

Integration: an elusive concept

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Abstract

The need for multi-disciplinary integration in business school education has been well-established. However, academics and business practitioners have raised serious concerns regarding the achievement of this program learning goal. This paper examines how graduate business programs address and evaluate the learning goal of multi-disciplinary integration.

Introduction

For many years, business graduate programs enjoyed rising respectability in academia and growing prestige in the business world. Recently, however, there has been growing criticism that graduate business education has lost its original strong connection between the multiple business disciplines and has neglected practical skill training in the teaching of MBA students (see Lane, 1995; Bossidy et al., 2002; Greiner et al., 2003; Bennis and O'Toole, 2005). Commenting on the failure of business schools to produce graduates with the skills necessary to succeed in the world of business, Bennis and O'Toole (2005) documented the need to enhance the MBA curriculum with multi-disciplinary content that would better serve the business graduate. Through an examination of MBA curricula, Navarro (2008) noted that functional silos still exist in business schools, even while accrediting bodies highlight the skill of the graduate in integration across the business disciplines as the hallmark of a quality program. The need for this multi-disciplinary integration is not lost to academia. In fact, a scan of capstone course

syllabi available on the World Wide Web shows that integration is often stated as one of the course objectives for capstone business courses.

The AACSB, the leading accrediting organization for business programs, recommends that “...Contents of the learning experiences provided by programs should be both current and relevant to needs of business and management positions.” The goal of this paper is to examine how different b-schools address and evaluate the integration goal in MBA programs. In the next section, we examine the conceptual definitions of the learning goal, “multi-disciplinary integration.” We follow this with a review of the different methods used to address the objectives related to his learning goal in business school programs. In the fourth section of the paper, we discuss the different assessment techniques used to evaluate student mastery of this goal. The purpose of the reviews in these sections is to gauge the efficacy of the different teaching and evaluation methods. The last section presents the methodology and the status of data collection of this research project.

“Integration” course objective overview

The prescriptive call for multidisciplinary integration of business disciplines dates back to Porter and McKibbin’s (1988) criticism of a “cookie cutter” approach in the graduate business curriculum. With a “cookie cutter” dominant curriculum design, every business discipline (e.g., marketing, finance, accounting, management) is taught in functional isolation. This approach lacks appropriate and much needed integration in a multidisciplinary manner useful to managers. In the early 1990s, businesses initiated restructuring processes by reforming operating units and reducing managerial layers to build a sustainable long-term competitive advantage which, required organizations to have employees with well-developed

broad-based set of skills. Realizing the need of the moment, graduate business schools started curriculum revisions to serve educational needs of modern managers.

The AACSB's "new" assurance of learning philosophy allows business schools greater flexibility in tailoring their graduate curriculum to meet their mission and needs of the modern business society. AACSB does not mandate any particular set of courses; however, content of the learning experience provided by graduate schools should be both current and relevant to needs of numerous stakeholders, such as students, faculty, trustees, and business community. Simply put, business schools are advised to exercise a "holistic" approach in developing the graduate curriculum.

Programs at different universities take varying approaches to addressing integration. Some have an overview course at the start of the program and an integrative capstone class at the end of the program, while some rely just on the latter to provide the experience. Others aim for discipline level integration rather than program-level integration across the business disciplines (Watkins, 1996; Pharr, 2000; Tippins, 2004; Ducoffe et al., 2006). For example, Lunsford and Henshaw (1992) discuss how to develop an integrated class for marketing and engineering students in order to enhance product development process. They propose an integrated method in which a marketing course and an engineering course are taken jointly by students, and it required integrative projects and presentations.

In 1998, Walker et al. shared their vision of an integrated marketing course which prepared students for addressing the complex multi-disciplinary nature of today's business problems. In their opinion, the key to achieving effective integration in what was learned by students was to link subject units across semesters, engage students in regular critical

discussion on how a business trend in one particular disciplinary area may impact on marketing or sales practice within a given organization, encourage learning through experience and self discovery, and use computer simulation through each semester of study.

