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Closing the Gap in Business Education: A Case Study of Continuing Curricular Transformation in an Exemplary Undergraduate Program

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CLOSING THE GAP IN BUSINESS EDUCATION:
A CASE STUDY OF CONTINUING CURRICULAR TRANSFORMATION IN AN
EXEMPLARY UNDERGRADUATE PROGRAM

A Dissertation

Submitted to the

School of Graduate Studies and Research

In Partial Fulfillment of the Requirements for the Degree

Doctor of Education

John A. Buttermore

Indiana University of Pennsylvania

May 2010

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ABSTRACT

Title: Closing the Gap in Business Education: A Case Study of Continuing Curricular Transformation in an Exemplary Undergraduate Program

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The motivation for this study was the need to understand why a gap still exists between what business schools teach and what businesses expect their entry-level management employees to know. This gap was identified more than 20 years ago in studies sponsored by the Association to Advance Collegiate Schools of Business, the premier business school accrediting body. The majority of undergraduate programs today follow a function-based curricular model that was developed in the middle of the last century. A small number of schools have made significant changes in both content and pedagogy to develop process-based programs that also emphasize team building and other people skills, making their graduates more marketable. This exploratory case study examined one of these early-adopting schools to discover the motives, methods, benefits, and challenges of such a program.

What this study found was an undergraduate school that followed a visionary dean and a dedicated team of faculty to build an innovative, team-taught core that trades depth of topic for breadth of understanding to give students both a well-rounded view of how business operates and people skills employers want. In the process, they made a broad and lasting connection to

business, created a culture of learning, and encouraged a community of scholars.

ACKNOWLEDGMENTS

The completion of this dissertation marks the end of a significant activity in my life, one that occupied many of my waking hours in the past four years. I'd like to acknowledge and thank those around me who in one way or another helped make this possible. First, I'd like to thank my darling wife, Jenny, for her unwavering love, help, support, and advice throughout this continuing experiment in adult education. I owe a debt of thanks and gratitude to my parents, George and Elma Buttermore, for encouraging a curious nature and a great hope that I would use the gifts God gave me.

My colleagues at Slippery Rock University, including the dean of my college, Dr. Bruce Russell, and my department chair, Dr. David Culp, offered encouragement and support, as well as great understanding when schedules had to be changed or amended to accommodate my graduate school commitments. I am also fortunate to have many friends among the faculty in the School of Business who offered help and advice when I needed it.

The faculty and staff of the ALS program were instrumental in my success. My adviser, Dr. Cathy Kaufman, and my committee members, Dr. Sue Rieg, and Dr. Robert Millward, offered guidance, patience, and knowledge, and made sure my work was the best I could do. Many members of my cohort became close friends over our shared experience, and I owe them thanks for giving me support and encouragement when I needed it the most. There really is power in the cohort, in the form of the relationships we develop and the bonds we make with

each other in pursuing this common goal. I wish you all good fortune and success as you move forward in your careers.

I offer a special thanks to the faculty and administrators at my study school for your gracious grant of access and your enthusiastic participation in this study. If my work is successful, it is only because I've accurately chronicled your success in creating and maintaining a truly exemplary and special undergraduate business program. Your persistence in pursuing better opportunities for your students shines through in all you do. As a former businessperson, it's been absolutely refreshing to meet and become acquainted with a group of serious academics who have made such a strong connection to practice without giving up any of the best aspects of the pursuit of knowledge.

The completion and acceptance of this dissertation also marks a new beginning for me, and helps validate my own commitment to my new career as an educator. I'm sincerely grateful to all who've helped make that possible. Thanks again.

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CHAPTER 1
THE PROBLEM

Introduction

There is a significant body of writings and research on the need to functionally integrate the business school curriculum (Jones, 2002; Porter & McKibbin, 1988; Walker & Black, 2000), but there is little evidence to indicate a significant change in academia. Although a small number of business schools have made dramatic changes in their curriculum to address the need for an integrated, process approach to the study of business, many other schools, including some considered premier academies, have done little to address this issue. This research explored the change process at a selected Association to Advance Collegiate Schools of Business (AACSB) accredited undergraduate program that has not only achieved an interdisciplinary, integrated, team-taught core curriculum, but has become a learning organization, one that continually re-invents itself to match the changing needs of employers.

Background

The structure of curricula found at most undergraduate business schools is largely unchanged over the past 50 years. The approach is functional, with students declaring a major as early as their freshman year, and pursuing a course in one of six to eight different and distinct areas of study, depending on the school. There is little if any cross-functional coursework between disciplines, except for a subscribed “core” of survey courses in each subject area. These

courses cover subjects like marketing, organizational behavior, business law, finance, operations management, and management information systems. These courses are known as “common body of knowledge,” or CBK courses. There is usually a single “capstone” business policy or strategic management course that is intended to bring all of these subjects together for graduating seniors.

This structure may well have served the business community of the mid-20th century, when most industries enjoyed stable pricing, moderate growth, robust staffing, and protection from foreign markets. But in the past half-century, sweeping changes have dramatically altered the organization, structure, size, and survivability of U.S. businesses (Schwahn & Spady, 1998). Free trade laws have opened our economy to increasingly strong competition in manufacturing, materially changing the business environment. Technology has boosted productivity, improved connectivity, and in the process, eliminated many positions from every firm (Friedman, 2005). Retailers, who traditionally followed manufacturer’s suggested retail prices (and their margins), broke ranks with their suppliers in favor of building sales and customer loyalty through everyday lower prices (Fishman, 2003).

The growth of small business in the U.S. has also been remarkable. Today, over 50% of all people employed in the U.S. are employed in organizations with less than either 500 employees or \$6 million in annual revenue, depending on the industry (SBA, 2006). Small businesses represent 99.7% of all employer firms. They have generated 60% to 80% of net new jobs annually over the last decade, and created more than half of nonfarm private

gross domestic product (SBA, 2006). Small businesses often expect more versatility and functionality from employees. Service industries have supplanted manufacturing firms as major employers, and one of the biggest trends across all industries is consolidation. Companies buy each other because they cannot grow from the inside. Today, companies routinely enter new product markets and geographies through acquisition rather than organic expansion.

These fundamental changes in U.S. business have some roots in a global focus on efficiency. Economists' theory of comparative advantage is alive and well in commerce today, spurred on by the many changes that have occurred in trade laws over the past quarter century. These changes have literally created global competition in many sectors, forcing most businesses to focus on cost control to maintain profitability. This in turn has led to off shoring and outsourcing in many segments as companies struggle to push their costs and prices lower, to meet the demands of an increasingly competitive economy (Fishman, 2003).

These new organizations are much leaner, more focused, and cross-functional in operation. There is no excess baggage; everyone employed has too much to do, and too little time to do it (Kanter, 1997). A typical strategy in consolidation is to reduce the indirect labor force, including management, to affect cost benefits from the consolidation. Employees who are not directly involved in the manufacture or sale of the product become increasingly vulnerable to technological replacement. And those who are directly involved in the line functions of the business are expected to perform at ever-higher levels of efficiency and productivity. At the same time, there is a growing need for

employees who display a sense of urgency, and an understanding of how business operates across all functions. Training programs, which used to provide an incubation period for new employees, are largely gone. In their place is an expectation that entry-level employees will make an immediate contribution to either revenue enhancement or cost reduction, or both (Carnevale, Gainer, Meltzer, & Holland, 1988; Tanyel, Mitchell, & McAlum, 1999).

There has been a call for change from various voices in business academia beginning more than 20 years ago (AACSB, 1996, 2002, 2006; Porter & McKibbin, 1988; Quelch, 2005; Frank; 2006, Linnehan, 2006). Some schools have made significant curricular modifications in their undergraduate business programs in recent years in recognition of these dynamic changes in business form and function. The University of Idaho, Boston College, New Mexico State, Babson College, and Fairfield University in New Jersey are a few examples. These new curricular models typically focus on cross functional, collaborative, or team teaching of business subjects like marketing, finance, human resources, and management to emphasize the inter-relatedness of these disciplines. Some schools focus on developing basic skills like communications, critical thinking, and teamwork. Others have moved from a functional to a business-process focus, reflecting how businesses collaborate across departments to accomplish basic tasks, such as order fulfillment. Some schools form classes into cohorts, or groups of students, who matriculate together for typically the junior year of schooling, before returning to a specialized focus on a major area during the last year of undergraduate school.

The AACSB, which was established in 1916 as the American Assembly of Collegiate Schools of Business, later changed to the Association to Advance Collegiate School of Business, and ultimately became recognized by the U.S. Department of Education as the premier accrediting agency for undergraduate and graduate business schools, gives this recommendation in its Accreditation Standards, regarding the relevancy of curriculum:

For business degrees, the business community provides valuable information about critical skills and knowledge for graduates. Major employers and corporate advisory groups give information about the situations most faced by graduates and view the learning goals of the school from the perspective of persons who must put knowledge into practice on a daily basis. They also may provide insight into trends and anticipated demands on graduates, thus assisting in curricular revision toward future needs. (AACSB, 2006, p. 62)

AACSB-accredited schools use a number of different curricular models, ranging from traditional offerings, with a basic set of core Common Body of Knowledge (CBK) courses, followed by a major course of study, to fully integrated business curricula with cohorts, and cross functional team-teaching. The AACSB is careful not to dictate a specific curricular formula, but rather suggests topics normally found in general management degree programs (AACSB, 2006). This is a result of a revision to standards adopted by the AACSB

in 1991, which changed the focus from specific curricular recommendations to a new focus on the individual school's academic mission (Porter, 1997).

There is a renewed emphasis on measuring student outcomes and finding meaningful ways to assess program and course effectiveness. The September 2006 report from the Commission on the Future of Higher Education delivered to then U.S. Secretary of Education, Margaret Spellings, focused on accreditation and the need to develop more comparable measures of student outcomes. In the Preamble to the 2006 Spellings Report, the following statement appears:

“Unacceptable numbers of college graduates enter the workforce without the skills employers say they need in an economy where, as the truism holds correctly, knowledge matters more than ever” (p. ix). And, although the recently signed Higher Education Bill of 2008 specifically prohibits the Department of Education from requiring standardized tests as a means of measuring student outcomes, interest remains among various higher education stakeholders, including students, parents, and employers for some method to compare schools' effectiveness in helping graduates succeed.

Historically, business schools have designed curricula to meet the needs of the marketplace. The earliest example of a specific undergraduate business curriculum appeared in Philadelphia in 1881 when the University of Pennsylvania established the Wharton School of Business with a \$100,000 donation from Joseph Wharton, who was a manufacturer of armor plate for the U. S. Navy (Pierson, 1959). In addition to the basic courses of history, economics, and

government, the new business school offered a specific set of courses in accounting, business organization, and commercial law (Pierson, 1959).

Over the next 50 years, business as a separate academic discipline grew on public and private campuses across America, in response to the increasing demands of business for trained graduates. Courses were developed based on the needs of business, and schools struggled to find and develop faculty and texts to teach these new subjects. By the start of World War II, there were more than 120 collegiate schools of business in the U.S. awarding 10% of all baccalaureate degrees, up from 3% in 1920 (Gordon & Howell, 1959). Most of these schools followed curricular recommendations as specified by the AACSB, which at the time dictated a set of required, isolated courses, including accounting, business law, finance, statistics, and marketing (Pierson, 1959). This group of courses continues at most business schools today. The dramatic increase in the number of students entering college after World War II drove significant growth in business enrollments, as well as new major areas of study (Pierson, 1959). The development of significant new technology and the expansion of international business, as well as the emergence of a service-based economy, placed business education on the threshold of a new challenge. Two landmark studies commissioned in the 1950s by the Ford Foundation and the Carnegie Corporation of New York, and both published in 1959, called for undergraduate and graduate business schools to improve the quality of their studies, their students, their faculties, their research, and to re-establish the ties between the functional fields of business and the core liberal arts curriculum.

The Ford report, *Higher Education for Business*, by R. A. Gordon and J. E. Howell, (1959), reported the results of a study begun five years previously, in 1954, that was driven in part by business leaders, who felt the graduates of most business schools lacked the basic skills needed to perform on the job. Their training was viewed as too narrow, and too vocational in nature. According to Gordon and Howell, business educators were attempting to produce broadly educated generalists, while at the same time trying to train functional specialists to meet the new technological demands of the business community. The authors concluded that academia was failing at both tasks; that America's universities were not positioned to accommodate the expanding needs of business. The report called for sweeping changes in business curricula, with a stronger focus on a liberal arts foundation and greater emphasis on faculty research.

The Carnegie report, *The Education of American Businessmen: A Study of University-College Programs in Business Administration*, by F. C. Pierson (1959), took a critical look at all the different ways a person could find preparation for a career in business, including trade schools, associate degrees, liberal arts education, or a specific undergraduate business curriculum. The Carnegie report concluded admissions standards were too low for most business schools, and similar to the Ford report, recognized that the faculty of business schools were faced with a dual obligation to functionally prepare graduates for an entry-level position, and at the same time, instill in them the well-rounded long view they would need as general managers.

These two foundational reports became touchstones and yard sticks for business school curriculum since their publication. But business has continued to evolve, and today holds little resemblance to the business world of the late 1950s, when computing and communications technologies were just beginning to emerge, and trade barriers still protected economies, including America's, from significant foreign competition. Schools that still measure themselves solely by the Ford and Carnegie reports are seriously out of touch with business practice today.

The changes that occur in business curricula tend to be incremental in nature. Different forms of integration and collaboration now routinely appear in course work. But in many schools, it is left to individual faculty to adopt these methods. The result is a hodgepodge of integrative methods and results. Many colleges and universities teach business principles and strategies using business simulation games, but often this simulation is limited to a single course. There is little coordination between faculty within a major, let alone coordination between functional areas or departments. Schools that have made a radical departure from the traditional business curriculum into an integrated form report greater success with students' understanding of the broad context of business, and greater appreciation of their graduates from the businesses that hire them (Pharr, 2000; Puri, 1995; Smith Ducoffe, Tromley, & Tucker, 2006).

Most schools, however, maintain curricular structures and teaching methods which are largely unchanged for the last half-century. There is a need to model a new curriculum and pedagogy that reflects these changing needs in our

user community. If not, business schools face irrelevance and marginalization as business looks elsewhere for its intellectual resources.

Problem Definition

Various studies and reports, some dating back 20 years, identify a widening gap between what is taught in undergraduate business schools, and what is needed by businesses (AACSB, 1996, 2002, 2006; Porter & McKibbin, 1988). A relatively small number of AACSB- accredited undergraduate programs have moved from the traditional, function and department-based approach toward a cross-functional, team-taught curriculum that blurs the lines between academic disciplines in favor of a business process approach to business education. The purposes of this research was to focus on the process by which one undergraduate business school achieved and maintained significant integrative curricular change, the motivation for change, the hurdles that were overcome to implement change, the process by which the program was reinvented, the impact of the integrated curriculum on student outcomes and employer benefits, and the methods used to maintain currency with the evolving nature of business. This study provides a blueprint for other schools that also desire to move in the direction of a functionally integrated, interdisciplinary undergraduate business program.

Research Questions

The principle research questions this work sought to answer are:

- Why did the school decide to change its program? Describe the principle reasons for the school to undertake a major curricular transformation.
- How did the school accomplish this transformation? What was the process followed, what were the major obstacles encountered, and how were they overcome?
- What benefits for faculty, students, employers, and other stakeholders can be attributed to the curricular change? Were changes made to faculty reward and evaluation criteria?
- Are processes in place to insure the program continues to evolve with changing business methods and practices? Describe them.
- What advice can you offer to other schools considering such a change?

Methodology

This research was primarily concerned with understanding the motivation for and process of curricular change, and identifying increased benefits for all the stakeholders of a school that may result. These stakeholders included current and former students, faculty, administration, and employers. There were many variables in the change process, and very strong contextual factors to be considered. Naturalistic inquiry, through its recognition of the importance of context, inductive analysis, holistic perspective, and multiplicity of variables was

identified as the most promising method for this research (Lincoln & Guba, 1985; Merriam, 1998).

Case study was chosen as the research design for this study, because the case study method lends itself to the study of contemporary phenomenon where the main lines of inquiry are questions of context and process, the researcher cannot manipulate the results, and the boundary between phenomenon and context is difficult to identify (Yin, 2003). There is a significant amount of evidence or data available in several different forms: interview, document analysis, and direct observation. It was hoped this research would provide additional insight into the model of integrative business programs, and that understanding the motivations for change, the process of change, and the benefits of change would be enhanced.

Theoretical Framework

Faculties who have achieved significant integrative change, as recommended by the AACSB and other influential voices in business education, have followed some process in affecting curricular transformation. We expected to find elements of change theory traceable to Lewin (1947), who suggested that change occurs in three steps:

1. Unfreezing-- creating an atmosphere for change;
2. Moving-- making the change; and,
3. Re-freezing-- adopting the change as the new normal state.

This theory of the change process is echoed by others, including Kotter (1996), who expanded the steps from three to eight:

1. Establish a sense of urgency;
2. Create a coalition;
3. Develop vision and strategy;
4. Communicate the vision;
5. Empower innovators for action;
6. Generate short-term gains;
7. Consolidate these gains and expect more change; and,
8. Anchor the innovation in this new culture.

In *The Dynamics of Academic Reform* (1969), J. B. Hefferlin theorizes that change in academia is particularly difficult for a number of reasons. These include conservatism and reputations based on constancy, not innovation. Further, tenured faculty also receives tacit tenure for their programs and methods. According to Hefferlin, many in academia believe education is intangible, unable to be measured, and so they discount the study of education. Education is “deliberately structured to resist change” (p. 16). The only time academia changes is when the perceived threat of not changing is greater than the threat of standing still.

Donald Schon (1973) theorized that there is in fact a continuous process of change in society and most of its institutions, but that this change is masked somewhat by what he terms “dynamic conservatism- a tendency to fight to remain the same” (p. 30). Schon contends that institutions must learn to understand these transformations, and adapt to them, becoming learning systems that have the ability to continuously change and self-transform.

Peter Senge's 1990 work, *The Fifth Discipline*, popularized the idea of a learning organization "where people continually expand their capacity to create results . . . where people are learning to see the whole together" (p. 3). The learning organization, which is flexible, adaptive, and productive, is appropriate today because of the need for rapid and continual change. This state of organizational optimization is achieved, according to Senge, through the application of five disciplines, including, systems thinking, which is the cornerstone, shared visions, mental models, personal mastery, and team learning. This theory provides a framework for understanding the changes the subject program has undergone. In order to achieve significant and lasting transformations, the change agents needed to develop some, if not all, of these five disciplines in their organization.

In a later work, Senge, Kleiner, Roberts, Ross, Roth, & Smith (1999) make the distinction between change, transformation, and profound change, the latter being the most significant form, according to the authors. Profound change is achieved when an organization not only changes to adapt to some external stimulus, but also makes fundamental changes in the way it does things internally. Accordingly, "it is not enough to change strategies, structures, and systems, unless the thinking that produced those strategies, structures, and systems also changes" (p. 15). One of the outcomes this research hoped to identify was this phenomenon of profound change and its achievement in an undergraduate business program. The implication of this later theory was that not only is change a process of unfreezing, modifying, and refreezing, as proposed

by Lewin, but there must also be a recognition of and mechanism for continually modifying the content, structure, and delivery of the program. This circle of initiating, sustaining, and redesigning change is the signature of a learning organization.

Definition of Terms

AACSB- -The Association to Advance Collegiate Schools of Business is the principle accrediting agency for baccalaureate and postgraduate business programs.

Collaborative learning-- is defined here as any pedagogical method or self-directed activity which uses novel approaches to facilitate learning.

Common Body of Knowledge (CBK)-- is the structure of classes required by all students seeking a degree in any major field of business administration. This is also known as the 'core' courses.

Demographic characteristics--refers to the different groups or segments that relate to a subject's gender, age, race, economic strata, etc.

Double Major--A student who seeks to concentrate in two different disciplines seeks to study a double major. In this study, the disciplines were majors within the School of Business.

Internship--is a temporary position for an undergraduate that gives the student hands-on business experience.

Integrative program--in this context, an integrative program refers to an undergraduate business program that integrates, within course, functional areas of study.

Major area of study--A discipline or field of study, in this case, in the School of Business, such as finance, marketing, accounting, etc.

Significance of Study

This study was significant for two reasons. First, it sought to examine in detail the context and process of changing from the traditional, function-based undergraduate business model, to an integrated, process-oriented, team-taught program, and understood the mechanism for maintaining currency with the continually evolving nature and scope of modern business practice. Second, this study searched for evidence of improved student outcomes, along with employer benefits, that are outside the program at this school. Although the literature has many accounts of schools that have integrated their undergraduate business curricula, there is very little written about improved student outcomes and employer benefits. This information may well provide added impetus to other schools that are considering a major overhaul of their programs.

Limitations of the Study

The following potential limitations were anticipated for this study:

1. The results will be limited by the accuracy of recollections, candor, and honesty of the respondents.
2. The concept of curricular integration is subjective, and therefore, may be interpreted differently by respondents.
3. For purposes of this study, curricular integration is defined as undergraduate business coursework delivered in a collaborative,

interwoven fashion by faculty teams made up of individuals from different disciplines.

4. Because this study investigates only one program, the results will be limited and not necessarily representative of all such programs.
5. Because the researcher is the data gathering and analysis instrument, bias may be introduced into the study.

Summary

Although many voices with an interest in business academia have both identified a gap between what schools teach and what employers need from new graduates, little curricular change has been observed across undergraduate business schools in the United States. As few as 5% of AACSB accredited schools have undergone a significant and lasting curricular transformation (DeMoranville, Aurand, & Gordon, 2000). A more recent study of AACSB deans found that about 23% of schools had made plans to integrate the undergraduate core curriculum, (Athavale, Davis, & Myring, 2008), although this number contains all integrating methods. Some research points to a sense of complacency among faculty and administrators (Porter & McKibbin, 1988), others speak of the general difficulty of achieving change in higher education (Hefferlin, 1969). Regardless of the reasons, schools that have achieved a functionally integrated, process oriented curriculum attest to the benefits for students, faculty, and administrators. This research attempted to identify the characteristics of successful change processes at an exemplary undergraduate school that has created and sustained a profound change in its core business programs, looking

for common themes and patterns, to create a roadmap for success for schools that are considering such a curricular transformation.

CHAPTER 2

LITERATURE REVIEW

Introduction

The purpose of this study was to examine the motives, methods, and results of profound curricular change in an exemplary model of undergraduate business education. The challenge to educators to close the gap between what students learn and what employers expect was voiced more than 20 years ago (Porter & McKibbin, 1988). In spite of this challenge, a relatively small number, approximately 23% of AACSB-accredited programs have reported plans or activities to integrate functional disciplines inside the curriculum (Athavale, Davis, & Myring, 2008).

This search and review of appropriate literature was organized into four main sections, to help shed light on the principle research questions of this study.

Those questions are:

- Why did the school decide to change its program? Describe the principle reasons for the school to undertake a major curricular transformation.
- How did the school accomplish this transformation? What was the process followed, what were the major obstacles encountered, and how were they overcome?
- What benefits for faculty, students, employers, and other stakeholders can be attributed to the curricular change? Were changes made to faculty reward and evaluation criteria?

- Are processes in place to insure the program continues to evolve with changing business methods and practices? Describe them.
- What advice can you offer to other schools considering such a change?

The first section of this review examines the new global business paradigm and how it has reshaped the organization and operation of modern business, and employers' changing expectations of skills and knowledge for business graduates. The second part explores the recent history of curricular change in business schools and the case for continuing and future curricular change. The third area looks in some detail at the experiences of a number of business schools that have made integrating changes in their programs, including a review of their integrating methodologies and some of the challenges they faced during implementation. The final section of this review creates a theoretical framework for this study. This is followed by a brief summary.

The New Global Business Paradigm

Every morning in Africa, a gazelle wakes up.
It knows it must run faster than the fastest lion or it will be killed.
Every morning a lion wakes up.
It knows it must outrun the slowest gazelle or it will starve to death.
It doesn't matter whether you are a lion or a gazelle.
When the sun comes up, you better start running.

African proverb, from Friedman, 2005, p. 137.

