and implications of life outside of the classroom (Dressel & Marcus, 1982).

When attempting to balance faculty expertise, educational goals, and student interest, integration of department or institutional curriculum can occur on many levels. Our recent experiences offer examples on two different levels. First, a course's search for a new means of communicating ideas leads to integration of courses within a department. Secondly, because of the student and faculty reactions, this approach was successfully applied to two additional upper division courses.

IMPROVING INTEGRATION WITH NEW MEANS OF COMMUNICATION

When developing the Introduction to Marketing course, alternative ways for students to express themselves and the marketing concepts they learned were examined. A critical concept changing the competitive landscape is the proliferation of e-commerce as it re-writes many of the tenets of marketing and business. Forrester Research projects e-commerce will exceed \$108 billion by 2003 (Satran, 1999). Furthermore, Jupiter Communications projects 55% of the US population will be on-line by 2003 (Wall Street Journal, 1999). Thus, communication via the Internet will be a requisite, critical skill in the future. Our students practice a great deal in written and oral communication as this a central institution educational outcome. However, the web site as a tool and medium was still new to them as students and us as faculty.

In the fall of the junior year, each student begins the management major with an Introduction to Decision-Making (MGT301) course. This course is described as an introduction to information and its implication/application to adaptive managerial decision-making via commercially popular software tools. A key skill introduced by MGT301 is the ability to develop web pages (vice web sites) by introducing web site fundamentals forcing students to learn coding Hypertext Markup Language (HTML). HTML is the programming language behind each and every web page (Shafran, 1997) promoting creativity and critical thinking in the average business student. In spring students have the option of taking both our MIS and Introduction to Marketing class (75% took both). The MIS class quickly moves away from coding HTML to the use of Microsoft's FrontPage. FrontPage is an "excellent, easy-to-use program that simplifies what used to be a complex job" (Shafran, 1997, pg. 10). In fact, "FrontPage isn't just one program, but rather a suite of related programs that all work together and make Web publishing as easy as possible" (Shafran, 1997, pg. 10). A marketing plan project anchors the marketing course: develop a new product/service and its marketing strategy. Recognizing the students' foundational knowledge in web site construction, an opportunity was seen to use this as a means to enhance their communication and delivery skills. For example, rather than requiring a 25 page paper or PowerPoint presentation to communicate their projects, students delivered their final "Marketing Plan" using the web site/FrontPage vehicle bridging and integrating topics from several courses within the management major and provide a superior product.

MARKETING & OTHER COURSE APPLICATIONS

Marketing. The final group project was to develop a marketing plan for an organization at the school, locally, or for a new product they want to develop. The vast majority

chose to develop a new product plan. The assignment consisted of addressing required marketing planning elements such as external environment analysis, customer analysis, competitor analysis, marketing information requirements, the four P's, and plan implementation. The students were instructed to use the web site/Front Page to communicate their marketing plan. The assignment culminates with the group's presenting their plan orally and "virtually" to their classmates and faculty members wearing a "venture capitalist cloak." The groups were provided an intra-web address for site storage for viewing/grading of the final deliverable. Student businesses included: a NASBAR (a sports bar leveraging the NASCAR craze), a resort golf course (using "trademark" holes from around the world); a light saber (capitalizing on the Star Wars/Phantom Menace rage); a computer services company hardware/software consulting services); and a job search service (matching college students and potential In addition tests of students' learned FrontPage capabilities are easily included in a final project as this. The instructor can check the site's user friendliness acting as a "customer", check its construction and links by using random questions to move through presentation elements, or have promotions such as television/magazine ads be demonstrated.

Strategic Management. Since that time, Microsoft FrontPage applications have been introduced to a seniorlevel capstone Strategic Management and junior-level Human Resource Management (HRM) courses. Continuing the FrontPage medium as a mainstay for project presentations, the strategic management course helps students to reinforce or re-learn skills developed in the junior year. Strategy course students are tasked to tie together various elements of the management curriculum into a small business plan. Following traditional business planning models, students generate their business concept, provide a business description, strategic analysis, marketing plan, human resource plan, and financial plan as their final project is delivered via a web site/FrontPage. The group's business plan presentation was made to interested "venture capitalists." The internet and FrontPage allow the students to develop small business plans for local establishments as well as locations anywhere in the United States. For example, after spending a summer in Washington D.C., a team of students put together a business plan for a physical weight training center there. As expected, the plan included locating available facility space, area demographic characteristics, and cost estimates for Washington D.C. Using links to real estate companies, the weight training industry, and government web sites, students constructed a realistic small business proposal including full start-up costs and the facility's future street address. Being our capstone course, it must be an example of what we have taught and developed (Davis & Parco, 1999). If students are asked to think "integratively" in a capstone course, they should be able to communicate using integrative means as well. By using web sites as vehicles to communicate

course projects/activities tasks their writing skills, the web site construction challenges their creative tools, and the presentation demonstrates their verbal skills.