DeConick and Steiner (1999) address some of the issues encountered in developing and implementing an integrative, team-taught finance and marketing MBA core course. They share four recommendations to those undertaking similar efforts. In order for the course to be a successful learning experience, first, teaching faculty should develop a common vision for the course and the possibilities of integration; second, focus the class on the connections between the disciplines rather than on delivering a large amount of content from either of the disciplines; third, facilitate a high level of interaction within the classroom between each of the instructors and the students; fourth, select cases and projects that both motivate student interest and clearly demonstrate the integration between disciplines; finally, periodically review the cases and projects to instill in the student how these assignments have demonstrated the relationships between the disciplines.

However, a more recent trend among business schools is to utilize an integrative capstone class at the end of the MBA program. According to the 2007 MBA Roundtable Survey, 73 percent of the responding full-time programs and 89 percent of responding part-time programs utilize a multidisciplinary capstone course which is delivered in the student's final quarter or semester (e.g., Watkins, 1996; Pharr, 2000; Stephen et al., 2002; Rapert et al., 2004, Tippins, 2004; Ducoffe et al., 2006). Pharr (2000) argues that the purpose of multidisciplinary integration is to show how stakeholder relationships are intertwined in a firm, which is defined as a "nexus of contracts" by Jensen and Meckling (1976). Therefore, graduate business schools

should better prepare business students for the reality of the corporate world which operates in a cross-functional way. Ducoffe et al. (2006) lay out the dynamics of the underlying pedagogy by advising that interdisciplinary education should combine the study of theory and conceptual frameworks with analytical thinking and applying acquired knowledge to develop broad problem-solving skills. In a more recent work, Kachra and Schnietz (2008) find that traditional capstone class at the end of the semester develops the level of integrated thinking necessary for managers to make good decisions in today's business environment, when it combines theoretical, applied, and practical integration. They suggest reorganizing the capstone course along the levels of managerial decision making and emphasizing pedagogies that employ rich-enough cases and business simulations to better develop both theoretical and practical integration skills in MBA students.

From the preceding discussion, it can be seen that graduate business course work addresses three kinds of integration: theoretical, analytical, and practical (Kachra and Schnietz, 2008). According to Karet and Studt (2001), theoretical integration encompasses student's understanding of the interdependencies between business disciplines and functions to make effective decisions in complex business environments. Furthermore, students must understand the applied importance of each functional area in the graduate business curriculum to the overall company performance. Students with well-developed applied integration skills should be able to make links between the component part of a business and the effect of components on the financial well-being of the firm. Kachra and Schnietz define this level of skills as "applied integration." Finally, a successful manager requires practical integration skills – the most behavioral of the three integration skills. Mintzberg and Golsing (2002) qualify "practical

integration” as a demonstration of wisdom, collaboration, and worldliness in one’s decision making. Stephen et al. (2002) point out that practical integration skills are particular difficult to teach in typical classroom setting. Hence, graduate faculty need to create opportunities during the capstone course for students to practice all three integration skills.

Searching for a strategy to teach integration

The most common method used in classes to provide students with multi-disciplinary competencies is the case method. Business cases pioneered by Harvard Business School in late 1940s are available from multiple sources such as textbook publishers and case repositories; many come with teaching notes that emphasize the integrative aspects of the cases. For years, the case method has been the dominant pedagogy in business graduate curriculum (Greiner, et al., 2003), especially in policy/strategy classes. The case teaching methodology emphasizes the role and importance of experimental learning - learning-by-doing (e.g., Clift, 1990; Mundell and Pennarola, 1999; Boshyk, 2000; Hutchings and Wutzdorff; 1988). More recently, Greiner et al. (2003) emphasize the importance of cases to educational settings in professional schools where students need to acquire competence and experience in translating complex cognitive knowledge into everyday managerial behavior and lasting skills set.

Hamilton et al. (2000) suggest using large, comprehensive case studies which provide a vehicle for depth and breadth of skill development, especially in teamwork, and a clear demonstration that a single business scenario has many considerably different aspects. Also, students learn the interdisciplinary nature of business. However, this approach has a few downsides: first, it is difficult to find and manage good case studies; second, case studies become obsolete fast. Downes (2000) points out that development of a case study is a costly and time-consuming exercise. It makes more sense to develop case studies that can be used

across disciplines. The study finds that students' effectiveness of learning was very positive, with students performing well on the examination tasks associated with lessons reinforced by, and drawn from, the case. Herremans and Murch (2003) draw on previous research in adult and experimental learning to develop an innovative approach for role-playing using case studies in graduate management education. Their approach builds an experience around the case study company and provides an opportunity for integration, challenges students to resolve complex, multi-dimensional issues facing today's organizations.