Evidence of Change

In their 1998 book, *Total Leaders: Applying the Best Future-Focused Change Strategies to Education*, Charles Schwahn and William Spady identify and chronicle the development of the Information Age, in a work that reviews more than 30 texts and futurist books. The most basic feature of this new paradigm is “the high quality, global marketplace that has influenced almost all businesses, no matter how small or local their focus” (p. 4). Today’s organizational leaders are influenced by an array of new trends. These include an understanding that quality products and services are no longer an advantage in the marketplace. Rather, they are the price of admission to the new global marketplace. They also suggest a seamless global economy, where the whole world is a marketplace for any company, no matter how small. Schwahn and Spady borrow from Peter Senge’s 1990 work *The Fifth Discipline*, to describe the new employee as no longer guaranteed a fixed career practicing fixed skills, but rather one who will be expected to continually reassess his/her talents and capabilities, as well as potential contributions to the organization. This suggests a much more adaptable, cross-functional skill set for success in this new global paradigm. Some of the key points in Senge’s work include change as the only constant. The inevitability of change leads to the challenge of creating an atmosphere of continuous learning and adaptation to insure survival. Empowerment of employees is also a characteristic of the new business paradigm. A corollary to empowered employees is decentralized organizations, close to specific market opportunities, and able to make decisions with greater

autonomy and speed. These new organizations will be expected to operate on a 24-hour schedule, reflecting the nature of the global marketplace. These trends describe a new model for business success, and new skills that need to be mastered.

The World is Flat: A Brief History of the 21st Century, by Thomas Friedman (2005), a popular New York Times columnist and author, chronicles, is an easy to read, anecdote-filled volume this new global paradigm and its impact and importance. His book is compelling, and totally engrossing. He helps us conceptualize and verbalize the many diverse factors that have played a role in the way the world is changing, and our lives along with it. Some of his key concepts set the stage for a discussion of this new global business paradigm.

First, Friedman identifies three periods of globalization. “Globalization 1.0” (p. 8) describes the period from the 15th century, when explorers like Columbus began to explore the world, until about 1800. This period was characterized by countries, through imperialism or religion, or both, “driving the process of global integration” (p. 9). “Globalization 2.0” (p. 9), the second great era, lasted from 1800 until about 2000. “In Globalization 2.0, the key agent of change, the dynamic force driving global integration, was multinational companies” (p. 9). This era, according to Friedman, was characterized by hardware breakthroughs, “from steamships and railroads in the beginning to telephones and mainframe computers near the end” (p. 10). “Globalization 3.0” (p. 10) describes the era we are just beginning as we enter the 21st century. This will be the era of individual globalization, the “newfound power of *individuals* to collaborate and compete

globally” (p. 10). The enabler says Friedman, “is what I call the *flat-world platform* . . . the product of a convergence of the personal computer . . . with fiber-optic cable . . . with the rise of work flow software” (p. 11).

Second, Friedman identifies “ten forces that flattened the world” (p. 50-200). These forces include socio-political events like the symbolic teardown of the Berlin Wall, technology improvements like the Internet, open-code software development, workflow software, and wireless connectivity. Also included are new trends in business like outsourcing, offshoring, and supply chaining, all relatively new ways for businesses to manage costs and improve efficiency. The list of flatteners also includes personal amplifiers like uploading, the ability to post our thoughts, ideas, and opinion on a bulletin board for the world to read. As Friedman tells it, “Individuals who never dreamed they could upload . . . suddenly found that they can have a global impact on the world as *individuals*” (p. 232).

Third, Friedman identifies a phenomenon he terms “the triple convergence” (p. 201-233). This concept brings the 10 forces he identified earlier together with two other significant changes, one, what Friedman calls “horizontalization” (p. 207), and two, the addition of three billion people, “the people of China, India, Russia, Eastern Europe, Latin America and Central Asia. Their economies and political systems all opened up during the course of the 1990s, so that their people were increasingly free to join the free market game” (p. 212).

Friedman continues:

It is this triple convergence-of new players, on a new playing field, developing new processes and habits for horizontal collaboration- that I believe is the most important force shaping global economics and politics in the early twenty-first century. Giving so many people access to all these tools of collaboration, along with the ability through search engines and the Web to access billions of pages of raw information, ensures that the next generation of innovations will come from all over Planet Flat. The scale of the global community that is soon going to be able to participate in all sorts of discovery and innovation is something the world has simply never seen before. (p. 212)

This triple convergence leads Friedman to describe the types of jobs that will fit into this new global paradigm, those that will make the job holder “untouchable” (p. 279), that is, able to survive and prosper in the face of global competition. He describes three broad categories: The first group “performs functions in ways that are so specialized that they can never be outsourced” (p. 280). Friedman puts superstars, sports celebrities, and surgeons into this group. His second category is “localized and anchored” (p. 280). These jobs are “done in a specific location, either because they involve some specific local knowledge or because they require face-to-face, personalized contact” (p. 280). This type of job can include service employees like waiters, trades people such as plumbers or carpenters, or professionals, like dentists and lawyers. They can be highly paid or minimum wage, but there will always be a job market for this category,

and their “wages will be set by the local market forces of supply and demand” (p. 280). The third category of untouchables described by Friedman is what he terms “the old middle jobs” (p. 280). These are the old middle-class jobs that range from factory worker to office clerk, and are under the most pressure from the new global market dynamics. These at-risk middle-class jobs have “been the foundation of our . . . economic and . . . political stability” (p. 281), and the economy cannot afford to do without them.

Friedman’s solution for “the new middlers” (p. 281), as he calls them, is a new set of job types based on the needs of successful global companies. They include “collaborators and orchestrators, synthesizers, explainers, leveragers, adaptors, personalizers, and localizers” (p. 282-295). We need to educate people to fill these new jobs in new ways. Friedman suggests four skill sets and attitudes, rather than specific courses that he gleaned in conversations with employers and educators. These skill sets include, first and foremost “learn[ing] how to learn-to constantly absorb, and teach yourself new ways of doing old things or new ways of doing new things . . . because what you know today will be out-of-date sooner than you think” (p. 302). Second, Friedman quotes Doc Searls, editor of the *Linux Journal*, who complains that most of us were:

Shaped in large measure by school systems that have had, from the dawn of the industrial age, a main purpose: to produce employees for boxed positions in corporate org charts that take the shape of pyramids, wide at the bottom and narrow at the top. (p 304)

Searls concludes that developing a curiosity quotient--a CQ, and a passion quotient--a PQ, is more important than a person's intelligence quotient--IQ. He formularizes it as: "CQ+PQ>IQ" (p. 304). Third, according to Friedman:

You need to like people. You need to be good at managing or interacting with people. Although having good people skills has always been an asset in the working world, it will be even more so in the flat world. (p. 306)

The final skill set that the "new middle class" will need comes from Daniel Pink, author of *A Whole New Mind: Moving from the Information Age to the Conceptual Age*, who explains "you need to focus on constantly developing your right-brain skills--such as forging relationships rather than executing transactions, tackling novel challenges instead of solving routine problems, and synthesizing the big picture rather than analyzing a single component" (Friedman, 2005, p. 307).

The Importance of Small Business

Another significant structural change in business in the last half century has been the rise of small business. At the same time the largest corporations are growing even larger through global expansion and acquisition, the vast majority of new business enterprise is at the other end of the size spectrum: small business. According to *The Small Business Economy: A Report to the President*, prepared by the U.S. Small Business Administration (SBA), Office of Advocacy in 2005, "small businesses employ about half of the private sector work force, produce about half of private sector output, and . . . allow entry into employment by individuals and demographic groups who might otherwise be

shut out of the labor market” (p. 5). The SBA also reports 99.7% of all firms in the United States had fewer than 500 employees, and these firms employed almost 59 million people. More than 21 million are employed in firms of 20 or fewer people (SBA, 2005).

An integrated undergraduate business curriculum would lend itself to this trend as well. The skills needed for success in an entrepreneurial or small business organization is more generalist-based, that is, people who are good at a variety of skills, according to a study of Stanford graduates (Lazear, 2004). This study found a correlation between students who had studied a more general curriculum and their success in entrepreneurial endeavors, compared to those students who never started a business. Binks, Starkey, and Mahon (2006) discuss “entrepreneurial skills development through an integrative learning approach” (p. 12). They continue: “As a subject [entrepreneurship] is therefore particularly conducive to the application of integrative learning approaches. Integrative learning refers to the individual student’s ability to make deep level connections between the processes of academic learning” (p. 13).

Changing Employer Expectations

This new global paradigm, characterized by decentralized, horizontal organizations, with empowered employees, suggests a new skill set for business people. As companies adjust to changing markets and constantly emerging competitors, what competencies and skills do they expect from their employees? Studies that attempt to match employer expectations in this new business model with business graduates’ skills began to appear more than 20 years ago.

Boatwright and Stamps (1988), studied responses from business recruiters representing “manufacturing, wholesaling, retailing, insurance, banking, and accounting firms” (p. 75). They categorized the responses into four utility dimensions: leadership, academic, communications, and self-starter skills. They found that depending on the type of entry-level job recruited for, the skills desired were different. For example, for management jobs, recruiters valued communications skills over leadership skills. For sales jobs, they placed a higher emphasis on leadership and self-starter skills than academics, and in accounting positions, recruiters valued academic skills significantly higher than self-starter skills (p. 77).

Bennett (1999), found that today’s professional needs an understanding of all the functional areas of an organization, and the information generated in each area. Karakaya and Karakaya (1996) proposed that business schools need to apply the principles of marketing, that is market research, to their curriculum, so they could match graduates’ skills with employer’s expectations, in order to fulfill their customer’s needs, expressly a good job following graduation. Their research objectives were to “examine the importance of business executives’ expectations from an ideal business education, and to identify the underlying dimensions” (p. 11) of those expectations. A literature search revealed 13 educational attributes that the authors included in a survey instrument that they mailed to a broad selection of businesses in their area. Their initial analysis revealed that four factors were more important than the others. These were: (1) knowledge of subject area; (2) working cooperatively in a group; (3) writing skills; and,

(4) verbal skills. Their factor analysis led to four distinct expectations that businesses had of an ideal business education. The authors identified them as: (1) research skills; (2) interpersonal skills; (3) basic writing and verbal skills; and finally, (4) ascertained skills, the latter formulated by combining knowledge of subject area, internship experience, and quantitative skills. The study findings suggested that all businesses seek to hire well-rounded students. Basic writing and verbal skills had the highest mean value, followed by interpersonal skills, such as leadership traits. Next were learned skills, and finally, research skills. Larger firms emphasized a greater research orientation.

P. A. Williams studied faculty and student perceptions of employability skills in his 1998 dissertation. He concluded that although there is some level of the awareness of employers' needs, and the schools he studied were making headway in skills integration, more effort was needed to insure the relevance of the classroom experience.

Nadia Shuayto surveyed Michigan employers and academic deans and administrators about the critical skills they expected in business school graduates in her 2001 dissertation. Her principle findings showed "the top seven skills desired by prospective employers . . . are responsibility and accountability, interpersonal skills, oral communication, teamwork, ethical values, decision making and analytical skills, and creativity and critical thinking. All of these skills are considered soft skills" (p. 106). Hard skills such as the ability to assimilate new technologies, computer skills, written communication, project management,

and presentation skills all ranked in the lower half of this skills list. Shuayto concludes, “Business schools need to add a substantial focus on the soft skills They need to continually reassess their goals . . . to keep up with rapidly changing needs of business organizations” (p. 108).

Shuayto modeled her attributes list from an earlier study by Tanyel, Mitchell, and McAlum (1999). They reported differences between the ranking by employers and faculty on approximately 44% of attributes. Employers gave “greater importance to (a) oral communication, (b) decision making and analytical ability, (c) written communication, and (d) creativity and creative writing. University faculty attached a greater relative importance to (a) ethical values, (b) project management, and (c) persuasive ability” (p. 36). These differences should remind faculty of the need to “provide graduates with skills and attributes that prospective employers desire. These results should be beneficial to faculty for curriculum revision and other changes in management education” (p. 37).

Carnevale, Gainer, Meltzer, and Holland (1988) highlight employers’ skills expectations for employees as revealed in a two-year-long study done jointly by the American Society for Training and Development (ASTD), and the U.S. Department of Labor. The study found that workers would be expected to work with less supervision, and at the same time identify more problems and make their own decisions. Their skill set will include a broad foundation including “problem-solving, listening, negotiating, and knowing how to learn” (p. 23). The study speaks of the “upskilling” (p. 23) of work in America. The challenge of

competition motivates companies to look for workers with strong interpersonal skills, collaboration, teamwork, and goal setting.

In her 2002 work, *Transforming the Curriculum: Preparing Students for a Changing World*, Elizabeth Jones describes employer expectations as: “Employers want a new kind of professional with a broad set of workplace skills and a strong foundation in the basics” (p. 7-8).

Recognizing the Gap in Higher Education

The speed of change in the business world and the need for continuing reform in business education to better match graduates with employer’s needs has not gone unnoticed in the halls of academia. Quelch (2005) opines that business school graduates get a degree but “learn little about how to analyze and solve the complex, messy problems that confront today’s business managers and leaders as they seek to navigate the global economy” (p. 17). Part of the issue, as Quelch saw it, is the continuing focus of business schools on “hard” or analytical skills at the expense of “soft” skills such as leadership, team building, and general management. He calls for business schools to balance their programs so graduates are able to deal with today’s business problems effectively. He proposes five areas that business school administrators need to support. These are leadership, ethics, global thinking, management skills, and technological innovation. Quelch suggests that faculty “must get out and about in the business community” (p. 18). Deans need to eliminate “the departmental (and journal-based) silos into which faculty members segregate themselves, and reward cross-disciplinary research and teaching projects” (p. 18). The author

claims “universities should expect more from their business schools- in particular, collaboration on major cross-disciplinary efforts to address important problems” (p. 19). Quelch concludes that almost half of the world's largest economies are not countries, but companies. That means training effective future leaders of these businesses is an extremely important undertaking.

Warren Bennis and James O’Toole echo these thoughts in a 2005 article in *The Harvard Business Review*, entitled “How Business Schools Lost Their Way”. The authors’ thesis is that business schools reward scholarly research at the expense of teaching, and thereby encourage faculty to design courses that reflect their own expertise. “These professors are excellent fact collectors, but despite their high level of competence, they are too often uncomfortable dealing with multidisciplinary issues in the classroom.” Bennis and O’Toole remind the reader that professors forget that business people “are not fact collectors; they are fact users and integrators” (p 101). So their needs tend more toward help in making decisions when all the facts are not known. The authors, repeating Quelch’s thoughts, point out “the integration of discipline-based knowledge with the requirements of business practice is left to the student” (p. 102), usually because the faculty is not qualified to teach cross-disciplinary courses. This produces graduates without the skills their employers need. It’s not unusual, according to Bennis and O’Toole, to find faculty members who taught the new graduates not only had spent little or no time in organizations as consultants or managers, but the younger faculty may not even be acquainted with business people. “Today, business practitioners are discovering that B-school professors

know more about academic publishing than about the problems of the workplace” (p. 102). Because business is a profession, the authors state “business school faculties simply must rediscover the practice of business. We cannot imagine a professor of surgery who has never seen a patient . . . and yet today’s business schools are packed with intelligent, highly skilled faculty with little or no managerial experience” (p. 103).

Perhaps the most important work addressing the gap between business education and the changing dynamics of the new global economy is that of Lyman Porter and Lawrence McKibbin. Their 1988 report, *Management Education and Development: Drift or Thrust into the 21st Century?* was commissioned by the pre-eminent business school accrediting agency, the Association to Advance Collegiate Schools of Business (AACSB). The authors, both highly regarded business educators, were given the task of predicting what management would be like in the early 21st century, and how management education could best meet those future needs. Data was collected by document review, interview, and survey instrument. Individuals in both business and higher education were the focus of the study.

The authors identified the most influential factor affecting future business leaders as the shift into a “post-industrial society,” referring to the move from industrial goods production to the provision of services, as the mainstay of our future economy. They explained that in the previous century, most of the population was employed in agriculture, what is called the first stage of economic development. As mechanization of farm labor developed and machines took over

most of the jobs on the farm, employment in agriculture dropped, in real and absolute terms. This led to the second stage of economic development, whereby people were employed in large industrial manufacturing jobs. By mid-20th century, “more people were employed in manufacturing than in any other sector of the economy” (p. 23). Two “key elements” of this second stage were that first, we had become a nation of employees, and second, that the workers were employed by large industrial firms.

Now we have arrived at the third stage of economic development, as defined by the principle type of employment. There are now (1988) more people employed in the service sector than any other part of the economy. This is also known as the shift to the information society, or the Information Age (as noted in earlier citations). In order to understand the magnitude of the potential for future business, the authors cited Muller (1970), from his book *The Children of Frankenstein: A Primer on Modern Technology and Human Values*. He points out that in the transition from the agricultural economy to the industrial economy, institutions such as the fixed-time workday, not living at work, commuting, urbanization and suburbanization, large pools of capital called corporations, and mass employment and trade unionism were all established. The “unspoken implication of this history, as we move out of the industrial phase, some of these now taken-for-granted aspects of our lives could be greatly altered in the future” (p. 24).

The authors also identified the potential impact of technological change, which they regarded as most likely in two main areas: first in the area of industrial

automation or robotics, which implies that many of the routine and semi-complex tasks in manufacturing will be done by machines instead of people, and second, in what the authors termed “the white collar arena” (p. 25), where computers would have a significant impact on information processing. They predicted this would affect not only how people work, but also where they work.

Porter and McKibbin (1988) identify entrepreneurship, the growth of small business, as a significant trend in their future. They note that the cycle of business will quicken in the move to a service economy, because it takes far less time and capital to develop a new menu item for a restaurant, or a new service at the bank, than to bring a new model automobile to market. This faster pace of business will lend itself to smaller organizations that can typically operate much faster than large organizations. Another factor in favor of the growth of small business is the growth of individuality in society, which also lends itself to working for oneself or in small, like-minded groups. From their perspective in the late 1980s, Porter and McKibbin could make the case for a move to larger organizations through the concentration of services like banks, media organizations, and information companies. But they could also make the case for the growth of entrepreneurship, through easy accessibility to capital and low entry barriers in many service businesses. In fact, they were right on both counts.

The changing structure of business has also changed employer expectations of business schools, according to the authors:

One of the most insistent pleas from . . . the corporate sector was for more broadly educated people who not only can learn to cope (quickly) with the financial and market vicissitudes of the business world, but who also can operate effectively in diverse managerial and societal settings. At the same time, however, the typical corporation *also* expects business school graduates to “hit the ground running” and to be able to *do* something immediately upon graduation. (p. 314)

Porter and McKibbin point out that it is not a new concept to seek balance in higher education. But the new twist (in 1988) is that the rising costs of education and the increasing complexity of business make it that much more important to achieve, at the same time that it is becoming much harder to accomplish.

Promoting Curricular Change in Business Education

A college curriculum is significant chiefly for two things: it reveals the educated community’s conception of what knowledge is most worth transmitting . . . and it reveals what kind of mind and character an education is expected to produce.

Hofstadter and Hardy, 1952, p. 11; cited in Gordon and Howell, 1959, p. 17

The Case for Change

As the 20th century drew to a close, it was apparent from perspectives in both business and academia that great changes were occurring and

compounding at faster and faster rates in the business world. Yet within the academic community, most schools were just getting comfortable with curricular changes they had made to address shortcomings identified in the late 1950s in the Foundation studies on business education published by the Ford Foundation, (Gordon & Howell, 1959) and the Carnegie Group, (Pierson, 1959). Pre-dating Porter and McKibbin by 25 years, the Foundation studies represented the best critical thinking regarding the state of business education in mid-20th century, and both reports made many recommendations for change.

The Ford report, *Higher Education for Business*, by R. A. Gordon and J. E. Howell, (1959), reported the results of a study begun five years previously, in 1954 that was driven in part by business leaders, who felt the graduates of most business schools lacked the basic skills needed to perform on the job. Their training was viewed as too narrow, and too vocational in nature. According to Gordon and Howell, business educators were attempting to produce broadly educated generalists, while at the same time trying to train functional specialists to meet the new technological demands of the business community. The authors concluded that academia was failing at both tasks; that America's universities were not positioned to accommodate the expanding needs of business. The report called for sweeping changes in business curricula, with a stronger focus on a liberal arts foundation and greater emphasis on research.

The Carnegie report, *The Education of American Businessmen: A Study of University-College Programs in Business Administration*, by F. C. Pierson (1959), took a critical look at all the different ways a person could find preparation

for a career in business, including trade schools, associate degrees, liberal arts education, or a specific undergraduate business curriculum. The Carnegie report concluded admissions standards were too low for most business schools, and similar to the Ford report, recognized that the faculty of business schools were faced with a dual obligation to functionally prepare graduates for an entry-level position, and at the same time, instill in them the well-rounded long view they would need as general managers.

These two foundational reports have been touchstones and measuring sticks for business school curriculum for almost 50 years. But business has continued to evolve, and today holds little resemblance to the business world of the late 1950s, when computing and communications technologies were just beginning to emerge, and trade barriers still protected economies, including America's, from significant foreign competition.

Even though these reports were published in 1959, J. R. Lough, in his dissertation, published almost 40 years later in 1997, studied the degree to which 52 leading business schools, as classified by a popular national weekly magazine, had conformed to the Ford and Carnegie studies' recommendations. His research found that in over half the dimensions suggested for change, little or no change was found in the schools he studied. And, in fact, there was evidence that business schools had actually moved away from the recommendations of the foundation reports.

The 1988 Porter and McKibbin report, *Management Education and Development: Drift or Thrust into the 21st Century?* introduced in an earlier

section, was commissioned by the AACSB in part to update the state of business education 25 years after the Foundation studies were published, but primarily to predict the future course of business, and thereby the changes needed for business education to keep pace. The authors surveyed a wide spectrum of stakeholders in business education, including deans and administrators, faculty, undergraduate alumni, and graduate alumni. They also included several categories of employers, including Chief Executive officers (CEOs), Senior Corporate Executives (SCEs), vice presidents of human resources (VPHRs), corporate college recruiters, and mid-level operating managers. Business leaders were selected from two different pools: Those from private industry, including non-profit organizations, and members of business school advisory councils.

The report highlighted both then-current criticisms of the business curriculum, and recommendations for change. Among the major types of criticism, the authors identified both general criticisms, and those addressed to specific topic areas. General criticisms included “insufficient emphasis on generating ‘vision’ in students” (p. 64). This criticism states that current course work focuses on problem solving rather than problem identification. Students spend more time analyzing solutions than on creating new approaches to problems. A second general criticism is “insufficient emphasis on integration across functional areas” (p. 65). The perspective of the critics here is the lack of sufficient attention to show students how specific functional knowledge applies in an integrated approach to the fast changing, complex problems of contemporary business. The specific topic area criticisms include “too much emphasis on

quantitative analytical techniques, insufficient attention to managing people, insufficient attention to communication skills, and insufficient attention to the external business environment” (p. 65). Criticisms also included “insufficient attention to the international dimension of business, insufficient attention to entrepreneurship, and insufficient attention to ethics” (p. 66).

It is interesting to view the overall opinions of these broad stakeholder surveys, but in order to help make the case for a disconnect, or gap, between academics and business regarding the employability of business school graduates, it is most enlightening to study the areas where there is a significant divergence of opinion. These differences appeared strongest in four distinct areas: Overly high expectations about initial pay and responsibility, a lack of organizational loyalty, poor communication and interpersonal skills, and a lack of leadership skills.

Overly high expectations—corporate respondents thought realistic expectations were not the norm for business graduates. Instead, graduates had high expectations about pay and responsibility that were not shared by their new bosses. This was in “sharp contrast” to all academic stakeholders, including deans, faculty and students. This gap indicates either an issue for how students are prepared, or how they are utilized.

Lack of organizational loyalty—this issue is more pertinent for graduate business students than for undergrads.

Poor communication, leadership and interpersonal skills—business leaders were most concerned about the lack of strength of business graduates in their

lack of a basic understanding of how business works, that is, how business operates in both practical and theoretical ways, and their low levels of “soft” skills--leadership and interpersonal relations.