Human Resources Management (HRM). As a major core requirement, the HRM course also capitalized on students' basic interest in entrepreneurship with student teams selecting a business venture of approximately 250 employees in size. This size mandate was necessary to create certain situational contexts from a HRM perspective. The remainder of the semester was devoted to dealing with HRM topics within the context of "their" business. Primary resources were the textbook and actual business internet sites they were trying to emulate. Approximately every other week, the "businesses" would be required to submit a new HRM plan section. Based on a specific HRM topic, this section addressed unique business/industry concerns including: legal, recruiting, selection, retention, training, compensation, and evaluation. The course requirement was present a complete HRM plan to employees and potential employees using of a FrontPage website. Websites were published to a common drive so that students could view other team efforts proving to be a motivational factor as students became competitive wanting to construct a good "product" for all to see. The semester culminated in presenting each team's business HRM plan using their website. Random topics were chosen to present with the primary resource being previously constructed FrontPage topic materials. Similar to other courses, the HRM websites were graded on comprehensiveness, ease of navigation, and design creativity. A final benefit seen is the integration within an individual course of all covered topics building into a logical, and meaningful "whole."

REACTIONS AND IMPLICATIONS

Management Major Student Feedback. Student reactions were mixed on the marketing FrontPage assignment. Many called for more "web-based projects" while some called no more. Students and faculty at our institution can be particularly resistant to new ideas. The students are accustomed to writing and class presentations but the FrontPage exercise was novel making them feel initially uncomfortable despite it being just another skill AND medium to convey information to various parties (e.g. investors, instructors, or customers). The project energized some groups as they learned more about the tool and the number of "buttons" they could add to improve their Interesting group social behavior was observed, as a team "web master" developed tying pieces together into a coherent package. Unfortunately, the web master spent an inordinate amount of time on the project while many of the others just focused on "their" pieces rather than the whole. This forced several groups to learn to manage their activities so people contributed equal Instructors were provided insight into these dynamics through a team evaluation worksheet. Additional FrontPage student feedback was collected at the end of the

next semester. Ninety-two students (75 male/17 female) voluntarily took a five point Likert scale survey providing views on FrontPage and its impact within the management major's curriculum. Each of the respondents had taken at least two management courses with FrontPage instruction or application. Descriptive results are in Table 1. Overall the respondents could see integration of management courses developing as FrontPage projects were linked with upper division courses. Results also suggest FrontPage projects help improve confidence in student computing skills. The lower response toward wanting to do more

FrontPage projects may be from an overload of courses using this medium during the same time period. Courses across department curriculum must share but balance course elements to avoid "mirroring" student experiences because of potential diminishing returns. Finally one interesting finding is that though female students have lower perceptions of their abilities to use FrontPage, they strongly desire to learn more advanced computer skills. The continued use of FrontPage can awaken awareness in students to the unlimited applications and potential of improving website skills and tools.

Table 1
Descriptive Survey Results

Question:	Total Sample (92)	Male (75)	Female (17)
My ability to use FrontPage (FP) is good.	69.6%	76%	41%
I see how our courses are integrated using technologies like FP.	85.9%	82.6%	100%
FP projects have made me more confident in my computer skills.	78.3%	81.3%	65%
FP can be a medium for projects in any course.	77.2%	80.0%	65%
Seeing how curriculum & interacts is important to me.	88%	88%	88%
I am looking forward to doing more FP projects.	30%	26.7%	47%
With each FP project I learn something new.	80.4%	78.6%	88%
I desire to learn more advanced web page skills and tools.	66.3%	47%	82%

Note: Percentages are based on the number of strongly agree (5) and agree (4) responses added together.

Instructor Feedback. Instructors found one advantage in each FrontPage application, the ease of grading. No pile of papers because the students sent their files to your "desk" for the final review. In addition the FrontPage medium provides something fresh adding diversity for instructors. When students deliver projects in traditional mediums (oral or written), there are ways to distinguish between the good and better ones. However, as the grading nears the end, papers seem to blend together or the presentations start sounding alike. This was not the case with the web sites. The power of FrontPage is its flexibility with students determined to test its limits. A tremendous amount of variety of content and style was seen as each group sought to add their personality to the project. There was a unique array of colors, video clips, music; links to other sites, product samples, and business plan elements in each project. Even after seeing the class presentation, instructors looked forward to opening each web site. When was the last time this could be said looking at the next pile of papers with endless attachments? Thus, a final grade does not have to be determined at the class presentation. The instructor can concentrate on presentation and delivery skills and later go back through the "technical" details for accuracy. A constructed score sheet of key items required in the final project makes this file review quick and painless.

The biggest downside is making sure the technology can host the web sites. Web sites are very expensive in terms of memory so students may not fit them on a disk – zipped or otherwise. To solve this problem, students ended up saving the web sites to a shared network drive to which everyone had access. The ultimate outcome takes some effort to achieve. From the student's perspective, the reliability/access to the campus network was an issue. If the network was down, students cannot work on their web sites. Because of the semester's end, more students taxed network resources causing it "work" slower. As more and more students logged on, the system had an increasingly difficult time keep up until sometimes it finally failed.

FINAL THOUGHTS

Holding student interest is an essential part of any educational experience. As seen here, using FrontPage assists filling key "experience" qualities when constructing

interesting integrative courses for department/school curriculums (Dressel & Marcus, 1982). Relevancy is addressed by highlighting the interrelationships between courses and institutional educational outcomes. These experiences hold student interest and motivate them by encouraging originality, creativity, thought, critical thinking, and demand collaboration/cooperation with others to solve problems by balancing present and prior curriculum experiences. Additionally, this approach reflects a pedagogical shift from an instructor-centered approach, where students strive to deliver a product meeting precise instructor specifications, to a studentcentered one, where students themselves continually reinvent their own project specifications. FrontPage as an integrative method can provide an interesting and productive experience in learning, for life, and can be thought of/used as one link toward more integration within management education.

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