Team-teaching, with faculty from different disciplines teaching a course together, is also employed successfully by many business schools to teach students how to approach the identification and application of frameworks and methods from different disciplines to successfully solve problems that span different functional areas (Hall, et al., 2008). Team-teaching is a way of providing graduate students and faculty with a holistic perspective by providing an arena for examination of the same issues from different perspectives (Watkins, 1996). According to Young and Kram (1996), team-teaching approach to multi-disciplinary integration represents how different business disciplines work together, complements faculty competencies, and provides student with broad perspectives. However, there are significant challenges to building effective faculty teams, such as inefficient use of faculty time, complexity in coordination, lack of motivation to participate among faculty, challenges regarding faculty evaluations issues (e.g., tenure and promotion), and strain on resources (Hamilton et al., 2000).

Greiner et al. (2003) share their experience with team-teaching of an integrated course and suggest the following six mechanisms to support multi-disciplinary integration in graduate business curriculum through team-teaching: 1. appoint a theme coordinator for each theme to

lead the theme faculty members in planning and arranging the schedule, team teaching, project design, workload, and grading; 2. require team-teaching sessions build into the schedule; 3. frequent use of a single case for a concluding final exam on which theme faculty base their individual questions to assess unique but related perspectives; 4. a single grade for each theme based on a merger of individual faculty grades; 5. uniform policies to assure common treatment by faculty on grading, attendance, and workload; and, finally, special feedback sessions where theme faculty members appear as a team and listen to students' comments.

Management simulation software applications, available as hosted services with web-based interfaces, allow the presentation of realistic business scenarios requiring multiple cross-functional decisions over different time periods. Simulations provide the opportunity to assess and address content knowledge and multiple skills. For example, many simulation applications require the students to present a business plan, which not only draws upon their knowledge of the different functional areas of business, but also teamwork and communication skills. Further, these applications are becoming more sophisticated with built-in assessment tools to address many of the common learning goals in business programs.

Study abroad programs, designed to examine different aspects of a single topic in a foreign country setting aim to develop integration skills in students. For example, one of the instructors at the business school led a study-abroad program to India focused on offshoring and offshore outsourcing. The topic lends itself to examinations from multiple disciplinary perspectives – human resources management, corporate governance, and strategic planning, just to list a few; thus, students gain a theoretical appreciation of the interplay of multiple

business disciplines. In addition, students get an intimate view of the application of concepts and theories.

The two final examples of multi-disciplinary integration are: 1. internship and 2. a guest speaker. There is considerable consensus that a well-guided internship that offers a rich cross-functional experience yields the highest benefit to the student (Hamilton et al., 2000). Work experience gives students a chance to practice their skills, apply their knowledge, and see what it is like to work in a given profession. A well-developed internship will likely validate students' interdisciplinary knowledge and skills and give both faculty and students an opportunity to establish relationships with people in industry. However, students often fail to use internship as an educational experience. Furthermore, internships may lack theoretical rigor or be completely meaningless because of the lack of consideration given to learning goals and structure. Internships also require creation of administrative processes for management and communication.

Another way graduate business students can have exposure to the interdisciplinary nature of business is through a guest speaker. The use of outside speakers has several advantages: it provides students with a role model and a more real perspective on business issues, it enhances their understanding of interdisciplinary concepts and information about careers, and it establishes connection with the business community. It also provides additional opportunities for industry-academia interaction and creates future research and/or consulting opportunities. At the same time, this approach has downfalls, like every other. For example, instructor must ensure that the speaker's presentation topic is relevant and the speaker is well prepared and engaging. In order for this approach to become a successful interdisciplinary

integration method, faculty and business community must have well developed long-term relationships.

Outcome assessment

In higher education setting, Flynn et al. (2007) characterize assessment as the integration of feedback controls into the instruction process through the focus on the attainment of learning outcomes at program/course completion. Outcome assessment measures appear to serve at least two purposes. They serve to report current performance and to support continuous improvement processes (Priesmeyer and Murray, 2008). AACSB's "new" outcome assessment guidelines are very flexible and allow business school to choose the assessment strategy.