Porter and McKibbin (1988) comment:

The message for business schools would seem straightforward: The business world regards the student product as relatively well prepared for starting out with a good base of knowledge in a particular business subject matter area, and for undertaking analytical tasks. The graduate is not regarded as particularly well prepared for encountering various day-to-day realities of the business world nor for exercising requisite levels of personal skills, including both communication (in the broad sense of being able to get meaning across and to be persuasive) and leadership that is capable of influencing others with whom they work. (p. 122)

In their conclusion, the authors state: “Perhaps our most disturbing finding was the general absence of concern for, or even expressions of awareness of, looming changes in the environment in which business schools will be operating in the next 10 to 15 years” (p. 311). Regarding the business school curriculum, Porter and McKibbin recommend five important areas for change:

Breadth of coursework--one of the key findings among corporate executives was a concern that graduates were too narrowly trained in business. Students lack a broader education in the arts and humanities. As the authors put it: “We feel that this is one of the most important challenges for business schools as they prepare for the 21st century . . . to incorporate the understanding of a

broad, well-rounded education in the preparation of business students” (p. 317). This opinion was not shared in the survey by academic deans and faculty, and the authors predicted little headway in this area in the future.

The external organizational environment--most of the emphasis in the traditional business curriculum is focused internally, on operational and financial effectiveness. But the importance of studying and understanding the influence of the economy, government regulation, cultural shifts, the legal climate, and the changing nature of competition on the internal operation of the organization has been minimized in most business schools even though these forces are impinging more frequently on the firm’s decisions. And the authors expect their influence to increase in the future.

The international dimension--the prospect of continuing globalization of markets and free trade between more nations in the future make it imperative, according to the authors, for business schools to help students become more knowledgeable about the international aspects of business, but they’ve seen little evidence this is happening.

The information/service society--the shift to both a service based economy and the rising importance of information systems give rise to this recommendation from the authors, which goes beyond “the insertion of one or two MIS (Management Information Systems) courses into the curriculum” (p. 321). Porter and McKibbin suggest, “business/management schools in the next decade will need to take a hard look at how an information orientation can be incorporated into the entire curriculum” (p. 321).

Soft (people) skills—throughout their study, the authors were confronted with this issue, from both the business community and academic deans and faculty. As the structure of business organizations continues to evolve to adjust to new markets and services, work is becoming less hierarchical and more lateral. Because of the need to make decisions faster, firms can no longer accommodate the old, time-consuming “top-down” approval structure. More decisions will be made by agreement among equals, sometimes operating in project teams. This calls for improved leadership and interpersonal skills. The authors are concerned that business schools will be effective in teaching these types of skills, because they will have to deal with students two or three decades of prior conditioning in these areas.

Cross-functional integration—according to the authors, in their survey work at 60 different business schools, they found an “overfocus on traditional functional areas . . . and a corresponding underfocus on how knowledge based on these specific functional areas can be put together to solve the complex, multifaceted problems in today’s business world” (Porter & McKibbin, 1988, p. 322). Recognizing that most schools provide a single capstone or finishing course that is designed to integrate all the functional topics, they believe this is not sufficient, for several reasons. First, the growth of entrepreneurship “demands a more integrated, cross-functional approach” (p. 322). Second, the increasingly global nature of business, combined with the growth of the service and information-based economy also constitute “powerful pressure for developing a wholly revamped approach” (p. 322).

One of the points Porter and McKibbin (1988) made several times in proposing these recommendations was the realization that because of the finite nature of the curriculum, something had to go to make room for something new. And this becomes the real issue for educators: how to re-design the curriculum to accommodate all the recommendations, and still maintain a focus on producing knowledgeable, well-rounded students.

The AACSB published another influential report in 1996, *A Report of the AACSB Faculty Leadership Task Force*. This task force attempted to address faculty issues as they related to “the growing misalignment of business needs and business school and faculty delivery of teaching and research” (p. 22). The report identified some of the symptoms they encountered in their studies, including “criticism from business on the irrelevance of . . . the business school curriculum” (p. 1), a “shortage of interdisciplinary faculty” (p. 3), and a “reluctance of business schools and faculty to change” (p. 3). Identification of symptoms led to the task force’ problem definition:

The primary problem is that faculty skills are not aligned with the rapidly changing needs of business Although school and faculty competencies have advanced, the gap between practice and academic research and teaching has widened. The lack of business interaction, changing technologies, aging faculty and shortage of incentives to change have inhibited faculty initiative for change. (p. 4)

According to the report, “the greatest needs exist for improvement in multidisciplinary methods, new teaching technologies, technological awareness

and innovative research” (p. 5). The strategies and tactics proposed by the task force include developing closer links between business schools and business, promoting interdisciplinary studies in the learning environment, encouraging doctoral candidates to have interdisciplinary and multidisciplinary experience, and “broadening the tenure criteria to include relevance [of research], interdisciplinary focus and an emphasis on pedagogical theory” (p. 20).

Another task force of business educators, commissioned by the AACSB, wrote a third report published in 2002, titled *Management Education at Risk*. Regarding the business school curriculum, the task force found that “complex opportunities that emanate from the worldwide scope of operations, outsourcing, supply chains, partnerships, and financial and consumer markets—all linked in real time through the internet—are not reflected adequately in curricula and learning approaches” (p. 20). The task force called for “blurring disciplinary boundaries” (p. 20). In this regard, they pointed out their concerns over the relevance of:

Functional silos that provide the organizational framework for departments, core curricula, and even elective courses Yet actual business problems or solutions rarely present themselves in neatly organized, vertical silos. The transformational role of technology . . . has blurred the lines among business functions, industries, and markets. (p. 20)

Clearly, these accreditor-sponsored reports put an emphasis on the need to integrate business functions into the curriculum. But how are schools to accomplish this task? Kenton Walker and Ervin Black proposed a cross-

functional integration technique in 2000. Their article, *Reengineering the Undergraduate Business Core Curriculum: Aligning Business Schools with Business for Improved Performance*, proposes a “process-centered model of business education, consistent with the trend toward process-managed organizations” (p. 194). This will provide a “central theme to integrate” (p. 195), and provide a “framework for integrating elements of the core business curriculum and administration of business faculty based on the concept of business processes” (p. 195).

The concept has its roots in business process reengineering (BPR) practice. BPR redefines a business organization from the traditional group of functional departments into a series of business processes. These processes describe how an organization performs its work. Rather than discrete functions, the output of a business is a result of the interaction of many different functions. “For example, the sales and collection process . . . might involve personnel from sales, production, purchasing, and finance. The success of the process depends on managing the process participants as an integrated unit” (p. 197). The point of this is that primary outputs from business organizations are not aligned with the functional areas that are traditionally taught in business schools.

The authors suggest that schools need to adopt an interdisciplinary approach in order to successfully prepare students for success in business. But they also believe few schools are equipped to do this, in part because of issues as outlined in the AACSB Faculty Leadership Task Force report.

Walker and Black then outline process-centered business courses that might replace the CBK courses in the traditional core curriculum. These include courses that cover the acquisition of capital resources, the acquisition of human resources, the conversion/service process, the sales/collection/customer service process, and an organizational performance measurement and management course. The authors suggest these courses should be linked through business cases that can be used in each of the process courses to help the students identify the connections between all the processes.

The authors see several groups of benefits from this process-centered approach. First, it provides a viable strategy for curricular development. Second, it makes for an efficient educational process, and third, it provides a change in responsibility for delivering course work from individual faculty to interdisciplinary teams.

The Business-Higher Education Forum, an organization made up of executives, educators, and foundation leaders has as its goal to advance solutions to educational challenges to make the U.S. more competitive globally. Their 1997 study made specific recommendations for higher education to make sure graduates acquired the skills and knowledge they need to be successful. These included:

- The core curriculum needs to help students develop flexible and cross-functional skills such as leadership and teamwork
- Methods of helping students acquire a passion for life-long learning must be integrated into the core curriculum

- Developing a collaborative method for restructuring curricula and pedagogy to reflect the changing needs of the global economy
- The academic community needs to find more examples of real-life experiences for students, and
- There needs to be an ongoing dialogue between faculty and business leaders to insure that college graduates are prepared for the workplace.

(p. 8-9)

The Case for the Status Quo

This review would not be complete without a look at those within business education who make the case to stay the course; do not change just because business wants it! What do they know? Or, as J. E. Howell, the esteemed co-author of the Ford Foundation report (reviewed earlier), said in an interview, conducted 25 years after the famous report was issued in 1959:

A business school has to serve the profession, but that doesn't mean that it should always do what the profession wants it to do. Its obligations are to its students and to the profession as it's emerging, not necessarily as it exists today. I think it is important that business schools stay some distance away from the business community. (Schmutter, 1984, p. 12, cited in Dulek and Fielden, 1992, p. 15)

This quote may in fact be representative of a good many faculty in business education. The case is made in two noteworthy articles. The first is a bit ironic in tone, but the message is clear: *Why Fight the System? The Non-Choice Facing Beleaguered Business Faculties*, by Ronald Dulek and John Fielden

(1992), takes issue with the calls for change, and they build their case based on several strong points. The academic value system prefers the academic to the utilitarian, Ph.D. training over lesser degrees, and loyalty to a specialty over loyalty to students. Business schools were criticized in the late 1950s by the two Foundation reports that likened a business education at the time to little more than vocational school. Business academia reacted dramatically, adding a stronger focus on liberal arts, more research in business disciplines, and development of post-graduate, PhD programs on many of the larger campuses. As the authors put it:

So who cares what business critics say? The business faculty's main audience is neither business nor students, but those who hand out national recognition- scholars in their discipline. Professors are more concerned with impressing other professors than they are with impressing business people. (p. 14)

They discuss how reward structures in higher education encourage this behavior. Not only is faculty rewarded more for research than teaching, the authors point out the risk that younger, non-tenured faculty face by considering interdisciplinary work.

Dulek and Fielden (1992) do see a chance for change in business academia, but think it will depend on several things occurring, including faculty outside business schools making a case against the continuation of higher salaries in the business schools. Also, understanding that most business research is school-sponsored and very little has practical application. Finally, if

businesses begin to hire liberal arts majors for entry-level business jobs, it will signal that business schools have failed to adequately train their own graduates. The authors believe that eventually business will “turn its back both on . . . questionably trained students and on [business school’s] highly esoteric research” (p. 18).

In a more recent article, Campbell, Heriot, and Finney (2006), argue that most undergraduate capstone courses provide sufficient cross-functionality and that individual courses may be modified for content including collaborative projects, but there should be no sacrifice in the depth of specialization in individual courses. The authors claim the issue is primarily pedagogical, not curricular. The solution lies in increasing the amount of integrating pedagogy in a course. This may be achieved by using multiple course cases, guest speakers, simulations, more emphasis on teams, reinforcement of basic skills, and course coordination.

Integrated Business Curricula in the Literature

The traditions and structure of academia work against rapid change. There are too many stakeholders who can block change and almost no one who can legitimately drive it.

Allan Cohen, 2003, p. 153.

Schools That Have Made the Change

It was reported by DeMoranville, Aurand, and Gordon (2000) that only about 5% of the more than 500 AACSB-accredited undergraduate business

schools in the U.S. have made some integrative change to their programs; yet the literature does yield a number of reported examples. A more recent survey of AACSB deans and administrators found the number of schools either using or planning some form of functional integration had risen to about 23% (Athavale, Davis, & Myring, 2008). The following table lists, by school, and year of publication, selected articles describing curricular integration efforts. These articles, among others, are discussed in this section.

Table 1

Partial List of Undergraduate Business Schools Reporting an Integrated Core Curriculum

School (Pub Yr)	Author(s)	Integration technique	Team Taught	Comments and Findings
Regis College (1994)	Jutras	Basic skills into mgmt courses	NA	Use of liberal arts and business faculty
UMass Lowell (1995)	Puri	CBK-Cross functional	NA	New product development
Univ of Idaho (1997)	Stover, et al	CBK- Cross functional	Yes	Process focus
Northern Illinois (1998)	Bishop, Vaughan, Jensen, Hanna & Graf	CBK- Cross functional	Yes	Process focus

School (Pub Yr)	Author(s)	Integration technique	Team Taught	Comments and Findings
Univ of Central Florida (1998)	Putchinski	CBK- Cross functional	Yes	Dissertation- case study
Boston College (2000)	Corsini, et al	CBK- Cross functional	Yes	Process focus
New Mexico State (2000)	Sautter, Popp, Pratt, & Mills	CBK- Cross functional	Yes	Process focus
Northern Illinois (2000)	DeMoranville, Aurand, & Gordon	Cross-functional	Yes	Process focus
Univ of Idaho (2000)	Pharr	CBK- Cross functional	Yes	Process focus
Wisconsin Oshkosh (2001)	Hartenian, Schellenger, Frederickson	Capstone course	Yes	Project-management based
Babson College (2003)	Cohen	CBK- Cross functional	Yes	Process focus
Grand Valley State (2004)	Cannon, Klein, Koste, Magal	Case study with ERP	Yes	Content sharing across courses
Boston Univ (2006)	Brunel & Hibbard	Cross-functional team project	Yes	One-semester
Fairfield Univ (2006)	Smith Ducoffe, Tromley & Tucker	CBK- Cross functional	Yes	Inter-relationship of functions. Alumni reported program helpful.

Here is an explanation of some of the acronyms, jargon, and shorthand found in this table:

1. CBK--common body of knowledge is a designation used to describe the contents of a group of core courses found almost universally in undergraduate business programs. These courses are functional in nature, and typically include marketing, finance, operations (or production), organizational behavior, information systems, and business policy or strategy. Most of these integrating examples attempt to extract elements from each of these areas and combine them into an integrated course, which may be team-taught, that emphasizes the inter-relatedness of these functions in business processes.
2. Team taught--Refers to an integrated course that uses a team of instructors, usually functionally oriented, to demonstrate the inter-relatedness of functional courses in a business setting. The topics are sometimes interwoven within lectures.
3. Process focus--this term relates to the idea presented by Walker and Black (2000), that most businesses do not operate as groups of functional silos, but follow very specific cross-functional processes in the pursuit of their goals. So, for instance, rather than focus on marketing, production, or logistics, businesses focus on order attainment and fulfillment. Another example might be that the finance or human resources departments of a business are really concerned with the procurement and optimal use of human or monetary capital in pursuit of a business' goals.

4. Lock-step curriculum--this term refers to a sequenced course schedule that links pre-requisites to courses in a prescribed manner, so that students build on prior knowledge in an orderly way (Kolbe & Cui, 2007).
5. Capstone course--usually the last course in a progressive curriculum, which incorporates aspects of individual courses that precede it, and link them together. This is the term used in many examples of traditional curricula to describe a final, integrating business policy or strategy-focused course.
6. SCM--or supply chain management, is the integration and oversight of the movement of goods through the different channel members in the marketplace, starting with raw materials and ending with the final consumer. Companies link in SCM through mutual benefit to maximize velocity and minimize waste (cost) through the entire supply chain. (Closs & Stank, 1999).
7. ERP--enterprise resource planning systems are software programs that provide company-wide data access and link business processes for quick access to information and real-time performance measures.

Motivations for Change

Almost without exception, the authors of these articles cite the changing face of the business world as the principle factor that motivated significant changes in curriculum. The introductory statement of Stover, et al. (1998), is typical: "The environment faced by many of today's organizations continues to be increasingly complex and uncertain. Globalization and increased competition are

forcing companies to make major changes.” They continue: “As organizations change and adapt in response to changing environmental conditions, there should be a corresponding change and adaptation in institutions of higher learning” (p. 1). Or, as Bishop, et al, (1998), put it:

Perhaps the most compelling motivation for cross-functional integration of the business curriculum is the evolving nature of the business world.

Organizations have fewer managerial levels and strategic direction has dictated that more responsive and significant decision making take place at lower levels of the organization. In this type of organization, systems awareness and horizontal communication are required. Students prepared to practice in a narrowly defined specialty without cross-functional awareness are poorly suited for the challenges they will meet in this type of organization. (p. 65)

These changes relate in some cases to the difference between traditional functional silos and business processes as organizational models for modern business. In other cases, they refer to the continuously evolving skill sets that employers seek. According to Hartenian, Schellenger, and Frederickson (2001), business school graduates trailed business organizations’ needs for “basic skills (e.g., business writing, project management) and who had a good grounding in all aspects of organizational operations” (p. 149). Ducoffe, Tromley, and Tucker, (2006), make the case for the importance of interdisciplinary education as a motive for change. Drawing on Davis (1995), these authors make the case for its importance in the curriculum as first, a way to resolve problems that derive from

overspecialization in a discipline, creating a “holistic experience” for the learner, and second, addressing questions about the shortcomings of our current programs as they relate to the “rapid technological and other changes that students will face” (p. 278).

Another motivation for some of these schools is the recognition that business has placed a much greater emphasis on teamwork for new product development, project management, and problem solving. DeMoranville, Aurand, and Gordon (2000) point out that in recent years, and in many industries, management has focused on the “critical and continuing need” to use cross functional teams of employees from many different functional areas to address a “multitude of marketing and other business-related issues” (p. 29). In fact, this theme of teamwork and the need to develop team skills is pervasive throughout these examples of integrated curricular development.

Another significant motivating factor is the recognition that the principle business school-accrediting agency, the AACSB, has expressed concern over the growing gap between business practices and business education and the need to “blur the boundaries between educational disciplines” (AACSB, 2002, p. 2). In fact, the language used in earlier AACSB accreditation guidelines is even stronger with regard to recommendations for inter-disciplinary coursework. As noted in Bishop, et al. (1998): “ The motivation for many program revisions is section C.1.3.e of the *AACSB Standards for Business Accreditation* which states, ‘The curriculum should integrate the core areas and apply cross-functional approaches to organizational issues.’” (p. 65). This language is much stronger

and direct with regards to recommendations for curricular change than later positions taken by the same accrediting agency.

Integrating Methods

The most popular integrating method among those reported here is some manner of consolidating CBK courses into a cross-functional, process-based, team-taught course (or courses) usually called the Integrated Business Core (IBC). This term is used to describe several of these examples (Bishop, et al., 1998; Brunel and Hibbard, 2006; Michaelsen, 2006; Pharr, 2000; Stover, et al., 1997). These schools often took the opportunity to reduce or re-engineer the number of hours that had been designated to the CBK courses, freeing up hours that could be used for electives or more emphasis on major studies. This resulted from the elimination of redundancies in course content that had existed in the traditional CBK model (Stover, et al., 1997).

Other schools have chosen to use an integrating tool, such as the new product development process (Puri, 1995). In this model, traditional courses are augmented with a business problem that cuts across different functional areas. The program “integrated the theory and practice of functional areas in a cohesive framework...ensuring that students develop an understanding of fundamental concepts” (p. 1).

Another example of an integrating tool is the use of ERP software, combined with a multidisciplinary case study across courses and semesters (Cannon, Klein, Koste, & Magal, 2004). The case is used in all the classes, and some parts of it are integrated into the ERP software. This technique is also the

primary topic in a recent dissertation entitled “Integration of Specialized Disciplines in Business School Curriculum: Applying the SAP Process”, by D. D. Holsing (2007). In his thesis, Holsing studied the integrating effects of ERP software in more than 40 business schools.

Kolbe and Cui (2007) describe a sequenced, lock-step curriculum combined with significant emphasis on metrics and business mentoring to develop an integrated marketing department curriculum. They report increased job placement and higher student satisfaction among marketing majors.

Challenges to Implementation

Time and again, the authors reported similar challenges to implementation. A representative summary of these can be found in Sautter, Popp, Pratt, and Mills (2000). The authors identified two main areas for consideration, administrative and instructional issues. Among the administrative issues are resource allocation, turf protection, and articulation concerns. The latter refers to potential problems for students transferring out of the program into other business programs, and the potential problem in applying proper class credit moving from an integrated back to a traditional curriculum. Resource allocation problems occur as a result of the interdisciplinary nature of the staffing for these team-taught courses. Historically these decisions were made within a functional department. Faculty concerns arose over equity, credit for student hours, and number of faculty assigned to integrated coursework. The issue of turf protection relates to some faculty members’ beliefs that an integrated curriculum “harms more than helps student perceptions of . . . individual disciplines.

Specifically, some . . . feel that the emphasis . . . makes it more difficult to recruit majors” (p. 26).

Instructional issues that arise with the integration process, according to Sautter, et al. (2000), include shifting learning objectives and continuous improvement measures, making a successful transition to team-teaching, and managing student expectations and frustrations with the new curriculum. Pharr (2000), refers to attitudinal, infrastructure, and resource issues, as those that may be subtler than content and presentation-related issues, but equally important. Curricular modifications require the “acceptance and enthusiastic support from all parties involved” (p. 20). Faculty members must be willing to give up their “fiefdoms.” Although most faculty members are discipline-specific specialists, they must be willing to explore other areas of their own discipline as well as other functional areas to understand the interactions and interdependencies. “For many, this will take a major commitment of both (a) time to acquire this new knowledge and understanding and (b) openness to acknowledge the status and contributions of other business disciplines” (p. 21). A critical mass of faculty willing to make the commitment to interdisciplinarity is critical for long-term program survival. Pharr (2000), also comments on the need to convince students that the extra work involved in the integrated curriculum is worth it in terms of their increased attractiveness to employers, if they can show “a demonstrated cross-functional understanding of business” (p. 21).

Infrastructure issues include “hiring new faculty with demonstrated cross-functional expertise, and creating a reward structure that encourages active

participation in the integration effort” (p. 21). Schools need to adopt the integration concept into their most basic strategic planning. Pharr (2000) suggests that any school considering a move to an integrated curriculum submit to an “integration readiness test” (p. 23). This test, made up of 12 questions, follows:

INTEGRATION READINESS TEST

1. Are the business school constituents committed to developing and delivering an integrated course offering?
2. If not, can the necessary commitment be cultivated?
3. Are sufficient resources available to fully implement an integrated business core curriculum?
4. If not, can the resource base be expanded?
5. Have/can new and replacement faculty positions be earmarked for cross-functionally trained candidates?
6. Do current faculty members have the necessary expertise to deliver an integrated course offering?
7. If not, can faculty development efforts bridge the gap?
8. Does the student body have sufficient ability to take on the additional rigor of the integrated curriculum?
9. Do students have flexible schedules that would allow for larger blocks of class time?
10. Are employers convinced of the benefits of cross-functionally trained employees?

11. Are employers willing to support the new curriculum through funding and hiring efforts?

12. If not, can employers be convinced to do so?

In his 2003 case study of the *Babson College Transformation*, Allan Cohen describes the process that precipitated successful implementation of an integrated undergraduate business curriculum in that school using a change formula adapted from management consultant David Gleicher as follows:

$$C = f(D \times V \times P \times S) > Co$$

Where:

Change occurs when the product of Dissatisfaction with the status quo, multiplied by a Vision of the future, multiplied by understood and agreed Pathways and Procedures to accomplish the change, multiplied by Support from key players, is greater than the Cost of change. (p. 157)

Cohen describes the idea of dissatisfaction with the status quo in a “curvilinear fashion: the greatest readiness to change occurs with moderate dissatisfaction.” He goes on to explain that at either end of the spectrum, there are groups who do not support change. At one end, those who are content with the status quo see no reason for change, and at the other end, those who are so frustrated that they are unable to change. Change agents therefore should try to find ways to move stakeholders into a “zone of moderate dissatisfaction . . . in

some cases this will mean attempting to reduce anxiety, in others, *increasing* anxiety or dissatisfaction is called for” (p. 158).

Cohen sums up his piece with a fitting conclusion: “The traditions and structure of academia work against rapid change. There are too many stakeholders who can block change and almost no one who can legitimately drive it. Yet the experience of Babson suggests that change isn’t impossible” (p. 165). He believes although faculty may be cynical and desire autonomy, most faculty members are “idealists who want to believe in education, and if given the chance to create extraordinary education, many will join” (p. 166).

In his dissertation case study on the Babson College MBA curricular transformation, Joseph Zolner (1996) reached the following conclusions:

- Curriculum innovation is an iterative, trial-and-error process
- Off-campus influences (employers, alumni, accreditors) can be used to trigger and sustain innovation
- Curriculum change is best achieved by administrators who involve faculty in collaborative ways
- Decentralized governance and decision-making systems increase prospects for substantial innovation. (p. vii)

Linda Putchinski reviewed the literature on change theory as it pertains to higher education, in her 1998 dissertation, *Case Study of Curriculum Change in a College of Business Administration*. She summarized as follows:

There does not seem to be any consistent change methodology that will work for every situation, especially in the university environment, where

the process of change usually affects not only curriculum, but working relationships, perceptions and attitudes of those involved in or affected by the change. (p. 47)

Theoretical Framework

One cannot manage change. One can only be ahead of it.

Peter Drucker, 1999, p. 73.

There is no question. For business schools to close the gap between business' expectations of graduates and the knowledge, insights, and skill levels of most of today's graduates, changes in curricula and program need to occur. But changes need to go much further than programs. Specializations, academic freedom, work hours, incentives and reward systems all must change. In fact, the most successful schools, in terms of curricular revision that are examined here, have established a new approach to the idea of change in higher education: they welcome it at all levels (at least those of their faculty who opt in).

Change Theory

Kurt Lewin (1947), a social psychologist, is credited with contributing to the development of field theory, action-research, and group dynamics. The idea of field theory is that not only one's own personality, but the environment that surrounds them as well influences an individual's behavior. From his studies of groups, Lewin formulated a relatively straightforward, three-step theory to describe the change process. Groups tend to be "quasi-stationary." There are forces working both for and against change in groups. Lewin called these "driving

forces” and “restraining forces.” In order to achieve lasting change, Lewin lays out three steps: unfreezing, moving, and re-freezing. These steps describe the actions required to first, create an atmosphere where change is possible, and then make the change, and finally, adopt the change as the normal state so that the group does not revert to their original behavior. Lewin believed that groups have a strong influence on individuals. He also believed it was easier to change a group than to change like-minded individuals. Lewin did believe that for a change to become permanent, this re-freezing of the new behavior had to occur. Another unfreezing would follow that.

There are other examples and variations of Lewin's pattern of change in the literature. Kotter (1996), for instance, described his change theory in eight steps. These are:

1. Establish a sense of urgency;
2. Create a coalition;
3. Develop vision and strategy;
4. Communicate that vision;
5. Empower innovators for action;
6. Generate short-term gains;
7. Consolidate these gains and expect more change; and,
8. Anchor the innovation in this new culture.

These eight steps relate to Lewin's three-step theory, albeit with more detail.

Change Theory in Higher Education

In *Dynamics of Academic Reform*, J. B. Hefferlin (1969) calls it “continuous adaptability. We hope for continual academic change beyond sporadic and occasional reforms . . . beyond the fits and starts and spurts of housecleaning followed by years of inertia” (p. 4). Hefferlin lists several reasons why institutions of higher education are particularly reluctant to change. First, they are “basically conservative” (p. 13) in both purpose and support. “Their governance stems from the most successful and wealthy groups in society . . . and professors . . . are members of a professional elite . . . and their academic disciplines represent a long tradition of custom and precedent” (p. 13). Second, the author describes the entire educational system as “vertically fragmented” (p. 13), meaning that each level of education is trapped between others. They accept the output of the lower level, and prepare it for the next. Too drastic a change would upset the entire system. Third, an academic institution’s reputation is not based on innovation. “The accepted roads to academic prestige and advancement are not those of unconventionality” (p. 14). Fourth, faculty members, unlike those in other professions like medicine or law, have observed their own vocation for years as students. “As a result, the process of self-selection in college and university faculties is particularly narrow” (p. 15). Fifth, academics operate independently inside the system. “A professor who receives tenure also receives tenure for his program and techniques. His powers of passive resistance are therefore great” (p. 15). Sixth, academics do not believe in efficiency in the institution. Many academics believe education is intangible,

unable to be measured, and therefore more an art than a science. Therefore, many inside the profession discount the study of education. Finally, Hefferlin believes that higher education is “deliberately structured to resist change” (p. 16). In addition to tenure and academic freedom to protect individual faculty, schools are fragmented into departments, schools, and divisions that “assure the diffusion of power” (p. 16). For all these reasons, academic institutions are more resistant than most organizations to change. So when do academics change? According to Hefferlin, when change is the least of the threats facing the institution, and “more desirable than any other alternative. Without the motivation of perceived benefit-prestige, economic return, enhanced self-image-it will not occur” (p. 19).

Learning Systems

Donald Schon helps move change theory into the idea of learning systems in his 1973 book, *Beyond the Stable State*. Schon believed that society and its institutions are in a continuous process of transformation. Most individuals, however, put their belief in “the stable state,” which is “the constancy of central aspects of our lives, or the belief that we can attain such constancy” (p. 9). This is the individual and society’s protection from uncertainty. Institutions, (like higher education), are characterized by what Schon calls “dynamic conservatism-a tendency to fight to remain the same” (p. 30). But there is a pervasive and continuous technical change that threatens the stable state. The loss of the stable state means society and all of its institutions are in a continuous state of transformation. Schon contends society must learn to understand these

transformations, and adapt them. In this way, according to Schon, we become adept at learning, and in fact develop learning systems, those that can bring about their own transformations. “The task which the loss of the stable state makes imperative, for the person, for our institutions, for our society as a whole, is to learn about learning” (p. 29). The author felt we must not just be able to transform our institutions in response to changing times. We must create institutions that are learning systems, capable of continuing to self-transform.

Schon asks: “What is the nature of the self-transforming process? What are the characteristics of learning systems? What limits of knowledge can operate within the process of social learning?” (p. 29). Schon invokes “dynamic conservatism” (p. 57), which allows a learning system to change states without disrupting its basic functions. Systems maintain identity, but they “must be capable of transforming themselves” (p. 57). The author equates business organizations with learning systems. He notes that businesses have moved from a product-based organization to business system integration. Businesses, in order to survive, must become capable of continually transforming themselves.

Learning Organizations

Peter Senge’s 1990 book, *The Fifth Discipline: The Art and Practice of the Learning Organization*, helped to popularize the notion of a learning organization.

According to Senge:

Learning organizations are organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is

set free, and where people are continually learning to see the whole together. (p. 3)

Organizations, faced with the need for rapid and continual change, must be flexible, adaptive, and productive. And although everyone is capable of learning, they are often operating within a structure, like higher education, that is resistant to change. Senge puts forward five basic disciplines that he believes separate learning organizations from the traditional model. These disciplines are systems thinking, personal mastery, mental models, building a shared vision, and team learning. The cornerstone of these, the fifth discipline, is systems thinking. This discipline integrates the other four, and fuses them into a cohesive body of theory and practice (Senge, 1990). This integrative aspect of systems thinking lends itself to application in the change efforts of business educators linking discrete functional courses, such as marketing, operations, and finance, into a coherent, integrated, multidisciplinary offering that helps guide business students to an understanding of business systems; how all the parts operate together in practice to produce measurable results. Several of the five disciplines may apply in achieving curricular integration, including, developing a shared vision, changing mental models of existing conditions, and team learning that emphasizes the collaborative nature of interdisciplinary learning.

In a later collaboration, Senge, et al. (1999), expand the distinction between change, transformation, and profound change. Change occurs when an organization recognizes and reacts to some outside force that threatens its survival or success. Transformation is more accurately a description of a one-

time reaction to an outside event. Profound change, though, is achieved when an organization not only responds to an outside threat or opportunity, but also makes fundamental changes in its capacity to change. “In profound change, there is learning” (p. 15).

Summary

This review of literature has examined the changing global business paradigm and employers’ changing skill and knowledge expectations for entry-level employees. It has also looked closely at the recent history of changes in business school curriculum and continuing calls to promote change from within academia. A significant number of program changes across a wide spectrum of AACSB-accredited schools were examined to study their challenges and effectiveness in improving student employability outcomes, and finally, a theoretical framework was built around change in academia.

In spite of the dramatic evidence of business’ changing dynamics and expectations, most business schools still maintain discipline-based curricula with the traditional CBK coursework, leaving it to the individual student to synthesize the integration of the different functions, even though the vast majority of students have no business experience to help them in this process.

Oblivious to some very strong voices, including the AACSB, the principle accrediting agency for business schools, and some very influential business and academic associations, most business schools continue down the path of least resistance, serving up a curricular stew that is old and stale. This study will add to the literature in this topic by shedding light on this apparent paradox: Knowing

how business and employers' expectations have changed, why do not more schools change?

To answer this question, we need to answer several others. What were the motives? What were the conditions that led to success in those schools that have moved forward? Is there a process in place to insure change continues? Can these conditions be duplicated in other schools? That's what this study will attempt to identify.

CHAPTER 3

METHODOLOGY

Introduction

A significant gap between what most undergraduate business students learn, and the skills and knowledge employers expect in their entry-level employees was identified more than 20 years ago (Porter & McKibbin, 1988). In spite of the evidence, the majority of undergraduate business schools have maintained the curricular status quo, offering core courses that cover the functional areas of business in three-credit bites, with little acknowledgement of the critical dependencies and continual interactions that routinely occur in business practice. Some critics of the gap claim business schools are not only out of touch with the profession they serve, but unwilling and unable to change (Bennis & O'Toole, 2005). One study reports that only about 5% of the more than 500 AACSB-accredited undergraduate programs had made any significant integrative or interdisciplinary changes to their curricula (DeMoranville, Aurand, & Gordon, 2000). A more recent study puts the number at approximately 23% (Athavale, Davis, & Myring, 2008), but this includes all types of integrating techniques, and in many instances, there is little change in the curricular model other than the addition of an integrating tool or topic like business planning or new product development, which is examined across courses and disciplines.

The purpose of this research was to examine the experience of faculty, administration, current and former students, and other stakeholders, including employers at an exemplary school that has made significant and lasting

curricular and pedagogical change. The goal is to increase understanding of the motives for change, the process of change, and the results that have been achieved in closing the gap between what business graduates learn and what employers need. The result may provide a blueprint or roadmap to help other schools that desire to move in the direction of a functionally integrated, interdisciplinary, team-taught undergraduate business core program.

Research Method

This research is primarily concerned with understanding the motivation for and process of curricular change, and identifying increased student benefits that may result. Early consideration to use a survey instrument to gather and analyze data failed to pass the “So what?” test of study significance. There are too many variables in the change process, and very strong contextual factors to consider. The answer to successful curricular change may in fact be entirely contextual in nature. Naturalistic inquiry, through its recognition of the importance of context, inductive analysis, holistic perspective, and multiplicity of variables, seemed a more proper method for this research (Lincoln & Guba, 1985; Merriam, 1998). The principle questions this study seeks to understand are the motivation for change or the “why,” and the process of change, or the “how,” and case studies are well suited to answering these types of questions (Yin, 2003). Case study allows an in-depth investigation of phenomena within real-life contexts, and is especially appropriate when the contextual conditions may be “highly pertinent to the phenomenon of study” (Yin, 2003, p. 13). Finally, the most important application of the case study method “is to explain the presumed causal links in

real-life interventions that are too complex for the survey or experimental strategies . . . the explanations would link program implementation with program effects” (Yin, 2003, p. 15). This is exactly what this study proposed to do.

Pilot Study

A pilot study was performed in advance of this research to help refine the interview questions and procedures. The pilot provided clarification for the research design as well (Yin, 2003). A number of individuals were invited to participate, including faculty and administrators who have been involved in the process of curricular integration, as well as business professionals who work with educators in an advisory role, such as members of a business school’s external advisory council. Their suggestions led to changes in the research and guiding interview questions, specifically the importance of exploring the continuous improvement process in the study school.

Research Design

This study aimed to develop as complete a picture as possible of the motivations, process, challenges, and outcomes of profound curricular change in an exemplary undergraduate business program using the case study method. In order to gain a holistic overview of the case, it was necessary to gather data from many different sources and groups. Document analysis was used initially to identify undergraduate business programs that have accomplished and recorded an integrative curriculum. Once a school was selected, individuals listed as authors of these peer-reviewed journal articles became the initial contacts for this

inquiry. These individuals cooperated by referring additional stakeholders for the study. There are many stakeholders in an undergraduate business program, including current and former students, faculty, administration, employers, and program sponsors. A sample of three to five of each of these groups was identified using this referral or snowball technique. Once these individuals were identified, they were contacted by the researcher and asked to participate. A voluntary letter of participation (Appendix A) was mailed to each individual identified as a possible participant. Site trips were made after an initial interview schedule was developed by telephone or e-mail with willing participants. Table 2 illustrates the data-gathering plan.

Selection Criteria

The following selection criteria were followed in this study to determine the exemplary program and to identify participants:

1. The study was limited to AACSB-accredited undergraduate business programs.
2. Faculty in the program had reported their curricular change progress in either peer-reviewed journal articles or other documents. More consideration was given to those programs that have multiple publications.
3. The new curricular model has been in place for at least ten years, so it is considered a well-established program.
4. The program was cited in other journal articles and compilations of integrated business programs.
5. This researcher was granted access for purposes of this study.

Table 2

Data Gathering Plan

Data Type	Sources	Details
Document Analysis	Peer-reviewed journals, other publications, program documents, handbooks	Descriptions of program and process; course syllabi and calendars; other material
Interviews	Faculty, current and former students, administrators, employers, business program sponsors	Face-to-face if possible, otherwise telephone Focus groups may be an option with student and business groups
Observation	Classroom observation of team-teaching IBC courses	During regular class schedule
Follow-Up Interviews	Same group as above	Telephone as needed

The Table 1 served as the primary list of candidates. In each case listed, at least the first two criteria had been met. To the extent possible, sensitivity to contextual differences were followed in the selection process to expand the “external generalizability of the findings” (Yin, 2003, p 53). Selection of actual participants was accomplished by first identifying a key individual who participated in the original program change and/or authored or co-authored a published account of the program change. This was done by literature review or website perusal. Once contacted, this individual, if agreeable, was asked to participate and recommend other subjects for the study, in different groups of stakeholders. These newly recommended individuals were asked to nominate additional subjects until a sample of three to five individuals in each stakeholder group was established. Interview times were then scheduled at the subjects’ convenience. Follow-up interviews were conducted based on the responses received.

Validity and Reliability

There were many considerations to establish and insure an accurate study. Because the researcher is the instrument in a naturalistic study, it is important to guard against biases the researcher may introduce (Lincoln & Guba, 1985; Yin, 2003). Miles and Huberman (1994) refer to the potential for two sources of researcher bias: “(A) the effects of the researcher on the case and (B) the effects of the case on the researcher” (p. 265). Bias A can be countered by the researcher in a number of ways, including spending as much time as possible at the research site, “hanging around, fitting into the landscape, taking a

lower profile” (p. 266). The researcher should also make the study’s intentions clear for the respondents, try not to inflate the importance of the study, and if possible, arrange some interviews off-site. Bias B can be minimized by spreading out the site visits if possible, interviewing “people outside the focus of the study” (p. 266), and including dissenters and others with known contrary views. Other methods to minimize Bias B effects include keeping research questions firmly in mind and triangulating different data collection methods.

Triangulation is “the use of multiple sources of evidence in case studies” (Yin, 2003, p.98), to address different issues. “The most important advantage . . . is the development of *converging lines of inquiry*” (p. 98). Conclusions are likely to be much more convincing if based on different sources. Patton (1990) describes four different kinds of triangulation that help improve the validity of a study. These are: (1) methods triangulation; (2) data source triangulation; (3) analyst triangulation; and, (4) theory triangulation. This study employed data source triangulation by comparing information gleaned from documents, archives, interviews, and direct observation. This study also used theory triangulation to compare data from different stakeholder groups involved in the program to look for convergence or divergence of theories about the “program purposes, goals, and means of attaining goals” (p. 470). Responses from external participants provided a measure of triangulation between data collected from internal subjects such as faculty and administrators, and these external subjects. The guiding research questions for these external stakeholders were

slightly different than those for internal participants, though all were focused on the program outcomes.

Another method to enhance validity in this study was the use of member checks (Stake, 1995). In this process, interview participants were asked to review interview notes that relate to their input “for accuracy and palatability” (p. 115). Participants were afforded the opportunity to “provide alternative language or interpretation” (p.115) prior to publication.

Piloting the design, research questions, and guiding interview questions with knowledgeable faculty and businesspersons provided another measure of validity. According to Yin (2003), “the pilot case is more formative, assisting you to develop relevant lines of questions-possibly even providing some conceptual clarification for the research design as well” (p. 79).

In order to insure a consistent research process, the reliability of this study was enhanced with a case study database, containing notes, documents, and interview transcriptions (Yin, 2003). This research database will be maintained and secured at the researcher’s home.

Research Questions

The principle research questions this work seeks to answer are:

- Why did the school decide to change its program? Describe the principle reasons for the school to undertake a major curricular transformation.

- How did the school accomplish this transformation? What was the process followed, what were the major obstacles encountered, and how were they overcome?
- What benefits for faculty, students, employers, and other stakeholders can be attributed to the curricular change? Were changes made to faculty reward and evaluation criteria?
- Are processes in place to insure the program continues to evolve with changing business methods and practices? Describe them.
- What advice can you offer to other schools considering such a change?

Guiding interview questions that follow these research questions have been developed for several different types of respondents. Guiding interview questions for faculty and administrators can be found in Appendix B. The guiding interview questions for employers is shown in Appendix C, and the guiding interview questions for students is located in Appendix D.

Data Analysis Plan

In qualitative studies, data analysis should begin during data collection (Merriam, 1998). In fact, Stake (1995) posits, “analysis is giving meaning to first impressions as well as to final compilations” (p. 71). The ultimate task is to understand the case. Two specific methods of data analysis in case study, categorical aggregation, and direct interpretation, are suggested by several authorities (Merriam, 1998; Stake, 1995; Yin, 2003). Categorical aggregation refers to the process of identifying or coding categories of information that can be

used to find themes or patterns in the responses to various interview questions. Direct interpretation is linked more to the interviewer's impressions of responses to questions or observed actions. Both these methods were employed to uncover patterns in the data. These patterns emerged into themes that helped explain the motives, process, and results of program change in the subject school.

Summary

A case study was chosen as the research design for this study, because the case study method lends itself to the study of contemporary phenomenon where the main lines of inquiry are "how" or "why" types of questions, the researcher cannot manipulate the results, and the boundary between phenomenon and context is difficult to identify (Yin, 2003). There is a significant amount of evidence or data available in several different forms: interview, document analysis, and direct observation. It is hoped this research provides additional insight into the model of integrative business programs, and that understanding of the motivations for change, the process of change, and the benefits of change are enhanced.

CHAPTER 4

FINDINGS

Introduction

Excellence is a better teacher than mediocrity. The lessons of the ordinary are everywhere. Truly profound and original insights are to be found only in studying the exemplary.

Warren G. Bennis, My Diary

The purpose of this study is to examine an instance of significant change in higher education, specifically an accredited undergraduate business program that transformed its curriculum and pedagogy for the benefit of its students. This study intends to understand the motivation for change, the process of change, and the benefits to stakeholders of change. The research questions this study sought to answer are:

- Why did the school decide to change its program? Describe the principle reasons for the school to undertake a major curricular transformation.
- How did the school accomplish this transformation? What was the process followed, what were the major obstacles encountered, and how were they overcome?
- What benefits for faculty, students, employers, and other stakeholders can be attributed to the curricular change? Were changes made to faculty reward and evaluation criteria?

- Are processes in place to insure the program continues to evolve with changing business methods and practices? Describe them.
- What advice can you offer to other schools considering such a change?

Stake (1995) suggests that program evaluations are commonly organized around program goals. Patton (1990) recommends an “analysis of the process whereby a program produces the results it does” (p. 23). The organization of these research questions is along process lines, that is, who or what caused the change, how did it occur, what benefits if any accrue to the various stakeholders, how is the currency of the program maintained, and finally, what insight can those involved in the program offer to others contemplating such a change? Likewise, the organization of this chapter follows the process of program development, implementation, maintenance, and closes with observations on recommendations for others.

The search for an exemplary program was limited by the modest list of AACSB-accredited schools that had reported a significant change in undergraduate business core curriculum and pedagogy. Very few schools had reported this kind of transformation (see Table 1), and of those, some had discontinued their programs since they had been reported. One exemplary school did agree to grant access for this study, under the conditions that its identity would not be disclosed, and the anonymity of contributors would be assured. Certain non-essential aspects of the descriptions of location and overall program have been modified to protect the confidentiality of the study school and

participants. Proper names, when used herein, are fictional. Attributions of direct quotes are also generalized to help insure the anonymity of interviewees. The program was referred to as IBC, short for integrated business curriculum. This is a fairly common description for this type of program.

A total of three trips were made to the study site, and more than 30 people participated in this study, either in one-on-one interviews, in focus groups, or both, over a period of six months beginning in late spring 2009. Interviewees included current and former IBC students, participating, non-participating, and former IBC faculty, college and university administrators, and employers. The faculty who took part in the study are designated in three different ways: as pioneer faculty, those who were part of the original IBC team in the early 1990s, faculty who teach IBC today, called current faculty, and a third group called former faculty, made up of faculty who have taught in the IBC program but are not currently a part of it. Employer representatives were hard to identify and enlist because of the study school's concerns about confidentiality. The study school cooperated fully. Program guides were made available, as were syllabi, calendars, exams, and other course documents. There was also a significant body of published work concerning different aspects of the program change, which helped to triangulate the data. Guiding interview questions for the faculty and administrative interviews can be found in Appendix A.

Many authorities on qualitative research suggest that data collection and analysis occurs simultaneously and proceeds together (Merriam, 1998; Miles & Huberman, 1984; Patton, 1990; Stake, 1995). As data is collected and analyzed,

patterns and themes begin to emerge. These patterns and themes can be observed during data collection and review in a process Stake (1995) calls “direct interpretation” (p.78). They can also be aggregated from the data by a process of coding. Stake (1995) calls this “categorical aggregation” (p. 78). Both techniques have been used in this study.

In addition to on-site visits, both initial and follow-up telephone interviews were conducted. What emerged from this data collection and analysis were definite patterns and trends from participants. After an overview on the case study school and its legacy business core program, this chapter is organized to examine the study findings in terms of the IBC program’s development, implementation, benefits, challenges, continuing transformation, and advice for other business schools that would follow.

Overview

The case study school is a state-supported university located in an agricultural region of the country. It was established in the late 19th century as a land grant college, and developed over the years in a typical fashion from a focus on agriculture to an array of 10 different colleges today. The nearest major population center is about four hours away. More than 80% of all students reside on or near campus because of the school’s rural location, and a significant majority are traditional undergraduates, in the 18- to 24-year old range. Resident undergraduate tuition is very reasonable by today’s standards, at approximately \$5,000 for the 2009-2010 academic year. The university draws most of its students from in state, but also pulls enrollment from several nearby states.

There are about 12,000 students attending the university, 1,300 of these pursuing business majors.

The College of Business had focused on undergraduate education since its inception more than 50 years ago, although an executive MBA program was recently added. There are 40 full-time faculty members in the college. The AACSB accredited the program approximately 20 years ago, and the college has maintained its accreditation since. The College of Business resides in an impressive facility built with the help of a major benefactor. The modern building offers wireless connection throughout. Classrooms are electronically integrated and several were designed specifically to facilitate self-directed student teams and cohort-style classes. Faculty enjoys well-appointed individual offices, and the business school also has an onsite bookstore and deli run by business students. Faculty advises students in their major areas, and performs other committee and community service work. Research is emphasized as well. Faculty is expected to produce the equivalent of at least one peer-reviewed journal article per year. The standard teaching load for tenure-track faculty is five courses per academic year, non-tenured professionally qualified faculty are expected to teach nine courses per year. Each IBC team currently has one professionally qualified, non-tenure track faculty member. According to the dean, this brings valuable business experience into the classroom, and also tends to help keep costs down, since these team members carry the rank of instructor.

The College of Business is organized into two departments, accounting and business, each offering eight majors. The individual disciplines are termed

“areas,” and have a designated coordinator who helps the department head coordinate schedules. This organization is unusual. Functional departments, like finance, marketing, management, and so forth, are used to organize most domestic undergraduate business schools. These departments typically are responsible for developing course work in their major field of study, and represent the “silos” referred to in some of the descriptive literature introduced in earlier chapters. The streamlined organization at the study school predates the curricular change that is the focus of this work, and is believed to have been a contributing factor in the adoption and success of the IBC program.

Legacy Business Core

Prior to the development of IBC in the early 1990s, the College of Business offered its majors a group of required basic courses, commonly called the business core, in similar fashion to the vast majority of undergraduate programs at the time. There were seven courses, in addition to four separate requirements in accounting and economics that students were expected to take in their sophomore and junior years. Many of these core courses were introductory classes in the individual majors. The three-hour courses that made up what is referred to here as the legacy core were:

- Financial Management;
- Introduction to Management;
- Marketing;
- Quantitative Methods in Business;
- Management Information Systems;
- Operations Management; and,

International Business.

Individual instructors, typically in a class of 30 to 40 students, delivered these courses. There was no effort to integrate the content of these courses between areas, and some instructors claimed to use these introductory courses to recruit majors.

Program Development

In order to understand the motivation for what became a total transformation of the undergraduate business core curriculum at the subject school, it was important to examine documents and interview faculty who had participated in the initial phase of the change. There were several individuals who participated in this study who had been part of the original five person pilot team in the early 1990s. In addition to these individual's recollections, there were also faculty who had been in the school before and during the transition. Published accounts of the transition process were also available.