To determine whether the instructional methods and tools have been successful in achieving the course objective of multi-disciplinary integration and those students have indeed acquired these much-needed skills, assessment techniques need to be implemented. There are many different assessment alternatives for academic programs and/or courses (e.g., standardized test, management simulation, scoring rubric, case competition), as there are methods for addressing this learning goal. Previous research finds a scoring rubric – a set of categories used to record the assessed performance for a given learning experience or assignment – at the heart of the learning assessment process (Moskal, 2000; Ammons and Mills, 2005).

Simulation packages lend themselves to this assessment quite easily, since they often include some means to test student skills at group and individual levels (McKone, 2003). According to Johne (2003), students exposed to management simulation retain about 75 percent of the instructional content compared to five percent for lectures, 20 percent for

audio-visual presentations, and 50 percent for discussion groups. The Educational Testing Services' Major Field Test (ETS) for the MBA program includes many integrative questions and can be used to gauge students' mastery of this skill. Some business schools conduct a case competition for exiting business school students with a panel of judges drawn from the industry and academia to judge students on their capability to use models and techniques from the different business disciplines competently in their analyses.

Methodology

To determine the most commonly used methods for addressing and assessing the multidisciplinary learning goal and to evaluate the efficacy of these methods in practice, data will be collected using an online survey. The survey instrument is attached in the appendix; the items in the survey are intended to capture the different methods used to address and assess multi-disciplinary integration in the business program. Invitations to the survey were mailed to assessment coordinators and deans of graduate programs of business schools in XXX. These individuals were identified through a search of web pages of business schools.

The results of this study will provide insights into how multi-disciplinary integration can be successfully addressed in the MBA program. It will showcase the different methods currently used along with their advantages and disadvantages and will be useful for instructors wishing to determine which method to employ. It is hoped that the study will also provoke additional discussion on why commentators on business programs still lament at the failure of the programs to equip the students for success in the business world.

Current status

The online survey remains alive. More than thirty complete survey responses have been received to date. A reminder message will be sent to the invitees who have not yet completed

the survey. The responses that have been received highlight the different techniques used to teach and evaluate this crucial but elusive skill.

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Appendix: Integration Survey

* 1. Is achievement of multi-disciplinary integration a learning goal of your MBA program?

Yes No

* 2. Please identify your role in the business school. Please check all that apply.

- Instructor of capstone course, addressing multi-disciplinary integration
- Instructor of a course – other than capstone, addressing multi-disciplinary integration
- Dean of Graduate Programs
- Chair of Assessment Committee
- If other, please specify

* 3. What motivated the inclusion of multi-disciplinary integration as one of your learning goals?

- Derived from school mission
- Resulted from faculty input
- Perceived as a required goal for MBA programs
- If other, please specify

4. Please provide the goal and objective statements related to multi-disciplinary integration for your MBA program.

5. What measures or traits do you use to evaluate multi-disciplinary integration in your program?

* 6. Where is multi-disciplinary integration addressed in your program?

- Capstone course
- Introductory course and capstone course
- Spread across multiple courses
- If other, please specify

* 7. How is multi-disciplinary integration addressed/taught in your program? Choose all the methods that are used at your institution.

- Multiple cases that cover different disciplines discussed in capstone course
- A single (grand) case that covers different disciplines discussed in capstone course
- A single (grand) case that covers different disciplines discussed in different courses
- Team-teaching in capstone course

- Team-teaching in multiple courses in the MBA program
- Simulation
- Study-abroad programs
- Internship
- Guest speaker series
- If other, please specify

8. We welcome your comments on how multi-disciplinary integration is addressed/taught in your program.

* 9. How is multi-disciplinary integration assessed in your program? Choose all the methods that are used at your institution.

- Exam
- Standardized test
- Simulation
- Case competition
- Solving a problem for a real company
- If other, please specify

10. We welcome your comments on how multi-disciplinary integration is assessed in your program.

11. If you would like to receive the compiled results of this survey, please provide your email below.

Email Address _____

Thank you for your participation in this survey.