The Change Process Begins

The college appointed a new dean in the late 1980s. By all accounts, he was a change agent. One of the faculty who had been there at the time believed the dean's academic discipline reinforced his willingness to experiment with new ideas. The dean's field was Information Systems, an area that changes constantly as technology develops. Another current faculty member echoed the theme of a connection between a person's field and his or her predisposition to change. According to her, in fields like accounting and finance, rules and

regulations govern many of the activities of practitioners, leading to a more rigid application of principles in the classroom. In people-oriented disciplines like management and marketing, faculty is more adaptable, because these areas are more susceptible to change. Of all the academic business disciplines, Information Systems is the most volatile because it is constantly adapting to new technologies. Faculty who specialize in this field are conditioned to updating course content and developing new courses to stay current.

Several members of faculty at the time recall the dean being concerned with the program's ability to produce graduates with the skills and knowledge employers desired. The dean attended a meeting of the AACSB in the early 1990s that piqued his interest in the gap between what students learn and what employers need. One faculty member from the time recollects: "He came back from an AACSB meeting with a Harvard Business Review article that talked about the gap between higher education and business. It talked about what business schools weren't doing well." Another recalls, "He came back from a meeting and asked a group of us to read Porter and McKibbin's (1988) study that focused on the gap between business education and business' needs concerning graduates' skills." The dean challenged the faculty "to look at curriculum and come up with pilot programs for the next year; that we be guided by research and evidence from stakeholders, particularly the advisory board, and to involve them." As a current IBC faculty member puts it: "If the goal is to create good business decision makers, we had to understand what it is they have to decide."

According to observers at the time, a faculty task group was organized, made up of about a dozen people. Those involved who were interviewed recollect that one of the first exercises of the task group was to review the topics covered in each of the common courses. A faculty retreat was the site for this review of syllabi. Each faculty member took turns describing the core course(s) they taught, and the topics they covered. One of the attendees recalled:

The same course was being taught so differently they may as well have been different courses. Accounting and finance were also teaching some of the same topics that were in the business core. So this beginning found both gaps and redundancies. One of the biggest gaps being that although every course used team projects, nobody taught teamwork.

Another task group member recalls that all the core business courses had international elements that duplicated much of the content of the International Business course. Other topics appeared in more than one course. Job design, for example, was covered in both the Operations Management and the Introduction to Management courses.

The task group also convened focus groups made up of the college's business advisory council. This council was (and is) comprised of regional business leaders who represent the business community and potential employers of the college's graduates. One participant recalls that faculty members sat at different tables with groups of business people. Faculty had a set of questions and an explanation of the current curriculum. They reviewed the current classes and asked for input. By one account, "the questions centered

around the quality of the school's graduates and whether they best served industry's needs." A common theme that emerged from the discussions was industry's concern that "graduates need a broader, multi-disciplinary focus about the business enterprise." According to attendees, another theme expressed by these executives was the need for better communications skills, and the ability to work with people from other functional areas of the business.

The college at the time was made up of only three departments: economics, accounting, and business. According to several participants, this minimal organization was one of the reasons the IBC program succeeded. The business department was comprised of disciplines including production and operations management, marketing, finance, and information systems. Most schools at the time were further organized into functional departments, which would have presented natural barriers to collaboration. According to these observers, the lack of organizational structure worked in favor of change.

All three departments initially developed pilot programs, but one member of the business task force recalled that accounting and economics dropped out of the college-wide initiative because they did not have the resources to participate. Accounting and economics did proceed in later years with their own consolidations of existing introductory course work from six hours to four hours, bowing, as one faculty member recalled, to advisory board pressure. At the time, though, only the business department moved toward developing an integrated pilot program. The business task group had identified various topics from each discipline that needed to be covered in the new course, but could not hit on an

organizing theme. Finally, one member of the team suggested using business processes as a theme. The idea of organizing businesses into horizontal processes as opposed to the traditional task oriented approach was gaining traction at the time. The concept was exemplified by Hammer and Champy's 1993 work, "Reengineering the Corporation: A Manifesto for Business Revolution." Once this theme was adopted as a curricular framework, the actual work of course development began to fall into place.

According to those involved in the process, the faculty approved the task force recommendations in the fall of 1993, and the dean asked the business department to prepare a pilot course for the following academic year. A faculty team was chosen from a list of volunteers. This team was responsible to complete the process of curriculum development and course planning. It was made up of one member each from the five disciplines that offered majors in the business department: human resources; marketing, finance; information systems; and, production/operations management. They had a little more than nine months to recruit students and develop the new pilot course, which was first offered in the fall of 1994.

It is hard to imagine the amount of work that went into the transformation of seven traditional three-hour introductory courses into a single, 18-hour class that would meet three times a week, for three hours at a time for two consecutive semesters. Team members recall working every day, right through the summer, with a big push during the last two weeks before class began, working out the calendar and schedule. According to one member, they received a one-course

reduction in workload, and a \$2,000 stipend for their efforts, but no pay for their work through the first summer. Another team member characterized the initial faculty team as being excited about the prospect of working on something new and important. All the team members were tenured. They were thought of as the “best teachers” in the college, and were called “heavy hitters” by another faculty member at the time. In addition to the work of course development, the faculty team visited several other schools that had reported innovative core curricula looking for ideas on structure and content. What they found was very inconsistent.

Pilot Integrated Business Core Development

The faculty team decided by early summer of 1994 to configure the new course into modules that reflected business processes. The team started by breaking down the seven core courses (listed earlier) into topics or “objects of information” that were thought of as essential knowledge for students. Each team member sought input from the other faculty in his discipline as these blocks of information developed. Once redundancies were identified, the faculty team looked for “natural linkages” between the topics. One of the critical decisions, according to team members, was the selection of an “integrating device.” Other schools had used textbook cases, or a process like new product development as a theme to show the integrative nature of business. The faculty team decided to seek out and recruit an actual business enterprise to partner with them as a case firm. They succeeded in contacting and convincing a prominent American manufacturer to join them. This collaboration lasted three years, and became the

model for the program. Each cohort since has had a case firm that provides people, information, and access to give students a living, breathing example of business in real time. In addition to providing support for the IBC, these case firms have also become both employers for graduates and sources of funding for the college. This is a significant contributing factor to the program's continuing success, according to the current dean. The concept of case firms will be explored in more depth later in this chapter.

The faculty team needed to develop content that would give students a better preparation for the modern business environment. This included significant instruction in teamwork and team dynamics based on input from the advisory board. According to one of the pioneer IBC faculty, the research showed that students were missing several key components in their basic business education. These missing components were team building and group dynamics, a consistent approach to developing presentation skills and technical writing, and consistent interaction with the business community. Course configuration took the shape of a series of modules based on key business issues that would run sequentially from fall through spring. This back-to-back ordering of courses was one of the keys to the program, according to program developers, because it promoted an immersion in the topic, and allowed the program to build on prior work as it progressed. Each module was in fact a separate, graded course, and in addition to course content and lecture material, the team needed to develop team projects, assessment tools, and exams for each of them. The pilot year IBC program totaled 18 credit hours, replacing 21 hours of common core courses.

The team decided on the following modules for the first pilot year:

Fall semester

Business Environment	3 credits
Team Building	1 credit
Business Functions	1 credit
Planning and Decision Making	2 credits
Product and Process Planning	3 credits
Managing Human Resources	2 credits

Spring semester

Business Operating Decisions I	4 credits
Business Operating Decisions II	4 credits

The pilot IBC program operated with the original faculty team for three years. The program was adopted for all students in the fall of 1997, at which time a second IBC faculty team was organized. The program has functioned for more than 15 years, with 2 to 3 faculty teams, depending on student population. The school currently uses three faculty teams. One team typically teaches two separate sections of IBC each year, and another faculty team teaches a second semester start section to accommodate transfers and students who are not ready to begin the program in the fall. Over the years, based on feedback and classroom experiences, the program was modified to reorder modules, revise content, and balance the work between semesters.

Today's IBC program looks like this:

Fall semester

Spreadsheet Modeling	1 credit
Team Building and Group Dynamics	2 credits
Business Systems	4 credits
Product and Process Planning	3 credits

Spring semester

Planning and Decision Making	2 credits
Managing the Firm's Resources	3 credits
Business Operating Decisions	3 credits

In addition, IBC students are expected to take specific accounting and economics courses concurrently.

Program Implementation

Faculty Teams

One of the most significant differences between the legacy core and IBC is the use of faculty teams. A five-member faculty team teaches each student cohort, made up of 50 to 60 business students. The original formula, choosing one team member from each major field, has been maintained since the beginning of the program. The faculty team is, according to participants, one of the most important reasons for the success of IBC. It is also one of the most controversial subjects in terms of the school's expectations of faculty compared to traditional programs because of the difference in the work itself, the workload,

the lack of autonomy, and shared decision-making concerning course and classroom issues.

According to one of the current IBC faculty:

It's hard to run IBC. There's a good segment of the academic population who chose the academic life because they don't play well with others.

Many academics don't have the mindset to compromise on pedagogy or content, or to work on teams.

Another current IBC faculty member adds:

Team teaching implies agreement among the members of the team on almost every aspect of the course, with the possible exception of an individual's contributions to the course within his/her discipline. Even those may in fact be modified to better match content from other team members.

And this, from another current IBC faculty:

At first the IBC assignment is like a prison sentence. There's a feeling of loss of academic freedom because so much of the course is prescribed; content, calendar, and so forth. All sections have the same learning objectives. Faculty teams develop exams. All this takes control away from individual instructors.

The time commitment for team teaching IBC is greater than a traditional course. The IBC classes meet 9 hours per week for 15 weeks, and faculty, particularly new to the program, are expected to stay in class for the entire meeting time. This helps faculty learn the material from other disciplines and understand for themselves how the different pieces fit together. The nine hours

per week are usually broken down into nine separate hour-long topics, and one faculty member is usually responsible for each topic. Much of the class work observed by this researcher was typical lecture, with a variety of styles. Often, faculty “in the back,” those not currently teaching, would either be called on by the lecturer, or offer their thoughts without prompting. The feeling was very much that the lecturer was not alone, but rather received support from the other faculty in attendance.

The coursework is designed to give each team member 20% of the total, so depending on the topics being covered, one faculty may lecture for three straight hours, then not lecture again for a week. There is a significant amount of downtime for team members not actually teaching. This time may or may not be spent in the classroom, except for faculty new to IBC, who are expected to attend all sessions the first year. For some of the more experienced teams, on non-teaching days, faculty may only make an appearance during breaks. One current faculty member made this point: “The difference between teaching IBC and a regular class is three times the work, much of it outside the classroom.” Faculty teams meet once a week, usually Monday, to plan the week, assess the prior week, and take care of exam development or grading. These meetings generally lasted two hours. This observer visited three separate faculty meetings. The shortest ran 90 minutes, the longest more than 2-1/2 hours. In addition to the weekly team meetings, each faculty member mentors student teams, usually two teams each semester, and is expected to attend the student teams’ required weekly meetings as well.

Exams are administered 10 times a year, always in the evening, outside the regular class schedule, and all sections of IBC are tested simultaneously. Since almost all the exam questions are essay type, grading tends to last several hours for each faculty member. One of the pioneer team members recollected the time commitment during the pilot years of the program to run 40 to 50 hours per week, but believed that as the program has matured, the faculty hours per week have fallen. Several of the current IBC faculty estimates the time commitment at 20 to 30 hours per week for each section. In fact, the dean who inspired IBC ran a time study during the second and third years of the program to verify faculty hours, and confirmed that typical faculty was spending the equivalent of a full workweek in the program, before accounting for their other course assignments or committee work.

How does the workload compare with traditional faculty in the school? Tenure track faculty is required to teach five courses per year. IBC faculty who teach one section are expected to teach one more course each semester, so IBC counts for three courses per academic year. IBC faculty who teach two sections are expected to teach one additional course per year, so two sections of IBC count for four courses. This seeming disparity does not seem to be an issue with those involved, because of the duplication of work in the two-section team. According to many of the faculty interviewed, it is the time commitment outside the classroom that makes the biggest difference between IBC and traditional assignments.

Students evaluate the faculty team as one, and IBC students tend to be more critical, according to some of the study contributors. This is a particular concern for non-tenured faculty. The significant workload and amount of material covered can lead to student frustration, and to lower faculty evaluations. One of the faculty teams has been experimenting with individual faculty evaluations, used to give students in the cohort practice on delivering feedback, at the same time garnering useful information on how students view the performance of individual faculty team members. According to this current IBC faculty member, each student team is asked to rate each faculty member. One team is given all the evaluations for a particular instructor, and the student team sits down with him or her to review all the student comments. It is done for all five faculty team members, and it is all about what can be done better. This meshes with management lectures on the importance of giving feedback in the workplace. “It’s difficult for students to give performance feedback to an instructor, but it gives them good experience for later, on the job.” This feedback process is optional for faculty teams at this point.

Many study participants linked the team environment of IBC to a higher level of collegiality among the entire faculty. As one put it: “After teaching IBC, I had a sense of loneliness when teaching a traditional course. I missed the interplay and shared responsibility of the team teaching environment.” Another said: “Because so many of our faculty has experienced IBC . . . there is either sympathy from former faculty, or buy-in from those in it now. If it were just the same five faculty teaching it, it would be their program.” A third comment: “IBC

teams that teach together for a number of years become very synchronized. A new person entering such a team will feel like an outsider for a while.” This pattern of collegiality and community will be explored in greater depth later in this chapter.

Student Teams

Students form teams of five or six members, depending on the size of the cohort, within the first two weeks in IBC. These are not the usual college-course project teams; these teams will work together, play together, and learn together for a full academic year. Besides sitting together in class, they will meet weekly; they will complete six major team projects, and they will study for tests together. They will get to know each other well. They will receive formal, graded training in team building and team success. One current IBC instructor comments:

We thought it was important to bring this idea of good relations and success measures of teams to the attention of students. It’s not just about the grade on projects. We ask the students to consider their relationships with each other. Can they work together on multiple projects? It’s more like business, where you don’t just work on one project with other people. You may be working together for a long time. Relationships need to stay intact.

Most IBC teams self-select, sometimes with guidance. Some students set up their teams long before class begins. One instructor urges students to talk about their personal goals, suggesting they try to match up with others who share those goals: “For example, some students want to excel, others just want to get

by. Mixing a team with divergent goals creates predictable results; they don't do as well as teams with common goals." As another current IBC faculty put it: "Students learn to work in self-directed teams in IBC. They've been on teams their whole lives, but they're usually a managed team, with a coach or other designated leader. The IBC experience is all about learning to work with others without a lot of outside direction or influence." This causes issues with some students, who feel there is not enough individual work. They cannot show off their own skills. In fact, this is one of the reoccurring critical points in student evaluations.

The first project the newly formed IBC student teams must complete is a team contract. According to class documents, a successful team performs at a high level in terms of task completion; demonstrates positive social relationships, and promotes the individual growth of its members. The benefits of negotiating a team contract include:

- Planning activities;
- Understanding the context in which the team operates;
- Written agreement makes individual viewpoints public; and,
- Provides an opportunity for team building.

Students are given guidelines for developing their contracts, including goal-setting, task understanding, verbalizing processes of moving from one stage of team development to another, and sources of external team support for task completion. The guidelines also direct an individual commitment to the team; all team members must sign the contract. The process of team building does not

end with the completion of the team contract. In fact, the contract is just the beginning. As noted in an earlier section, one of the early IBC modules is Team Building and Group Dynamics. This two-credit module covers team building and productivity, problem-solving, decision-making, conflict resolution, and project management techniques. Teams complete this module early in the IBC program so they can benefit in team performance from what they've learned.

Talking to Student Teams

Focus groups were organized to interview two different student teams made up of six students each from one of the IBC cohorts. The cohort was nearing the end of the program, only three weeks from the end of their second semester. The two teams were purposefully chosen, representing high-performing and low-performing groups in the cohort. For purposes of identification, they are referred to here as the Colts (high-performers) and the Lions (low-performers). Proper names used in the following dialogue are fictitious. The guiding interview questions for these student focus groups can be found in Appendix C.

The Lions are composed of second-semester students who had to re-form into this group because they either left, or were asked to leave, each of their first-semester teams. The IBC program does offer the entire cohort the chance to realign teams at the end of the first semester. Most teams lose at least one member in the process; some teams lose two or more. The Lions' performance is described as "struggling" by their instructors. Individually, they are capable, even high-performing students, but as a team they are producing marginal results. At

the time of the focus group, they had been working on their final project, a presentation to the entire cohort, faculty, and executives from the cohort's case firm, who would participate in evaluating and grading the project. During introductions, it was revealed that several members of the team had significant work obligations, and one was a married student, starting a family. They were all males.

When asked about their experience in IBC, the Lions tended to focus on the workload:

There's a lot of work in IBC. It seems like all I do.

I don't really know how to manage all the demands on my time.

It's very tough scheduling work hours around class and team meetings.

Concerning a comparison between IBC and other coursework, the pattern continued:

The instructors expect you to have a lot of things done quickly.

The tests are very tough. You have to study for eight questions, but you only get four.

In terms of IBC course benefit, the tone remained:

I think I'm learning something. I sure hope so with all the stuff we have to do.

I transferred here from another school, and we didn't have to spend this much time on our courses.

Finally, when asked about extra demands on their time:

There's a lot of information to deal with, lots of exams and projects, and it's not like anything I've done before.

I heard from friends that it would be a lot of work, but I had no idea it would be like this.

Regardless of the question, the conversation seemed to return to the extraordinary amount of work these students perceived in IBC. There was little discussion of social issues inside the team. As a group, the Lions seemed focused on just finishing the course and putting it behind them.

In contrast, the Colts, representing a high-performing team, had been the only team in the cohort that had remained intact from the beginning of the program. They arrived at the meeting wearing matching polo shirts embroidered with their team logo. They were a high-energy group, with lots of small talk and banter as they waited to begin. This group was made up of four girls and two boys. One of the girls was married with a family.

When asked about their experience in IBC, the responses of the Colts contained lots of references to the workload, but were significantly different than the Lions because they seemed to understand what they were working for:

IBC's pretty effective, because I'm burned out right now. I'd heard it was a lot of work, and very intense, but I feel like I'm learning a lot about business right now.

I had a lot of trouble getting on board with the team experience, because I liked to work alone, but this semester I've begun to realize the importance of working in teams.

We've gotten to know each other and our strengths and weaknesses, and we play to the strengths.

We needed to schedule our work really well. We learned what hard work really is.

On comparing IBC to other coursework, they focused more on content:

We're motivated by our team experiences. We get on each other to pay attention or do well in class.

I heard that Capstone (the senior-level Strategy course) was pretty involved, but I don't expect any other course to have this much work.

I was pretty prepared, and excited. I knew we had to have a good team. I had family members who went through it, so I knew what to expect.

On how they formed such a durable team:

A small core had formed. Sue asked to join, and we all went down front and grabbed Brenda because we knew she was smart.

I resisted the urge to form up with friends, and I'm glad I did. The teachers say that teams made up of strangers tend to do better.

Jim asked me if I wanted an "A" before he'd let me on the team.

We're motivated to win the "team of the year." I heard it's \$2,500 to split among ourselves.

On the perceived benefits of IBC:

I don't think I ever would have understood the level of integration in business if I had taken regular classes.

I was at another school, with a prestigious reputation. I heard about IBC and decided it would really help my business education. I'm willing to bet that IBC is just as good as any of the top ten business programs.

This team business will help when I get a real job, because I'll have this experience that others won't have.

There's a big social aspect to IBC. We're open, we're flexible, but we've learned how to say things to each other that are hard to say, but need to be said. Sometimes the only fix for a team problem is to be able to talk to each other about conflicts. I think that's the main reason other teams fail. They don't address their problems.

You really get to see when everyone's contributing. Six heads are better than one.

On the extra demands on their time in IBC:

For the tests, we'll spend eight to ten hours studying."

The team meetings take a lot of time. I never studied with anyone else before. Now I study with the whole team. It easily takes twice as much time with six people than working alone.

Last semester we met a lot of times on Sundays. I'm married, and older, and it was very hard.

I've never had a test monopolize my whole week like here. The projects require a lot of meeting time outside of class, plus the nine hours in the classroom every week. It's a lot of time.

The IBC workload is a theme in both current student focus groups, but it seems to be a much bigger issue with the Lions than the Colts. In the high-performing team, the students were weighing the workload against the benefits of the program. The perception was of a much more cohesive group, one that had achieved success together and expected that to continue. They were all able to put the IBC experience into the perspective of their continuing education. There was much less insight in the comments of the low-performing team. Their goal seemed focused on completing the course and getting back to a "normal" class schedule.

One current faculty member characterized the IBC experience for students as "drinking from a fire hose" in terms of the amount of information that is presented. Another noted that IBC consists of "large amounts of information, limited time, and imperfect knowledge of the situation, very similar to the nature of business decisions." Still another current faculty member said: "IBC uses lots of information and less than perfect contexts. In the real world, you don't really know all the problem, but you have to find the solution." His teammate continued: "We give students much more information than they need to solve a problem, so the real learning is in deciding what information is pertinent to the problem at hand." And from another: "IBC is about the application of ideas and how they

work in the real world. We give students assignments about real companies. They take them more seriously.”

Breadth Versus Depth

One recurring theme related to IBC program implementation was the issue of topic breadth versus depth. This relates to the problem of what material to cover--what goes in and what comes out of the IBC curriculum, and in what order it appears. The initial faculty task force identified gaps and redundancies in the legacy core. Eliminating the redundancies freed up some time to fill in the gaps. But the new program was 3-credit hours shorter than the old curriculum, which meant there would be 45 fewer hours of contact time for students. Whole new topics like teamwork and business systems needed to find space, which meant other subjects had to be cut from the original list. Using business processes as an organizing mechanism appears to have been a real insight. Functional topics are still covered in the new curriculum, but they are organized in a completely different fashion. As one current IBC faculty put it:

We constantly talk about the issue of breadth. Not only did we reduce the total number of hours . . . we also added major new topics that thinned out the legacy subjects even more. What’s resulted is a new course that delivers the integration of the topics in a business context. Later courses, like the Capstone, are able to add more depth to their content because the IBC student has a better understanding of business processes.

Even though the functional topic content is decided by consensus of the faculty in each discipline, and the most important topics in each area are

included, the order of presentation of that information is significantly different, and it's usually interspersed with topics from different fields. This order of presentation, unlike in a legacy course, is chosen to emphasize the process modules that make up the new course. The result is a unique experience for students and instructors compared to the traditional classroom. One of the pioneer faculty remembers the process in the formative years of the program:

In terms of trading breadth for depth, each year more and more stuff was being taken away. The course was getting too broad. It became increasingly important for disciplines to determine IBC content, and to make sure the most important topics were taught more than once during the course.

A current IBC team member describes it: "One of the problems with an IBC type program is it's difficult to drill down in any given topic. How do we get more traditional homework outside of class? It's not do-able." And this: "IBC has become 'what does everyone need to know about finance', not 'what do finance majors need as an introduction to the major?'" Students notice the difference as well. A former IBC student said: "We'll talk finance for a day, then we might not talk about it again for a month."

There is a noticeable change in student outcomes as a result. One current IBC faculty says:

Students don't come out with the same skill set as they did in legacy classes. There's not enough time in IBC to cover all the topics in each discipline, because time is needed to teach the

concept of integration and why it's necessary. IBC projects tend to be integrated, and students may miss depth in an individual subject. They're better off in IBC, though, because they develop the big picture, and begin to see the relationships.

Major discipline areas are responsible for the depth of a topic, and disciplines have made adjustments to their second and third-level majors courses to include topics formerly covered in the intro courses replaced by IBC, according to a current IBC faculty member. Another points out: "In the end, each discipline needs to figure out what to take out to make room for something new." One of the pioneer faculty points out:

Before IBC, students paid more attention to the legacy course in their major. Since they could take the legacy courses in almost any order, over their sophomore, junior, and senior years, they didn't synthesize the knowledge in any particular pattern. IBC focuses this entire course content in the junior year, in a functionally integrated way, and students concentrate on their major studies during the senior year.

As one of the senior student's who completed IBC last year described it: "You get the breadth in your junior year in IBC, and you get the depth in the senior year major's classes. It makes you well-rounded."

Program Benefits

Benefits for Students

Many of the faculty interviewed for this study believe the main benefit for IBC students is gaining an understanding of business processes and how the

different functional areas of a business work together. They also believe students do not appreciate this benefit until they have entered the workforce. As one current IBC faculty puts it: "The payoff for most students comes when they are exposed to a practical work experience, whether a first job or an internship." Another current IBC faculty says: "Kids get the big picture, particularly after they complete an internship in their junior/senior summer. That's when the light bulb goes on." A member of the pioneer team says: " Students are able to see the whole picture of business. What they won't get anywhere else is the breadth of understanding. They'll know the language and jargon of other fields."

A group of nine senior students participated in a focus group for this study. They had completed IBC last year, and had a greater appreciation for this key benefit than faculty might have expected. Here are some of their comments on this subject:

I understand the other aspects of the different functions.

I talked to one of my friends at [nearby Private College], and he couldn't fathom what we did here. He focused on his major from his junior year on. We have the breadth of understanding that he doesn't have.

I know marketing majors out there who don't know anything about financial analysis- not remotely aware of the financial aspects of business.

People who are not finance majors benefit most from IBC, because we learn how to read financial statements and how finance works in business.

I can't imagine that other students in traditional programs know this much by the end of their junior year.

Another key IBC benefit for students is the collaborative skills they develop as members of a self-directed team. "Their team skills are exceptional," says one of the current IBC faculty, "employers call with praise for their team skills." Another current faculty member extends this idea: "Employers come here first, because our graduates have developed a reputation for excellence in teamwork. They have so much work to complete in IBC they learn to depend on each other. Individual students would be overwhelmed."

The senior focus group also had pertinent comments about the value of teamwork learned in IBC:

I was very accustomed to working in teams; it was easy for me.

When we formed up our teams in Capstone, we got right to the tasks at hand.

What's really going to help me when I get a job is I'm going to mesh well with my work team because of IBC.

I agree with that. I think getting on a project team, instead of sitting back . . . I'll understand others' concerns better, and mesh better, and get overall better results.

Another benefit for students often mentioned in faculty and student interviews is the strength of the relationships they build in the program with other students and with IBC faculty. Evidence in this study suggests these relationships endure long after students leave school and enter the workforce. In fact, several faculty and administrators pointed to IBC graduates who return to school years later as employers specifically to hire new graduates based on the strength of the program and its ability to prepare students for entry-level professional business positions.

Meeting Employer Expectations

Are IBC students more marketable in general than students who complete a traditional undergraduate business program? Does the integrated program do a better job of meeting employers' expectations for entry-level management positions than the functional approach to business education? These questions are the crux of the matter. Unfortunately, there is little empirical evidence to help answer or support these views. Two comparative studies have been done on this question at the study school, but to insure the confidentiality of this work they will not be addressed here. Suffice it to say one study supported the proposition that IBC students found jobs faster and were promoted sooner than graduates from the legacy core, and that employers do value IBC grads more than traditional students.

The anecdotal evidence, though, is very strong. Following the lead of their former dean and a dedicated group of faculty looking to make a difference, this school set out to do a better job of preparing business students than they had

done in the past, and they are convinced they have accomplished this.

Comments from faculty on this subject were very supportive:

Employers come to [study school] first because the school's graduates have developed a reputation for excellence in teamwork.

Employers highlight their team, conflict management, and communications skills.

Employers tell us our graduates think on their feet better, it's easier for them to fit into either team work or individual responsibilities, and they're easier to train.

IBC alumni tend to favor our graduates for their work ethic and experience.

Understanding the human element in business is critical. The ability to work with other people to accomplish tasks is most important. IBC addresses these human aspects of business.

Employers who know about IBC have had graduates and come back for more.

The number of employers who come here and say they want to hire our students because of the program is what gives us the impetus to continue. Employers trust the program.

From the employer perspective, one former recruiter for a multinational firm regularly hired from the study school, even though it was not initially on his list of target schools. His company needed people who could adapt to their interdisciplinary rotational training program. His company had focused their

recruiting efforts on nationally ranked business programs. In his words: “We were becoming jaded by faculty’s lack of interest in bachelor’s graduates’ success in business. They seemed to be more interested in preparing undergraduate students for their graduate programs. There was no real interest in determining employers’ expectations.” He discovered the study school by accident, came to campus and “interviewed a few students. I was immediately impressed with their team skills, their self-critical analysis, their self awareness, and their seeking feedback on individual performance.”

His campus recruits were going to have four different jobs in their first two years, and they had to be flexible and adaptable. He continues:

IBC grads were much quicker to adapt to new jobs and new situations, and received better evaluations than their peers. They also exhibited a better understanding of how business works, and what was expected of them. They demonstrated more intellectual curiosity when compared to the best students from the top business programs in the region.

According to this subject, faculty at most schools where he recruited believed employers wanted high QPAs and technically proficient students. What his company is actually looking for is leadership skills, emotional maturity, professional proficiency, and the ability to take and deliver performance feedback.

His assessment of IBC graduates as employees: “IBC produces individuals who are technically adept in business fundamentals, but also have team and communications skills. They also exhibit conflict resolution skills. This

is a very important attribute for people working in self-directed teams, as well as managers.” When asked what he believes made the difference for these students, he pointed to the program and the school:

They asked the company for feedback on how to improve the IBC curriculum to make students more employable. They have executed a fundamental academic paradigm shift. They are more outwardly focused, they seek employer input for programs and curriculum, and they make faculty collaborative.

In contrast, this recruiter believes research institutions do not have a focus on teaching: “The average faculty at the prestige schools relate to their grad students, not their undergrads.”

Faculty Benefits

Benefits for IBC faculty include the opportunity for pedagogical training, becoming conversant in other disciplines and business processes, building stronger relationships with both students and faculty, and for some, the feeling that they are part of something bigger than the traditional Higher Ed experience.

Comments from current IBC faculty include:

We become better teachers learning from our teammates.

We get to know the students much better. Team mentoring helps build better relationships between faculty and students.

Nothing makes a job nicer than working with people you like. There’s not one day when I don’t feel good about being part of IBC.

Because our school is so strongly identified with IBC, we feel like we are contributing to the cause.

Observing and working with four other faculty has an influence on your pedagogy, including style, content, and using other instructors in the room to help make a point.

People really enjoy being at this school.

Listening to other disciplines lecture you learn a lot more about business.

You also learn about teaching. I've picked up something useful from every person I've teamed with over eight years.

Faculty who like IBC tends to like the team aspects of it. They see real synergy in their work.

Faculty, who are kings of their own islands, but now in IBC work with other people in other disciplines. It's a unique circumstance.

Faculty gets a chance to lecture on topics that aren't necessarily our strengths.

Some may view teaching in a topic they're not strong in as a weakness; here it's viewed as a learning experience, because there's usually an expert in the room.

In a traditional classroom, the teacher may just avoid topics they're not familiar with. In IBC it's covered, but you feel like you have backup.

New faculty benefits from feedback on teaching from four senior faculty, and can learn a lot.

Comments from former IBC faculty follow the same pattern:

Everyone shares a value in helping students do well, that they need to understand the big picture of business if they're going to be successful.

It's very developmental for faculty. Team-teaching for example. How many faculty want to teach in front of four or five other faculty? You want to be sure you do a good job in there.

The great benefit of team teaching is you have lots of examples of different ways to teach or interact with students.

Because you're sitting in class, not necessarily teaching, you have the opportunity to observe how other faculty engage students. You can bring a new idea into your own class, but it's hard to deliver the idea and critique it at the same time.

New faculty can really develop in IBC. They learn a lot about teaching and techniques. This developmental aspect is one of the reasons IBC has survived.

The experience in IBC was more like teaching doctoral students than undergrads, because there are always people in the room who know more about the topic than you do. You tend to rely on them to support, correct, and expand on your lecture.

There are colleagues in the room, and it has a doctoral feel to it. I enjoyed the experience.

Finally, this from a faculty member who's been there from the beginning:

What makes us successful is that we only do IBC. We haven't divided up the faculty into camps. If there were competing parallel programs there would be more points of difference and attitude.

Program Challenges

It is Not for Everyone

One theme that emerged in faculty and administration interviews is that the team-teaching experience is not without issues. "IBC is not for everyone. Some people enjoy the independent contractor role," says a current IBC faculty member. And from the dean:

It's not a program for "Lone Rangers." It isn't without bumps, and you have to be willing to wear the brand from the bottom up. The bigger challenge is for faculty to work on a team, to give up some of the discipline-specific work in favor of a cross-functional experience. The constraint is [finding] faculty members willing to do this. They have to be willing to make the commitment.

Another current IBC team member puts it this way: "If you make a Venn diagram (Lewis, 1918) of academics out there, start with that circle, then make another circle to describe academics who desire to team-teach and share pedagogy, the group at the intersection is pretty small." One former IBC instructor says: "One of the downsides to teaching IBC is the lack of autonomy. There is team autonomy, but not individual. Group decisions are the rule."

This became evident as the program initially expanded from the original pilot team to a second team, and then a third as IBC moved from optional to mandatory for all students in the late 1990s. “Faculty has to be part of the change,” says a former IBC member, “some are frustrated by the lack of depth in topics. Others are unsure of working in other disciplines.” One of the pioneer faculty recalls: “At some point, during the conversion, almost everyone had to work on an IBC course, and it became apparent that everyone wasn’t suited for it. Unlike the pilot team, newer faculty teams had some problems.”

The Culture Changes

“IBC needs to become part of the culture. Everybody needs to come together and ‘get it,’” says a current faculty member. “IBC commands enough of your time, enough of a student’s time. It’s so big that it’s going to flop over and have a big impact on everything outside the program.” She concludes: “It needs to permeate everything. That’s what’s happened here.” That sentiment is shared by most of those interviewed. The culture of the organization has changed over the years, as the IBC program became the centerpiece for the school’s identity. It may have happened accidentally at first, as faculty team chemistry dictated who could work together and who could not. Individual faculty selected in or out of IBC based on their feelings toward each other, and their desire to participate in the program. According to a current IBC faculty member: “The college made the change amidst a period of faculty turnover and cultural turnover. Many older faculty never participated in IBC, but as they retired were replaced with IBC-focused recruits.”

The program has in fact attracted faculty who want to be involved in this unusual approach to business education. A current IBC faculty remembers his first visit to the school: "I was immediately impressed with IBC. I sat in on a lecture on quality deployment that was being delivered by both Operations Management and Marketing faculty. It was unique." A pioneer faculty member recalls:

We began to change selection criteria. We hired faculty who had MBA's for the breadth it indicated. Job talks [search interviews] moved to more team-oriented individuals. We began to hire faculty who came to school to be part of IBC.

A current IBC faculty member says: "Candidates are sized up by existing faculty in terms of their ability to work together." Another IBC faculty member remembers the period: "We were able to recruit people who wanted to come here to be part of it, and that really made a difference. We attracted people who wanted to be part of it."

The school initiated a policy several years ago that in general, requires new faculty to commit to a three-year cycle in IBC as a condition of employment. This policy has further institutionalized IBC, and insures a stream of faculty who are committed to the program. One former IBC faculty member puts it: "How do you maintain the culture? In hiring, there's a lot of emphasis on IBC and team-teaching, so if people don't like the idea, they can self-select out of the hiring process." He attributes the success of the program over the years to Schneider's (1987) theory of organizational culture known as A-S-A, the attraction-selection-

attrition framework. According to Schneider, it's the people, not the environment, who are responsible for the culture of an organization. People are attracted to careers as a function of their own interests. They search for a fit based on their personalities. Organizations tend to select individuals who display the same attributes as are common to the organization, and people leave an organization when they don't fit the environment.

A Sense of Community

According to one of the associate deans, the school recently hosted a team of outside faculty functioning as a "maintenance of accreditation" team. They made several references to the "sense of community" they encountered while at the school. He attributes this community atmosphere, which extends from administration and faculty through the student body, to IBC and the collegial nature of faculty and student teams. One current IBC faculty member describes it: "IBC is part of the culture here now. It seems a very natural part of the school's identity." This observer sensed the same atmosphere in all three visits to the school for this study. Faculty was very familiar with each other, and they were also well acquainted with the student body. This was apparent in both formal and informal settings. As one current IBC faculty expresses it:

If you've been here long enough, you've worked with most of the faculty in the building. We all know a lot about each other. Mentoring student teams in IBC gives you a chance to build significant relationships with students as well.

Another factor that may contribute to this apparently high level of collegiality is collaborative research, which is encouraged at the school. The dean who inspired IBC changed the rules for co-authored articles to help ease the workload of faculty, giving equal credit to all authors, and this rule is maintained today. That combined with the new areas of interdisciplinary research inspired by the IBC curriculum and pedagogy has created another platform for faculty to work together.

Integrated Business Core Costs More

Another significant challenge for the IBC program is its cost. “The IBC program does cost more,” says the dean. “There’s no question a return to legacy courses would save time and free up resources.” The average class size across the college is about 35 students. Inside IBC, five instructors teach 60 students, so the faculty/student ratio is 12 to 1. The high concentration of faculty in IBC, each representing a specific discipline in the matrix, is one of the keys to the program’s success. According to the current dean: “We decided it was worth the money. How is the program sustained? Institutional commitment is the secret.” He continues: “One important piece is that support from outside stakeholders is critical. After the first year, advisory board members as well as case firms began to donate funds for stipends and program development. They also began to hire our graduates.”

Continuing Transformation

The study school has built a unique program for undergraduate business, and sustained it for more than 15 years. It has become embedded in the school's culture. According to its stakeholders, IBC is the defining element of the school's identity. One of the main lines of inquiry in this study is the question of continuous improvement. The findings suggest there are several ways the IBC program changes to meet the needs of their graduates in terms of their value as employees to the business community. One of the most important things this study found is the school's dedication to building and maintaining dialogue with business at several operating levels. The program also has a well-defined annual process for review and modification, called "summer camp," and informal methods to experiment with changes in content and pedagogy through the faculty team structure. Each of these elements will be explored in greater detail.

The Business Connection

One of the most striking things this observer encountered is the acceptance by the majority of faculty and administrators of the value of staying in touch with business, and looking to business people for program input and direction. Although one might expect this to be routine in every business school, it is in fact unusual to find business practitioners influencing programs and course content to the extent it is apparent at the study school. In addition to active business advisory councils at the college, department, and even some area levels, each IBC cohort has a "case firm" that works directly with students in the classroom. Executive speakers are a routine part of other coursework as well. In

the Capstone business course, students have five or six executive speakers each semester. One current IBC faculty member describes the connection:

Employer input is integral to helping shape the curriculum. Faculty has contact with employers through speaking engagements. They also give feedback on our graduates. Each IBC section has a case firm that is used to identify and brand the cohort. Students may get to work on real problems in these companies. There also tends to be student access for internships and possible employment.

Business' influence is no more apparent in the school than in interview responses from faculty regarding the main reasons the IBC program was developed. Here are some of those faculty comments:

The major reason for the change to IBC was our advisory board said what we were doing wasn't working. Graduates need more team exposure, and there's a need to capture the human element of business.

Students and employers expressed concern about the lack of integration between disciplines.

Advisory committee feedback at the time was critical. They found graduates had no connectedness, that is, no sense of how business departments work together.

[The] motivation for change was the advisory council, who said technical skills of graduates were fine, but they lacked the ability to work with others.

School had close relationships with the advisory board and used them as a sounding board.

Faculty seems to accept input from advisory boards. The attitude is they're helping us do our jobs, rather than telling us what to do.

Business advisory council focus groups were held. What does business need? We began to crystallize our thinking. We needed a more horizontal approach; we needed to operate in a more integrating fashion, needed good communications and teamwork skills.

The advisory board got excited about delivering the core in a non-siloed manner.

The college's advisory board was giving feedback, saying new hires had trouble with teamwork and understanding how things worked outside their little area.

Communicating regularly with the business community in a number of channels is now a part of the culture of the school.

The Case Firm

Each IBC cohort has a case firm. This is another unique aspect of the program, because these case firms function as real-time, multi-dimensional case studies. Either administration or IBC faculty recruits these firms. Companies typically commit to work with the program for three years. They tend to be larger firms, with either a headquarters, or significant operations or presence in the school's area. They also tend to be potential employers for the school's graduates, and according to the administration, usually become contributors to

the business school. They literally have a presence in the IBC classroom, as speakers, mentors, and judges. For example, during a recent visit to campus, this observer watched IBC student teams rehearse for a presentation each would make to a panel of case firm executives who planned to visit class later in the month. The presentation was one of the prescribed IBC team projects to propose ways the case firm could achieve a competitive advantage. The team simulated a cross-functional business group. They had to develop ideas that were consistent with the case firm's resources and markets, and then support them with marketing, operating, and financial plans. Teams had access to case firm mentors they could talk to as they developed their plans. Case firm executives would give each team feedback, and participate in grading the work.

An interesting exercise was observed during these rehearsals. Each team that was not presenting was expected to critique the other teams' work for both delivery and content, and this feedback was given to the presenting team both orally and in writing, immediately following each team's rehearsal. This was one of four planned feedback sessions during the IBC program that encourages students to give and take both praise and constructive criticism. According to one of the current IBC faculty: "There needs to be feedback for improvement. Students need to get in the mode of giving constructive feedback as a manager's skill." This feedback exercise speaks to the level of sophistication in the IBC program, in terms of developing students' people skills. In fact, an employer who was interviewed noted this particular trait of IBC graduates:

Students are used to being rewarded for mediocre performance, and this carries over into their first job after graduation. In general, they are unable to accept and use constructive feedback. Graduates hired from [the study school] exhibited a much greater willingness to accept and use feedback for improvement than new hires from other academic programs.

Summer Camp

The primary mechanism for program review and modification is an annual event known as “summer camp.” This is a two-day faculty retreat officially called the IBC Annual Planning Meeting, scheduled shortly after the spring semester closes. All current IBC faculty are expected to attend, as well as representatives from the economics and accounting areas that teach the IBC companion courses. One of the Capstone course faculty is also generally in attendance. An agenda is developed among the entire faculty participating, and a faculty volunteer chairs the event. This observer attended the 2009 meeting. There were about 20 people in attendance both days, including all three IBC teams. The atmosphere of the meeting is casual, but purposeful. There is a complete two-day agenda that covers old and new issues. The leader of the seminar is a current IBC team member, but otherwise enjoys no special standing. He has no trouble leading the sessions, and has the support of the group.

The first impression is that the entire group is very familiar. They appear to know each other well. They seem to have been together for a long time, or it could just be the effect of the bonding they have had over the shared experiences of IBC. Either way, the group dives into the agenda, which has time

for group discussion of various topics as well as breakout time for each functional area. This is another remarkable aspect to the program. In spite of the integrative, process approach of IBC, disciplinary divisions are maintained throughout all discussions. Teams are made up of five representatives from different disciplines, who are expected to communicate any and all concerns from IBC to the discipline and vice versa. They are also expected to insure that discipline specific topics are covered in the overall IBC curriculum. In the words of the dean: "IBC strengthens disciplines because it emphasizes what each brings to the business table."

There is definite interplay on hours and topics. There are only so many contact hours in the classroom. This meeting provides the place for dialogue on changes, including what new topics should be added, where they should be placed, and what topics need to be deleted to make room in the class calendar. Typically, a new topic or subject is piloted by one of the teams before it is considered for all sections. The new item is presented to the entire group at summer camp for discussion and possible adoption into all sections.

There was a functional session where each module's learning objectives were reviewed, with a goal to add, subtract, or revise as needed. There was another session on examples of "closing the loop" in the program. Closing the loop describes a process of identifying a needed change, making that change, then assessing the effect of the change on student outcomes. The group brainstormed policy issues, including items like the use of non-standard laptops and modifying exam procedures for the following year.

The second day the main group was broken down into smaller groups to discuss a new spreadsheet course the team had decided to add to the program. One group worked on course content, another on course resources, and a third on scheduling the new course. This spreadsheet course developed from IBC faculty's concern over the lack of skills students demonstrated using spreadsheets, particularly Excel, for analysis of business problems. Unlike the lengthy procedure at many schools, the entire process of identifying the need, designing, and adopting a new course at the study school can be completed in a matter of months. The final afternoon of summer camp was spent on discussions and demonstrations of different integrating models and methods. It was impressive to observe a faculty group that had developed and successfully delivered an integrated business course for more than 15 years decide they needed to find more ways to integrate their topics to benefit their students. One of the final tasks of the group was to set the schedule for an effort identified by a core group of IBC faculty to initiate a complete program review during the balance of the summer, called revitalization.

The Revitalization Effort

A group of current IBC faculty had expressed concern that while summer camp represented an annual opportunity to consider program revisions, the changes resulting from the Annual Planning Meeting tended to be administrative in nature, or incremental in terms of content. They proposed a top to bottom review of IBC, including fresh input from business groups and other stakeholders. This revitalization effort may result in a redesign of various elements of the

program. The group held brown bag meetings throughout the summer and into the fall of 2009, without compensation, considering all aspects of IBC. Based on their discussions, changes in content in some modules will begin as soon as this academic year.

Advice for Other Schools

It seems appropriate in a study on curricular transformation to seek the advice of those involved on how another school might successfully implement such a program. Study participants were in fact eager to offer their thoughts on this question. Replies tended to focus on having the right people, good planning, obtaining support from administration and other stakeholders, and insuring an infrastructure that is conducive to success.

The Right People

Almost without exception, participants who offered an opinion on what elements a school needs to insure success, put having or getting “the right people” for the job at the top of their lists. Some examples from current and former IBC faculty and administrators:

Pick your people carefully. They must share a common vision, and they must be able to function as a team.

First, you need a critical mass of interested faculty. Second, they must get along or the effort will fail. Compatibility of team members is critical. Third, faculty needs to understand the time issue. This can be a very hard sell.

Recruiting is a key to success in IBC.

There is a sell-down effect, from administration to faculty to students.

There is a need for patience as each level becomes more comfortable with the changes.

Look for faculty who are willing to work together, who really want to make a difference with students. Find good colleagues, including looking at new faculty coming in.

Start with a pilot group. Find a core of believers and make it high profile.

Give them special release time or money, make it a big deal.

In order to sustain the program, you need to have enough of the right faculty who are willing to stand up and support IBC. It's personality driven.

Good Planning and Unwavering Support

Most of those interviewed agreed that unwavering support from the dean, or the top of the organization, is another critical success factor. This is not a subtle change. Good planning is critical. Major modifications will need to be made to course assignments. There will need to be release time for program development. There will most likely be a negative impact on full-time equivalents (FTE) a measure of faculty productivity, and a consequent increase in costs. These are significant issues that must be addressed at the administrative level. Here are some comments:

Planning is a key to successful IBC implementation. How many people are needed, how much time will it take to develop the program, and how much release time will faculty need?

First, understand what you're trying to accomplish. Establish the dependent variable and design a program to address it.

Visit and study other programs. See what works and what doesn't.

Programs [like IBC] need a champion at higher levels and a sense of urgency about the need to change.

You must get the dean's buy-in, and make it special for students.

Administration must buy in completely, because it's too easy to walk away from a program like this.

A change like this starts with leadership. Support from the top and outside stakeholders is critical.

You also need strong administrative support. But without the right faculty, administrative support will not sustain the program. These two things fit together nicely.

You need to understand business systems before tinkering with the academics. Business is a puzzle with pieces changing shape and color as you put them in.

Do a pilot to tune up the program. Create a prestige element about it."

Infrastructure is Important

In addition to the right people, good planning, and strong support from the top, several respondents pointed to the importance of infrastructure for program

success. Issues like the size of the school, whether it is a residential campus, and the current level of departmentalization in the school are all seen as success factors in making a change of this magnitude. To wit:

A residential school is important, because commuting students will have difficulty making all the team meetings and class events.

There are team meetings, exams at night, lots of out-of-class IBC activities. It would be tough for commuters.

What you need is a residential school about our size. If running day and night school, I couldn't run the IBC at night. There are any numbers of influences that mitigate against the success of a program like IBC.

A residential campus is important because of the need for significant team contact outside of class, and because the 9 hour per week class schedule is difficult for commuters.

Schools with enrollments larger than, say 2,500 or more would be unable to manage the logistics of a large number of IBC sections. But 1,000 student, and 30 to 40 faculty is about right.

It's important to have one business department, rather than departments by discipline. This would be an important barrier to implementation.

This is a very collegial group. They consider themselves in business, not just a focus on discipline. The single business department that preceded IBC provided the first break.

Summary

What this investigation has found is an undergraduate business school that at every level seeks out and embraces practitioners for advice, council, and direct input for the benefit of their students' improved chances for success. Over a period of a decade and a half they introduced and perfected a radically different approach to the business core, the common body of knowledge all business majors need to assimilate before they move on to focused study in their majors. In the process, they re-wrote the contents and objectives of the core, in order to match employer's expectations. In addition to technical knowledge, graduates exhibit enhanced people skills, including teamwork and communications. They also demonstrate conflict resolution and leadership skills, and the ability to give and take constructive performance feedback. According to employers, they tend to be intellectually curious.

IBC students do not just come to class. They are part of a living business laboratory; where they get a chance to understand not just the fundamental tasks, but also the processes that define how business operates and the ways in which individual departments interact to get work done. Students work in self-directed teams on real business problems. Their case studies are in real time. Business people interact with them in the classroom and help them learn. When they complete the IBC program, students talk about how they miss their teammates, the interaction, and the intensity. Some of them have begun relationships that will last well into their professional careers. They will remember the IBC experience as one of the most challenging and rewarding times of their

lives. Some, as employers, will return to the school to hire new graduates, because they know what they know, and what they've been through.

The teachers that work with these students are special, too. They have given up the individuality of traditional academic endeavors, at least for a time, in favor of a collaborative effort that requires more hours and certainly more compromise. They work five-day weeks, mentor student teams, and still produce a significant body of research. Some of these teachers have been here from the start. Several were on the original pilot team that helped carry out their dean's vision of an undergraduate program that would set their students apart, and give the college a new identity at the same time. Others on the faculty sought this place out because they wanted to be a part of something unique, something really different than the norm. They find themselves working in self-directed teams, similar in fact to the student teams they guide. Some of the faculty finds a permanent home in IBC, others move on to teach in the majors. They individually and collectively work to keep the content fresh and the student experience unique.

The administrators have given their complete support to the program, even though it costs more than a traditional approach to undergraduate business education, because they are believers in its effectiveness to produce graduates who will have a leg up on their competition for entry-level management jobs. Several of the college's administrators were also members of the original pilot team that developed IBC. They have seen their original work grow and adapt as new faculty, the constantly changing business environment, and technology

continue to raise the bar for their graduates. In the process, the college has become a community of learners. Most of the faculty has worked with each other on an IBC team. The smaller teacher to student ratio of IBC and the extra mentoring built into the program has helped create lasting student relationships. The level of sophistication of the program is evident in the latest research lines of faculty, which are now considering the effects of cohorts and organizational behavior on student outcomes.

CHAPTER 5

SUMMARY AND DISCUSSION

Introduction

One of the motivations for this study was the need to understand why a gap still exists between what business schools teach, and what businesses want their new entry-level management hires to know. This gap between educators and practitioners was identified more than 20 years ago in a study sponsored by the AACSB, the premier business school accrediting agency, and written by two highly regarded academicians (Porter & McKibbin, 1988). However, the majority of undergraduate business schools today still follow a curricular model that was initially developed at least a half a century ago, usually modeled after the functional areas of a business, and reflected in part through the discipline-based organizations of most business schools. Marketing, operations, finance, and human resources may identify the tasks of a business, but they do not identify the processes business organizations follow to achieve their goals. For example, order fulfillment, customer service, supply chain management, and new product development are processes that are critical to a firm's survival. They all cross the functional areas of a business, but they are hard to understand in a function-based matrix (Hammer & Champy, 1993).

A number of AACSB- accredited undergraduate programs did recognize the inconsistency of the traditional curriculum with business' changing expectations, made significant changes to both content and pedagogy, and documented these new approaches (Bishop, Vaughn, Jensen, Hanna, & Graf,

1998; Cohen, 2003; Corsini, Crittenden, Keeley, Trompeter, & Viechnicki, 2000; DeMoranville, Aurand, & Gordon, 2000; Hartenian, Schellenger, & Frederickson, 2001; Smith, Ducoffe, Tromley, & Tucker, 2006; Stover & Morris, 1997). It is the goal of this research to look closely into a school that transformed its program, to try to add to the understanding of how this change was accomplished and maintained. It is also hoped that what is learned will help other schools that would like to follow.

The number of variables to consider and the likelihood of contextual factors led to a choice of qualitative analysis as the most promising method (Merriam, 1998). Case study was chosen as the research design, because it lends itself to the study of contemporary phenomenon where the main lines of inquiry are process and context related (Yin, 2003).

The principle research questions this work seeks to answer are:

1. Why did the school decide to change its program? Describe the principle reasons for the school to undertake a major curricular transformation.
2. How did the school accomplish this transformation? What was the process followed, what were the major obstacles encountered, and how were they overcome?
3. What benefits for faculty, students, employers, and other stakeholders can be attributed to the curricular change? Were changes made to faculty reward and evaluation criteria?

4. Are processes in place to insure the program continues to evolve with changing business methods and practices? Describe them.
5. What advice can you offer to other schools considering such a change?

The theoretical framework for this study is change, and how it occurs. A progression of change theorists, beginning with Lewin (1947), defined and refined the theory of organizational transformation. Kotter (1996) expanded Lewin's basic three-step unfreeze, move, and re-freeze proposition to an eight-step process, to include more organizational elements, including coalition-building, communication, and the anticipation of more change to follow. Hefferlin (1969) related change theory to higher education, which he believed was "deliberately structured to resist change" (p. 16). Elements like tenure and academic freedom, along with fragmented department-based organizations that are characteristic of higher education, tended to make academia more resistant than most organizations to change. In *Beyond the Stable State*, (1973), Donald Schon professed his belief that society and its institutions are in a continuous process of transformation, while most of society's individuals and institutions try to maintain a "stable state" which is resistant to change (p. 9). Schon's thesis in part is that society needs to accept continuous transformation, in a process he referred to as "learning to learn" (p. 29). The notion of an organization capable of learning and reinventing itself is one of the main tenets of Peter Senge's *The Fifth Discipline: The Art and Practice of the Learning Organization* (1990). Among five practices or disciplines he believes learning organizations exhibit, the

cornerstone is systems thinking. This discipline integrates the other four, which include personal mastery, mental models, building a shared vision, and team learning, and fuses them into a cohesive body of theory and practice. In a later, more practice-oriented work, the idea of 'levels of change' is introduced to the five disciplines. At the highest level, profound change is achieved when an organization not only responds to an outside threat or opportunity, but also makes a fundamental change in its capacity to change. "In profound change, there is learning" (Senge, et al., 1999, p. 15).

This final chapter is organized in two remaining sections: first, to discuss and link to theory each of the five research questions listed above in terms of the analysis presented in Chapter 4, relating those findings to the theoretical framework and supporting literature found earlier in this study. The second section offers an interpretation of the findings, contributions of this study to prior research, and suggestions for additional research.

Answering the Research Questions

Research question #1. Why did the school decide to change its program?

Describe the principle reasons for the school to undertake a major curricular transformation.

Discussion. The findings suggest the dean who took over the college in the early 1990s was a change agent, a professor of Information Systems, which is a discipline that constantly redefines itself as technology obsoletes old systems. According to observers at the time, the dean was concerned about how well prepared the school's graduates were for entry-level management jobs. He

apparently had been influenced by information he had received and discussions he had had at AACSB meetings. This is consistent with the timing of the Porter & McKibbin study (1988) and other published work concerning the gap that had formed between academia and business practitioners. The dean called for an internal analysis of course content and he also asked faculty to set up focus groups with the college's Business Advisory Council to learn first hand from business people their opinions on how graduates performed in their organizations. From these sessions a list of skills and knowledge was developed that business stakeholders felt would make the school's graduates more marketable.

The dean then challenged faculty to develop pilot programs that might help close the gap, and gave them a firm timeline for delivery. The faculty team that developed the IBC program was full of "heavy hitters," according to observers. Everyone on the team had tenure, and they were a group that looked on the dean's challenge as an important transformation rather than an onerous task. By all accounts, they set out to develop a more marketable student, and they believed in what they were doing.

Links to theory. There is clear evidence here of the processes of change theory, particularly the first five of Kotter's eight steps (1996). These are:

- Establish a sense of urgency-the dean framed the issue as a core curriculum that wasn't serving students' best interests and called the faculty to action. He set a timeline for teams to develop pilot programs.

- Create a coalition-the dean formed a faculty task group to review the current curriculum and enlisted the Business Advisory Council for input.
- Develop a vision and strategy-He next called for recommendations for new programs that would better serve graduates.
- Communicate that vision-faculty who were part of the transformation recall the dean's articulation of the problem.
- Empower innovators for action-the faculty pilot team that formed was made up of "heavy hitters". The team embraced the development of the new program. They were expected to develop the new course in a short time, and were given control of content and pedagogy.

Other links to the literature include the similarities between what the study school's Business Advisory Council expected from graduates and the expectations of employers surveyed in many of the studies included earlier in this study. These expectations included more teamwork, communications, and other people skills, as well as a better understanding of how business operates, the "big picture."

Research question #2. How did the school accomplish this transformation? What was the process followed, what were the major obstacles encountered, and how were they overcome?

Discussion. The first faculty team was expected to develop the new integrated course and introduce it as a pilot program in the fall of 1994. One of the key changes that facilitated the new course design was the team's decision to use business systems as a framework, replacing the functional, siloed

approach. The pilot team taught the course for three years with volunteer students as they worked out the wrinkles in content, order, and delivery. Feedback from students, employers, and instructors convinced the dean and faculty to make the new IBC program a part of the overall curriculum in the fourth year. According to those present at the time, the change was unanimously approved by faculty vote. New faculty teams were organized and new case firms recruited as the program expanded to multiple sections.

As the integration of the pilot program proceeded, another obstacle appeared, in the form of team-teaching. Those involved recall this transition highlighted some compatibility and personal choice issues. The loss of autonomy and control in the classroom was not an attractive prospect for some. Others really enjoyed it. There is a significant number of faculty at the school who today view themselves comfortably as permanent members of the IBC team. Others on the faculty look back on their service as an interesting but necessary time.

The expansion of the IBC program was a critical point in the transformation. Until this juncture, faculty who were not directly involved could operate in a traditional fashion. After the vote, almost everyone would be either directly or indirectly involved. Observers noted this was a general period of faculty transition, when a number of senior faculty retired and new faculty were recruited. One remembers: "That was the hardest part; adopting IBC for all students. But we had proof by then the concept worked. It was new, and it was different, and it was interesting, so people became interested in it, in participating in it."

One of the biggest obstacles to the adoption of the new program was its cost. IBC is faculty-intensive, and if it were simply a matter of money, the program may not have moved past the pilot stage. But the dean and key faculty were convinced the extra cost and extra work were worth it because they believed they were giving students a competitive advantage in the job market. Some of the extra cost has been offset by donations from case firms, advisory board companies, and alumni who appreciate the education they received. In fact, the current dean believes this income stream is critical to the program's continuity. He affirmed that contributions have continued in recent months, in spite of the current economic turmoil. He interprets this as a strong commitment from the program's external stakeholders. The school has added professionally qualified (PQ) faculty members to the school, and to IBC teams in recent years. These team members may or may not hold a terminal degree, but all bring significant business experience to the classroom. According to the current dean, employing PQ faculty brings practical insight to students while also helping to control costs.

A significant factor that played a positive role in program adoption, according to some who were there, was the lack of discipline-based departments in the college. This was not a large group, as most business schools go. With about 40 faculty, 1,000 students, and 8 majors, the school had only 2 or 3 faculty in some disciplines. A Business department that covered all the majors except Economics and Accounting made organizational sense. This smaller size made it easier for people to get to know each other, and fostered a more collegial

atmosphere. A subtler factor that worked against discipline-based organization at the school was the seniority-based assignment of offices. This, according to one faculty member, insured a random placement with respect to discipline. Another noted that interdisciplinary research was not unusual, even before IBC. Finally, the school was not considered to be a haven for research. The study school was undergraduate-only at the time, located in a rural area, and attracted faculty whose primary interest was teaching.

Links to theory. The final three steps of Kotter's (1996) change theory are evident in this implementation phase of the IBC program:

- Generate short-term gains-the program proved to be a success for stakeholders, including faculty, students, and employers.
- Consolidate these gains and expect more change-expanding the pilot program to all students signaled a strong organizational commitment to change.
- Anchor the innovation in this new culture-the faculty vote adopting the program solidified the program change across the college. As several respondents pointed out, IBC is too big not to impact the rest of the school's programs. It has become the centerpiece for the school, an identity and differentiator that the school uses to attract new students, faculty, and employers.

Another link to theory is the lack of organizational fragmentation that Hefferlin (1969) believed assured the "diffusion of power" (p. 16) and led to inertia in academia. When the pilot team recognized the importance of

integrating business functions and chose business systems or processes as a model for IBC, they were demonstrating systems thinking, the key organizational discipline in Senge's (1990) work. Other schools that adopted a team-taught, integrated approach to the business core also documented many of the same obstacles that the study school faced.

Research question #3. What benefits for faculty, students, employers, and other stakeholders can be attributed to the curricular change? Were changes made to faculty reward and evaluation criteria?

Discussion. Faculty benefits in IBC tend to be either developmental or relational.

In terms of development, team teaching affords the opportunity to observe several other teaching styles and techniques. Most faculty interviewed commented specifically on this aspect. This teaching benefit is particularly valuable to new faculty, whose only teaching experience may have been as a graduate assistant in a traditional course. Another developmental benefit for faculty is the knowledge gained in terms of other disciplines, and a better understanding of how business operates. They reportedly become more comfortable with topics they may have avoided both inside and outside their specialties.

Relational benefits for faculty include the collegiality that develops on faculty teams, and the synergy some faculty see as the team works together for a number of years. For some, there is also the feeling that they are contributing to the greater good, that the size and scale of the IBC program gives them a bigger

impact on students' success than they might otherwise have. IBC faculty may not appreciate the level of collegiality they enjoy, but from an outside observer, there is a real sense of unity and community apparent in this school. It seems like a friendly and enjoyable place to work.

Student benefits include a better overall understanding of business, collaborative and people skills, and enduring relationships. These benefits lead to the most important student benefit--IBC students are thought to be more employable than students from more traditional programs. The breadth of understanding IBC students display about general business operations and financial analysis is, according to both faculty and employers, much greater than students who had completed the traditional business program at the study school. Collaborative skills include teamwork and the ability to get along with others in the workplace. IBC graduates are also noted for their conflict resolution skills and their ability to give and take constructive performance feedback. IBC graduates tend to develop lasting relationships with their team and cohort, as well as with members of the faculty team. These relationships reportedly extend well past graduation. IBC graduates hire their teammates. They also, as employers, return to school to hire new IBC graduates. Some become program benefactors.

Employers benefit from IBC by having a stream of potential entry-level employees who demonstrate adaptability and flexibility. They have intellectual curiosity, and a good understanding of how business works and what's expected of them. Employers also benefit by having a school that seeks their opinion and

advice regarding the things their students should know and the traits they should display to be employable.

The IBC program offered release time and a small stipend for faculty who participated in the development of the program. Faculty today receives release time for IBC, and occasionally a summer stipend, if funds are available. There is ample evidence that IBC faculty routinely work without added compensation, whether in ad hoc groups or in extra work outside class. This seems to be an expression of the level of dedication demonstrated by these individuals. It also speaks to the sense of community noted by this and other observers. Faculty generally ascribes this overall organizational familiarity to IBC and the fact that most everyone in the school has worked on faculty teams in IBC over the years. This close, personal contact makes for an organization that is very synchronized, and operates with a common purpose. It is much more similar to a business organization in this regard than to an academic department.

Links to theory. The belief that IBC students are better prepared for a career in business than they might be in traditional programs relates in fact to their adoption of a process approach to business, consistent with Senge's (1990) thesis. Successful students meet IBC program objectives, and display characteristics of the five disciplines in Senge's work, including:

- Systems thinking-the integration of functional areas by creating modules that represent business processes encourages students to think in terms of how all the parts of business work together to achieve the organization's goals.

- Personal mastery-IBC program objectives include professional proficiency. Students are expected to demonstrate an understanding of business processes.
- Mental models-another program objective in IBC is developing critical thinking and analytical skills.
- Shared vision-one of the collective disciplines establishes a focus on mutual purpose. IBC students are organized first into a cohort, then into teams. They function in this team environment for a full academic year.
- Team learning-this discipline of group interaction is best exemplified by the self-directed nature of the IBC student teams, and the synergy they report in their work. They must achieve common goals to be successful. Faculty teams also demonstrate the five practices or disciplines of Senge's (1990) work.

Research question #4. Are processes in place to insure the program continues to evolve with changing business methods and practices? Describe them.

Discussion. The study school has both informal and formal processes in place to help insure the program maintains currency and reacts to external stakeholders. First and foremost, the school has adopted a business connection that ranges from business advisory councils at different levels in the organization to business' physical presence in the classroom, participating as speakers, mentors, and advisers. This broad acceptance of business in the inner workings of the IBC program in particular, and the entire school in general, gives the

program and its faculty and students an immediate link to practice. This attitude of openness and invitation to business seems unusual in business education. It represents an important link, and the study school's students and faculty are the immediate beneficiaries to the insights it provides into contemporary business practice.

Inside the IBC program, informal mechanisms are in place to promote change. Faculty can individually or in teams introduce new material incrementally into IBC on a trial basis. The results of the trial are reported to the entire program team, which decides whether to adopt the change in all sections. A complete program review was initiated last year by a group of IBC faculty who believed the program had not been thoroughly scrutinized since its inception. This revitalization effort developed to keep IBC from becoming stale and predictable.

Summer camp is the nickname for the annual IBC planning meeting that represents the formal change mechanism for the program. This multi-day meeting is a chance to review the past year and discuss possible changes in content, delivery, or format going forward. One of the main functions of this retreat is to act as a clearinghouse for program revision. Because there are a specific number of student contact hours in IBC, and they are all being used, any change that is adopted must be accompanied by a deletion or alteration of something else. This interplay is a negotiation, at times inside a discipline, and at other times, between them.

One of the characteristics of the study school is that, in spite of the presence of this large, interdisciplinary course and its pervasive influence on the

college, faculty maintains respect and accountability at the discipline level. IBC faculty teams are made up of representatives of five different disciplines, and each representative is expected to discuss any proposed IBC content changes with the other, non-IBC faculty in his or her discipline. All IBC faculty also teach courses each year in their majors. This disciplinary integrity is important so faculty can maintain academic credence and the specialization that is characteristic of academia. Faculty maintains discipline-specific research interests, although many do publish in interdisciplinary topics as well.

Links to theory. The formal and informal program review processes evident in IBC help define it as a self-transforming, learning system, as Schon (1973) described. He believed business organizations had moved from a product-base to business systems integration. In order to survive, businesses had to become capable of continually transforming themselves. It seems to make sense that an academic organization dedicated to business education would also benefit from this ability to transform itself.

This learning organization, capable of continual change, is also described in Senge, et al. (1999). Profound change is achieved when an organization not only responds to an outside threat or event, but also makes fundamental changes in its capacity to change. Program review and transformation is formally supported and informally encouraged at the study school. The review process is annualized so it may be regularly revisited. The faculty who developed IBC are now the college's administrators, and they encourage the faculty who are

teaching the program to challenge the content and the structure, to continue to grow and transform. According to Senge, (1990):

Learning organizations are organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together. (p. 3)

The study school appears to fit this description nicely.

Research question #5. What advice can you offer to other schools considering such a change?

Discussion. It seems fitting to seek advice from these IBC practitioners. Their school has more than 15 years experience at delivering this integrated, team-taught cohort-based course to undergraduates just beginning their junior year. They have developed, expanded, revised, and revitalized the program. They have developed mechanisms to continually transform themselves, and they have become a learning organization in the process. They have changed their culture as well. They've created a community of scholars and a generation of alumni who routinely show their appreciation for the program by hiring its latest graduates or contributing to its funding, or both. Anecdotal evidence of graduates' continuing business success is a driving force in maintaining the program, in spite of its higher cost. What are the keys to success? How can another school develop and maintain a program like IBC? Here are some of the most significant responses, the best advice from those closest to the program:

- The right people-this is a critical element for success. There needs to be a core group of faculty who share the vision of an integrated, team-taught course. They must:
 - Be able to work together.
 - Be willing to commit a significant amount of time and effort to develop the program and to carry it forward.
 - Really want to make a difference with students.
 - Be able to exercise patience
- Unwavering support-a change of this magnitude can only succeed if it has the complete support of those responsible for budgets and staffing. In some schools this will be the dean, in others it may be the provost or the president. They will need to address:
 - An increase in costs, either directly or indirectly.
 - Release time, stipends and other forms of compensation will be needed for program development.
 - Ongoing staffing and scheduling changes will need to be addressed.
 - The program should become largely self-funded to insure sustainability.
- Good planning-a new program that will eventually affect the entire school needs special consideration at the outset. There are lots of questions to answer:
 - What are we trying to accomplish?

- How many people will be needed?
 - How much time will it take to develop the program?
 - Can we find volunteer students to populate the pilot?
 - Are there model schools we can visit?
- The right infrastructure-many of the respondents believe there are infrastructure constraints that may limit the ultimate success of the new program. These include:
- IBC works best in a residential school. A school with a large number of commuting students will find they will have trouble making all the team meetings and outside of class events.
 - IBC won't work as a part-time or night program. The time commitment is too great, and the need for student access to faculty is critical.
 - Size is important. The program would be unmanageable at a large school. 25 to 40 faculty and about 1,000 to 1,500 students seem to be the ideal scale. Smaller than this there isn't enough depth in the disciplines, larger, and it becomes logistically impossible.
 - The change needs to be all-inclusive. An IBC-type program may work as an honors course in a larger school, but complete faculty buy-in is needed for long-term success.
 - Discipline-based departments are barriers to implementation. To the extent they don't exist, or can be consolidated, it will contribute to successful program implementation.

Links to theory. Making sure that an organization has the right people for the job is a theme that is found in several of the references herein (see, for example, Friedman, 2005; Jones, 2002; and Senge, 1990). These keys to success, offered by faculty and administrators who function in a long-term, successful program, represent an offer of coaching and support, a critical success factor for transformational change, as discussed in *The Dance of Change* (Senge, et al., 1999). This group also made several offers of direct help and support for potential program development and implementation. Some have worked with other schools on IBC program development.

Discussion and Interpretation of Findings

This section begins with an interpretation of the findings, then a statement on the contributions of this study to previous research, and closes with suggestions for additional research.

Interpretation of Findings

There appears to be a consensus among business educators that integration of content across functional disciplines is important. A recent study reports that of 143 AACSB-member, business school deans who responded, more than 80% believe there is a need to integrate the undergraduate core curriculum, and 77% of respondents believe it is critical to the future success of students (Athavale, Davis, & Myring, 2008). The same study reported only 23% had implemented a curriculum integration plan, 20 years after the landmark Porter and McKibbin (1988) study. There are many approaches to

interdisciplinary business studies, and many of the integrating methods reported are not nearly as complex as IBC. Creating multi-disciplinary, team-taught, process-based courses yields a high degree of curricular integration and social skills improvement, but entails a significant challenge to design, implement, and maintain (Hamilton, McFarland, & Mirchandani, 2000).

Clearly this is not an easy thing to do. The opportunity to study an organization that not only accomplished this difficult transformation, but also has successfully developed it for almost 20 years afforded a unique opportunity for insight. How did they do it? How do they sustain it? Can others do it, too? If so, how to go about it? These and many other questions come quickly to mind.

This study found that the change process began with a visionary dean. He recruited and empowered a team of faculty that shared his vision. Together, they devised and implemented a radically different approach to the business core. They traded depth of knowledge in traditional topics for breadth of understanding of the way business works, and the importance of achieving goals through collaborative efforts. They changed the core subjects from an introduction for majors to a survey of processes for business practitioners.

There were elements of the infrastructure that many participants believe were keys to the transformation. The school's location in a rural area, a significant distance from population centers, means the campus is residential in makeup, with a majority of traditional 18- to 24-year old students. The size of the college, at about 1,200 students and 40 faculty, is also believed to have contributed to the success of the IBC program. If a school were much smaller,

there would not be faculty depth in disciplines to teach majors courses, and a larger school would have logistics problems scheduling all its students, according to program administrators.

Another key to the study school's success is the lack of a discipline-based structure in the college. The organization of all the traditional academic disciplines into one business department, with the exception of accounting and economics, meant there were fewer barriers to discarding traditional principles' courses and building a new multi-disciplinary approach. Disciplines are maintained at the school in a structure called "areas." These disciplinary groups are responsible to manage their particular content in IBC, but do not have a department chair or separate budgets. Nor is faculty in a particular discipline clustered together. Office assignments are made on the basis of seniority, which, according to some observers, contributes to relationship building and research collaboration among faculty from various specialties. Teaching teams are made up of one member each from five different disciplines, and faculty in these areas maintain majors courses, research in their specialties, and identify with others in their fields outside the school.

Business connections are apparent at many different levels, and in many degrees of involvement, throughout the school. The organization seems to welcome collaboration and input from external stakeholders. There are several layers of business advisory councils. At the college level, they are comprised of senior executives who provide input on strategy and direction as well as critical funds for development and deployment. At the department and area level, the

advice comes from operating executives, typically general managers, operations, or marketing directors who provide concrete input on expectations for graduates and advice on changes in course content. At the IBC course level, case firm executives and managers work side by side with faculty and students in a living case study, enriching the class with insight and providing unique business contact for students. At the student team level, case firm representatives mentor and coach students through projects and presentations. Internships and shadowing opportunities abound in this environment. Students' experiential learning is enhanced both inside and outside the classroom. Employment opportunities are also reported. This business connection is unusual because it provides not only strategic advice, but tactical and operational input as well. This close relationship with business appears to be a vital key in the continuing success of the program.

The dean who was the catalyst for change almost two decades ago may not have anticipated a cultural shift in the organization, but it appears to be another key factor in the sustainability of the program. The findings support a cultural change in not just the IBC classroom, but in the entire college. Participants speak of the team environment, the opportunity to work closely with other faculty over a period of years, and the impact that has on developing lasting relationships. Relationship building was observed on student teams, and reported in student responses as well. Long after the IBC cohort and teams dissolve, friendships endure. There is a significant body of anecdotal evidence that these relationships have led to employment opportunities for graduates and

financial support for the college. There is also a tangible atmosphere of community throughout the school. People seem to be well acquainted with each other. Student-faculty relationships also appear to be strong. Respondents point to the faculty-mentoring role in IBC, and the low student to faculty ratio in the program as major sources of this familiarity.

There is a self-perpetuating cultural aspect that has appeared over time, according to observers. IBC has become the centerpiece of the school's activities and identity. The program attracts faculty who desire to work in the team environment. Faculty search teams are naturally attracted to candidates whom they believe will fit in, and hiring practices insure most new faculty will spend a significant amount of time teaching in the program. The school uses the IBC program in recruiting materials for students, and the university admissions office promotes it as well. It is an effective differentiator for prospective students. The program has a reputation for rigor, but students tend to seek it out, some because they are curious about a unique business education, some because they have heard about the success of its graduates. In spite of the challenges, there is a high completion rate in IBC. Respondents report more than 95% of students successfully complete the course each year.

The study school is an organization that displays a strong sense of community, built in part on the idea that there is synergy in collaboration between faculty, students, and business practitioners. The "faculty as independent contractor" model has been replaced with a community of learners. The shared experience of developing, implementing, and maintaining IBC has helped build

personal and professional relationships for faculty and staff. Student cohorts and teams are experiments in organizational behavior as well as the basis for lasting friendships. The functional focus has been removed from the core curriculum, replaced with a broad view of business and how it works. What has been accomplished here is remarkable. Many schools have moved in this direction, but very few have had the stamina and resolve to maintain it through years of budget cuts and enrollment swings. There is an ongoing commitment to the IBC program, driven by the benefits it garners for its graduates. This is truly an exemplary school, and a learning organization.

Contributions of the Study to Prior Research

Previous doctoral theses based on undergraduate programs have focused primarily on the initial adoption and implementation of integrated curricular methods (for example, Holsing, 2007; Putchinski, 1998). The academic literature also has many articles describing integrated curriculum program development and implementation (Bishop, Vaughn, Jensen, Hanna, & Graf, 1998; Cohen, 2003; Corsini, et al., 2000; DeMoranville, Aurand, & Gordon, 2000; Hartenian, Schellenger, & Frederickson, 2001; Smith, Ducoffe, Tromley, & Tucker, 2006; Stover, et al., 1997). There have been several comprehensive studies on the state of curricular integration across business education (for example, Athavale, Davis, & Myring, 2008; Hamilton, McFarland, & Mirchandani, 2000).

This study brings several aspects to the field that are unique from published research. One is the perspective of both developers and current stakeholders of a long-term, successful, integrated business core curriculum.

Many of the participants in this study have more than a decade of experience in the program and have shared unique insights from that level of experience and long-term involvement. Another unique aspect of this study is, because of the longevity of the program, it is possible to focus on the improvement processes that are in place and how they have changed over time. This study sheds light on some of the issues and challenges that arise long after the initial program implementation. A third aspect of this study that helps it stand apart from earlier research is the placement of the business connection as a key success factor in program sustainability. Business does not have a secondary or tangential place in this program; they are at the center of it.

Recommendations for Further Research

First, this study points to additional research on employers' expectations and experiences with a specific academic program. Such a study may yield additional insights into the benefits they perceive from a program like this. A study that focuses on employers and other business connections as they relate to an academic program could further clarify that relationship and potential benefits for students.

Another stakeholder group that could give new insights is alumni. The ability to document their experiences and continuing relationships could yield valuable information about the direction of the current program.

Another interesting line of research relates to the organizational aspects of cohorts and student teams as well as faculty teams in a program context. For example, do the social or collaborative aspects of groups influence academic

performance? Is there a benefit to student outcomes in changing the level of social contact and interaction?

The findings here also suggest an investigation into the possible organizational and participant benefits that may result from the significant cultural shift that occurred in the study school.

A final research topic that is suggested from this study is an investigation of schools that developed and implemented a complex integrative program like IBC, but failed to sustain it. Understanding the factors that led to failure could help other schools avoid the same fate.

It's been nearly 20 years since the dean asked faculty to consider if what they were teaching was truly serving their students' needs. The answer to his question went far beyond the core curriculum and began a transformation that affected not only the common body of knowledge courses and how they are taught, but the entire college and its culture as well. Students are attracted to this school because of its reputation for helping its graduates succeed. Faculty comes for a chance to participate in a unique, collaborative approach to business education. Employers find employees who they believe are better prepared to contribute to their efforts, and academics who are willing to listen and respond to their needs. Employees become benefactors who help support and sustain the program. The perspective of two decades reveals a pattern that a brief inspection could not disclose. The cycle repeats, in a continuum of change.

References

- Association to Advance Collegiate Schools of Business. (1996). *A report of the AACSB faculty leadership task force*. St Louis, MO.
- Association to Advance Collegiate Schools of Business. (2002, April). *Management education at risk: A report from the management education task force, executive summary*. St. Louis, MO.
- Association to Advance Collegiate Schools of Business. (2006). *Eligibility procedures and accreditation standards for business accreditation*. Tampa, FL.
- Athavale, M., Davis, R., & Myring, M. (2008). The integrated business curriculum: An examination of perceptions and practices, *Journal of Education for Business, 83*(5), 295-301.
- Bennett, J. C. (1999). Achieving professional excellence for a new century, *Information Management Journal, 33*(2), 36-42.
- Bennis, W. G., & O'Toole, J. (2005). How business schools lost their way. *Harvard Business Review, 83*(5), 96-104.
- Binks, M., Starkey, K., & Mahon, C. L., (2006). Entrepreneurship education and the business school. *Technology Analysis & Strategic Management, 18*(1), 1-18.
- Bishop, T. R., et al. (1998). A cross-functionally integrated undergraduate business core curriculum. *Mid-American Journal of Business, 13*(2), 65-71.

- Boatwright, E. W., & Stamps, M. B. (1988). Employers' importance ratings of student characteristics: A conjoint analysis approach. *Journal of Marketing Education, 10*(2), 74-78.
- Bridges, W. (2003). *Managing transitions, 2e*. Cambridge, MA: DeCapo Press.
- Brunel, F. F., & Hibbard, J. D. (2006). Using innovations in student teaming to leverage cross-functional and marketing learning: Evidence from a fully integrated undergraduate core. *Marketing Education Review, 16*(3), 15-23.
- Business-Higher Education Forum. (1997, January). *Spanning the chasm: Corporate and academic cooperation to improve work-force preparation*. Washington, DC: Author
- Campbell, N. D., Heriot, K. C., & Finney, R. Z. (2006). In defense of silos: An argument against the integrative undergraduate business curriculum. *Journal of Management Education, 30*(2), 316-332.
- Cannon, D., Klein, H., Koste, L., Magal, S. (2004). Curriculum integration using enterprise resource planning: An integrative case approach. *Journal of Education for Business, 80*(2), 93-101.
- Carnevale, A. P., Gainer, L. J., Meltzer, A. S., Holland, S. L. (1988). Workplace basics: The skills employers want. *Training & Development Journal, 42*(10), 22-44.
- Closs, D. J., & Stank, T. P. (1999). A cross-functional curriculum for supply chain education at Michigan state university. *Journal of Business Logistics, 20*(1), 59-72.

- Cohen, A. R. (2003). Transformational change at Babson College: Notes from the firing line. *Academy of Management Learning and Education*, 2(2), 155-180.
- Cook, C. W. (1993). Curriculum change: Bold thrusts or timid extensions. *Journal of Organizational Change Management*, 6(1), 28-40.
- Corsini, L. S., Crittenden, V. L., Keeley, R. C., Trompeter, G. M., & Viechnicki, B. (2000). Integrating cross-functional undergraduate teaching and learning: A work in progress. *Marketing Education Review*, 10(3), 1-17.
- Davis, J. R. (1995). *Interdisciplinary courses and team teaching: New arrangements for learning*. Phoenix, AZ: The Oryx Press.
- DeMoranville, C., Aurand, T. W., & Gordon, G. L. (2000). The delivery of an undergraduate, cross-functional business principles program: One university's continuing journey. *Marketing Education Review*, 10(3), 29-41.
- Drafke, M. W., Schoenbachler, D. D., & Gordon, G. L. (1996). Active and passive teaching methodologies: Student outcomes over a semester course. *Marketing Education Review*, 6(1).
- Drucker, P. (1999). *Management challenges for the 21st century*. New York: HarperCollins.
- Dulek, R. I., & Fielden, J. S. (1992, September/October). Why fight the system? *Business Horizons*, 305-310.
- Felder, R. M. (1995). We never said it would be easy. *Chem. Engr. Education*, 29(1), 32-33.

- Felder, R. M., Felder, G. N., & Dietz, E. J. (1998). A longitudinal study of engineering student performance and retention v. comparisons with traditionally taught students. *Journal of Engineering Education*, 87(4), 469-480.
- Fishman, C. (2003, December). The Wal-Mart you don't know. *Fast Company*, 77, 68-78.
- Frank, H. (2006, November/December). The BBA-resized. *BizEd*, 5(7), 34-36.
- Friedman, T. J. (2005). *The world is flat*. New York: Farrar, Straus & Giroux.
- Gordon, R. A., & Howell, J. E. (1959). *Higher education for business*. New York: Columbia University Press
- Hamilton, D., McFarland, D., & Mirchandani, D. (2000). A decision model for integration across the business curriculum in the 21st century. *Journal of Management Education*, 24(1), 102-126.
- Hammer, M., & Champy, J. (1993). *Reengineering the corporation: A manifesto for business revolution*. New York: Harper Business
- Hartenian, L. S., Schellenger, M., & Frederickson, P. (2001). Creation and assessment of an integrated business course: One college's experience. *Journal of Education for Business*, 76(3), 149.
- Hefferlin, JB. L. (1969). *Dynamics of academic reform*. San Francisco: Jossey-Bass.
- Holsing, D. D. (2007). *Integration of specialized disciplines in business school curriculum: Applying the SAP process* (Doctoray dissertation, University of

- South Dakota). Retrieved April 22, 2008, from ProQuest Digital Dissertations database. (Publication No. AAT 3269557)
- Jones, E. A. (2002). Transforming the curriculum: Preparing students for a changing world. *ASHE-ERIC Higher Education Report*, 29(3) 1-14.
- Jutras, P. F. (1994, July). *Developing students' capacity for learning and thinking through integrated curriculum and team learning experiences*. Paper presented at the annual International Conference of the International Association for the Study of Cooperation in Education, Portland, OR.
- Kanter, R. M. (1997). Restoring people to the heart of the organization of the future. In Hesselbein, Goldsmith, and Beckhard, (Eds.). *The organization of the future* (pp. 139-150). San Francisco: The Drucker Foundation, Jossey-Bass.
- Karakaya, F., & Karakaya, F. (1996). Employer expectations from a business education. *Journal of marketing for Higher Education*, 7(1), 9-16.
- Klein, J. T. (1990). *Interdisciplinarity: History, theory and practice*. Detroit: Wayne State University Press.
- Kolbe, R., & Cui, A. P. (2007, August). *Curriculum innovation: Toward real-world based learning*. Paper presented at American Marketing Association annual meeting, Philadelphia, PA.
- Kotter, J. P. (1996). *Leading change*. Boston: Harvard Business School Press.
- Lazear, E. P. (2004). Balanced skills and leadership. *American Economic Review*, 94(2), 208-211.
- Lewin, K. (1951). *Field theory in social science*. Chicago: Harper Brothers.

- Lewis, C.I. (1918). *A survey of logic*. Berkeley, CA: University of Berkeley Press.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- Linnehan, F. (2006, November/December). The undergraduate portfolio. *BizEd*, 5(7), 36-38.
- Lough, J. R. (1997). *Undergraduate curricular change among leading collegiate schools of business as measured by conformity to the Ford and Carnegie reports of 1959* (Doctoral dissertation, University of Georgia, 1997). Retrieved April 22, 2008, from ProQuest Digital Dissertations database. (Publication No. AAT 9817864)
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.
- McKinney, E. H., & Yoos, C. (1998). The one school roomhouse: An information and learning approach to curriculum integration. *Journal of Management Education*, 22(5), 618-636.
- Michaelson, L. K. (2006). *Integrating the core business curriculum: An experience-based solution*. Norman, OK: University of Oklahoma.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: Sage.
- Nicholson, C. Y., Barnett, S. T., & Dascher, P. E. (2005). Curriculum assessment in marketing programs: Current status and examination of AACSB core standards at the program level. *Marketing Education Review*, 15(2), 13-26.

- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage.
- Peterson, R. T., & Devlin, J. S. (1994). Perspectives on entry-level positions by graduating marketing seniors. *Marketing Education Review*, 4(3), 2-5.
- Pharr, S. W. (2000). Foundational considerations for establishing an integrated business common core curriculum. *Journal of Education for Business*. 76(1), 20-23.
- Pierson, F. C. (1959). *The education of American businessmen*. New York: McGraw-Hill.
- Porter, L. W. (1997, Winter). A decade of change in the business school: From complacency to tomorrow. *Selections. The Magazine of the Graduate Management Admission Council*, 1-8.
- Porter, L. W., & McKibbin, L. E. (1988). *Management education and development: Drift or thrust into the 21st century?* New York: McGraw-Hill.
- Puri, Y. R. (1995). *Enhancing business education using an integrated core curriculum*. Lowell, MA: University of Massachusetts, Lowell.
- Putchinski, L. B. (1998). *Case study of curriculum change in a College of Business Administration* (Doctoral dissertation, University of Central Florida, 1998). Retrieved April 24, 2008, from ProQuest Digital Dissertations database. (Publication No. AAT 9910803)
- Quelch, J. (2005). A new agenda for business schools. *The Chronicle Review*, 52(15), B19.

- Sautter, E. T., Popp, A. V., Pratt, E. R., & Mills, S. K. (2000). A "new and improved" curriculum: Process and outcomes. *Marketing Education Review*, 10(3), 19-28.
- Schneider, B. (1987). The people make the place. *Personnel Psychology*, 40, 437-453.
- Schon, D. A. (1973). *Beyond the stable state*. New York: Norton.
- Schwahn, C. J., & Spady, W. G. (1998). *Total leaders: Applying the best future-focused change strategies to education*. Arlington, VA: AASA.
- Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organization*. New York: Doubleday.
- Senge, P., Kleiner, A., Roberts, C., Ross, R., Roth, G., & Smith, B. (1999). *The dance of change: The challenges of sustaining momentum in learning organizations*. New York: Doubleday.
- Shapiro, B., Rangan, V., & Sviokla, J. (2004). Staple yourself to an order. *Harvard Business Review*, 82(7/8), 162-171. Retrieved from Business Source Premier database.
- Shuayto, N. (2001). *A study evaluating the critical managerial skills corporations and business schools desire of MBA graduates* (D.B.A. dissertation, Nova Southeastern University, 2001). Retrieved April 22, 2008, from ProQuest Digital Dissertations database. (Publication No. AAT 3024472)
- Small Business Administration. (2005). *The small business economy: A report to the president*. Washington, DC: Office of Advocacy.

- Small Business Administration. (2007). *SBA Office of Advocacy; Frequently asked Questions*. Retrieved April 25, 2007, from sba.gov Web site:
<http://app1.sba.gov/faqs/faqIndexAll.cfm?areaid=24>
- Smith Ducoffe, S. J., Tromley, C. L., & Tucker, M. (2006). Interdisciplinary, team-taught, undergraduate business courses: The impact of integration. *Journal of Management Education, 30*(2), 276-294.
- Smith, S. J., & Demichiell, R. L. (1996). Survey for stakeholders: A tool for assessing the importance of proposed curriculum changes. *Journal of Education for Business, 71*(6), 325-329.
- Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.
- Stake, R. E. (2006). *Multiple case study analysis*. New York: The Guilford Press.
- Stover, D., & Morris, J. S. (1997). Breaking down the silos: Attaining an integrated business common core. *American Business Review, 15*(2),1.
- Tanyel, F., Mitchell, M. A., & McAlum, H. G. (1999). The skill set for success of new business school graduates: Do prospective employers and university faculty agree? *Journal of Education for Business, 74*(7), 33-37.
- U.S. Department of Education, (2006). *A test of leadership: Charting the future of U.S. higher education*. Washington, DC.
- University of Arkansas, Fayetteville, AR, Sam M. Walton College of Business.
Reengineering the undergraduate business core: A business process approach. Retrieved April 22, 2008 from the Walton College website:
<http://waltoncollege.uark.edu/newcore/>

- Walker, K., & Black, E. (2000). Reengineering the undergraduate business core curriculum: Aligning business schools with business for improved performance. *Business Process Management Journal*, 6(3), 194.
- Williams, P. A. (1998). *Employability skills in the undergraduate business curriculum and job market preparedness: Perceptions of faculty and final-year students in five tertiary institutions* (Doctoral dissertation, Andrews University, Michigan, 1998). Retrieved April 24, 2008, from ProQuest Digital Dissertations database. (Publication No. AAT 9841476)
- Wingfield, S. S., & Black, G. S. (2005). Active versus passive course designs: The impact on student outcomes. *Journal of Education for Business*, 81(2), 119-123.
- Yazici, H. J. (2004). Student perceptions of collaborative learning in operations management classes. *Journal of Education for Business*, 80(2), 110-118.
- Zolner, J. P. (1996). *Moving the academic graveyard: An analysis of curriculum reform at Babson College* (Doctoral dissertation, Harvard University, 1996). Retrieved April 22, 2008, from ProQuest Digital Dissertations database.

APPENDICES

APPENDIX A

Letter of Invitation and Informed Consent Form

Subject: Invitation to participate in a study titled:

Closing The Gap In Business Education: A Case Study Of Continuing Curricular Transformation In An Exemplary Undergraduate Program

I would like to invite you to participate in a research study I am conducting for my dissertation that is exploring the motivations, process, and outcomes of change that resulted at the [study school] from the development and adoption of the Integrated Business Curriculum. Participation in this study will require about an hour of your time in an interview, either in person, or by telephone or webcam if that is more convenient. I plan to ask you questions about your perceptions of the implementation of the program, your impressions of the outcomes for students, and the processes you and your team employ to maintain currency and relevancy.

Hopefully, the results of this study will give insight into the process for other schools considering such a program change. The resulting research may be published in academic journals or presented at conferences, but your identity and the identity of your school will be kept strictly confidential. The initial interview and any follow-up interviews may be audio recorded to insure the accuracy of your statements. These audio records will be maintained in strictest confidence, as will all data collected, including interview notes. There are no known risks or discomforts associated with the study. Your privacy will be maintained by establishing a coding system to conceal your identity in all my data records and notes. Your participation in this study is strictly voluntary, and you are free to withdraw at any time. If you so choose, all data collected from you will be immediately destroyed. Participation or non-participation will not affect your relationship with the investigator, IUP, [study school], or your employer.

If you agree to be a part of this study, please sign the attached **Informed Consent Form** and return it to me in the enclosed self-addressed envelope. If you have questions or would like more information about the study, please feel free to call me or e-mail me. There is a second copy of the form enclosed for you to keep.

Sincerely,

John Buttermore
Principal Investigator
Doctoral Candidate, IUP

Dr. Cathy Kaufman-Crop
Faculty Sponsor
Professor, Professional Studies in Education

This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects.

Informed Consent Form

Closing The Gap In Business Education: A Case Study Of Continuing Curricular Transformation In An Exemplary Undergraduate Program

VOLUNTARY CONSENT FORM:

I have read and understand the information in the enclosed Invitation to participate and I consent to volunteer to be a subject in this study. I understand the interview(s) may be audio recorded. I also understand that my responses are completely confidential and that I have the right to withdraw from the study at any time. I have received an unsigned copy of this Informed Consent Form to keep in my possession.

Name (Please Print) _____

Signature _____

Date _____

Phone number or location where you can be reached:

Best days and times to reach you:

I certify that I have explained to the above individual the nature and purpose, the potential benefits, and possible risks associated with participation in this study, and have answered any questions that have been raised.

Date

Investigator's Signature

APPENDIX B

Guiding Interview Questions for Faculty and Administrators

The guiding interview questions for internal subjects, including faculty and administrators, align with the research questions as follows:

- Research question #1: Why did the school undertake this curricular and pedagogical change?
- Interview questions:
 - Describe the curricular model your school followed prior to revision.
 - Describe the external factors that influenced your change.
 - Describe the internal factors that influenced your change.
 - Describe your goals for the change.
 - Describe the program's values and beliefs.
 - Were these goals achieved?
- Research question #2: How did you accomplish this transformation?
What was the process you followed, what were the major obstacles encountered, and how were they overcome?
- Interview questions:
 - Can you describe the process that your school followed?
 - How did you arrive at this process?
 - Who was involved in the process?
 - Did you use an existing model for guidance?
 - What was the timeframe of the program change?

- Did you pilot the change?
 - Describe the main challenges to implementation.
 - How did you address these challenges?
- Research question #3: What benefits for faculty, students, employers, and other stakeholders do you attribute to the curricular change? Were changes made to faculty reward and evaluation criteria?
- Interview questions:
 - Describe the benefits for students.
 - Are they measurable, and if so, what are the results?
 - Describe the benefits for faculty.
 - Are they measurable, and if so, what are the results?
 - Describe the benefits for other stakeholders.
- Research question #4: How do you insure that your program continues to evolve with changing business methods and practices?
- Interview questions:
 - Do you have a process for considering change to the program on a regular basis?
 - Describe this process for continual improvement.
 - How is the change process administered?
 - If there is a regular review process, can you describe it?
- Research question #5: What advice can you offer to other schools considering such a change?
- Interview questions:

- Would you do things differently if you were to start over?
- Were you satisfied with your organization through the change process?
- Would you organize differently?
- If so, can you describe how that organization might look?

APPENDIX C

Guiding Interview Questions for Employers

External subjects of this study include employers and business sponsors of the program. These stakeholders have a different perspective and interest, focused more on the product and less on the process. Interview questions for these subjects will differ from those of the internal subjects of the study.

The guiding interview questions for these external subjects are:

- How long have you or your organization had a relationship with this school?
- Can you describe your organization's relationship with the school?
- Are you aware of the differences in the undergraduate program at this school versus other schools in the area?
- If so, what do these differences mean to you?
- What skills, traits, and knowledge do you look for in your new employees?
- Can you describe the differences in individuals who have completed this program versus individuals from other schools?
- Are individuals from this program more valuable to your organization, in general, than those from other schools?

APPENDIX D

Guiding Interview Questions for Student Focus Groups

S1: How do you feel about your IBC experience?

S2: How does IBC compare with other coursework you've taken at the university?

S3: Do you feel you're gaining a benefit or losing ground to students in conventional courses?

S4: Does IBC help in your major course of study?

S5: Are there extra demands on your time in IBC? If so, can you describe them?