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What are business schools doing for business today?

Fred R. David^{a,*}, Meredith E. David^b, Forest R. David^a

^a School of Business, Francis Marion University, Florence, SC 29501, U.S.A.

^b College of Business, Florida State University, Tallahassee, FL 32306, U.S.A.

KEYWORDS

Business school curricula;
Business theory vs. practice;
Business academicians vs. practitioners;
Business licenses, certifications, and skills

Abstract This article examines disparity between business school focus and business community needs. A content analysis of 200 corporate job descriptions collected in Fall 2009 revealed 140 specific license/certification/skills commonly cited as required for candidates applying for business jobs. A detailed matching of these post-graduation proficiencies with pre-graduation business major tracks is provided herein to assist schools in better aligning curricula with job requirements. This matching and aligning process is proposed as a key means for reducing disparity between post-graduation licenses/certification/skills required and the academic tracks that are feeders for such positions. Examination of 200 résumés of business students nearing graduation revealed low to no proficiency on the job description-derived skill sets. This finding suggests that disparity between school of business focus and practitioner needs is ongoing and potentially problematic, at least at the institutions sampled. A content analysis of 100 school of business course syllabi and 20 textbooks supported this conclusion. This article provides suggestions for closing the gap between business school curricula and corporate needs. The old business school is compared to our vision of the new business school, where close alignment of pre-graduation training with post-graduation job requirements serves both students and practitioners well.

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1. Are business students learning what employers need?

More than two decades ago, Dickinson, Herbst, and O'Shaughnessy (1983) wrote a *Business Horizons* article titled "What Are Business Schools Doing for Business?" In this piece, the authors stated that

"communication between business academics and the business community appears to be minimal, and perhaps even threatening to both parties; academics have little interest in practitioners and their ideas" (p. 51). We revisit this important issue, assess whether business schools today are offering students what it takes to get a job, and develop a matching of job description-derived skill sets with academic tracks that are feeders for such positions.

Since Gordon and Howell's (1959) Ford and Carnegie Foundation Report, business schools have been widely criticized for being too academic. In the 1990s, Mintzberg (1996) and others outspokenly

* Corresponding author.

E-mail addresses: freddavid9@gmail.com (F.R. David), med08f@fsu.edu (M.E. David), forest_david@strategyclub.com (F.R. David).

criticized business school curricula (Mintzberg & Gosling, 2002; Mintzberg & Lampel, 2001). The term 'ivory tower' came to symbolize the failure of business schools to adequately provide what the business world needs. Bennis and O'Toole (2005, p. 96) said "business programs face intense criticism for failing to impart useful skills, failing to prepare leaders, and even failing to lead graduates to good corporate jobs." More recently, Reibstein, Day, and Wind (2009) discuss how and why business academia has lost its way. Ellson (2009, p. 162) concluded that "whilst there may be exhortation of the benefits of practitioner learning, few institutions can obviously and straightforwardly claim teaching staffs that either offer wide experience of business practice or a pedagogy that reflects authentic and legitimate practitioner learning." Thus, after decades of business research, there appears to remain a divide between the training provided at some business schools and the needs of business jobs. This situation hurts business students, business schools, business firms, and society.

We endorse, acknowledge, and recognize the outstanding work that hundreds of academics have done and continue to do in advancing the body of knowledge in their respective business discipline. Many business professors over many years have maintained an excellent dialogue with the business community through their consulting, writing, workshops, continuing education, and teaching. Similarly, many business schools are doing an excellent job bridging the gap between theory and practice for their students. Various publications such as *Business Week*, *U.S. News & World Report*, *The Wall Street Journal*, and *Financial Times* annually publish best practice rankings of business schools. For example, *Business Week* in 2009 ranked business schools according to the percentage of graduating students that had completed internships; more than 90% of students graduating from five business schools had completed internships: Northeastern, University of Michigan, University of Pennsylvania, New York University, and University of Virginia. Internships generally provide practical knowledge to students. Another 19 business schools in that ranking had 80%-89% of their graduating seniors completing internships, led by Syracuse, Villanova, Cornell, Carnegie Mellon, Lehigh, and Georgetown.

The primary purpose of our research was to identify, categorize, and match specific business licenses, certifications, and technical skills cited in corporate job descriptions (as required for entry-level business jobs) with feasible academic tracks within various business majors. Business students likely need proficiency in one or more of these license, certification, or skill areas to

compete for business jobs, especially in this era of high unemployment. Our matching of skill sets with proposed academic tracks could benefit any business school striving to more closely align academic focus with corporate job needs.

The secondary purpose of our research was to assess the level of disconnect—or gap—between business school focus and business community needs, and to suggest some specific ways to meet the needs of both students and the business community. A close alignment of business school focus with business community needs should greatly benefit all stakeholders, especially business school students seeking full-time employment.

It is notable that large companies generally scan incoming résumés by key words, such as the exact licenses, certifications, and technical skills cited in job descriptions. If a graduating senior in business administration, for example, does not have expertise in a particular skill area and thus does not reflect this competence on their résumé, then oftentimes their résumé does not make the first cut for consideration. Such graduates arguably would have difficulty competing with persons laid off who have proficiency in areas cited in posted job descriptions.

Some recruiters, particularly in non-technical areas, assert that they do not recruit students as much for their specific skill sets as they do for the fact that they have essentially been 'certified' via graduating from a top business school program. These recruiters firmly believe that they can provide the in-house technical education students might require. What they seek are students who have been socialized in a top business school program. These recruiters, then, would not necessarily screen applicants on the basis of their holding special licenses or certifications as much as they would screen on the basis of the school from which the applicant graduated. Some faculty do not view their role as providers of licenses and certifications, and some recruiters do not hold faculty to this standard. Many critical certifications (e.g., CPA) occur post-graduation, not prior to graduation. Yet, students who do graduate with a specific skill set have a competitive advantage over those who do not.

2. The old business school

Perhaps the time has come to realign business school curricula with corporate needs. Pfeffer and Long (2002, p. 80) conclude "there is little evidence that mastery of the knowledge acquired in business schools enhances people's careers; even attaining an MBA has little effect on graduates' salaries

or career attainment.” Bennis and O’Toole (2005, p. 98) proclaimed that:

Instead of measuring themselves in terms of the competence of their graduates, or how well their faculties understand important drivers of business performance, business schools measure themselves almost solely by the rigor of their scientific research which is largely not grounded in actual business practice.

More recent articles also conclude that in order to get promoted in business academia, publications in the leading journals is key; contributions to practice, in or out of the classroom, are not important (Seggie & Griffith, 2009). Reibstein et al. (2009, p. 2) said “most promotion and tenure decisions depend on articles published in leading journals and, to a lesser degree, on teaching and service; it is time that promotion and tenure decisions take contributions to the advancement of practice into consideration.”

Some business journals publish articles deemed by practitioners to be impractical. Richard West, Dean Emeritus of the Stern School of Business, New York University, used the terms “fuzzy, irrelevant, and pretentious” to describe business school research (Gaddis, 2000, p. 55). Some journal articles are seemingly written by academics for academics, and offer little to no assistance for the practice of business. Bailey and Ford (1996, p. 8) summarize this problem, saying “business schools appeal to one another as scholarly communities through a plethora of academic journals that are utterly divorced from the challenges of everyday management.” In their AACSB-sponsored report on business schools, Porter and McKibbin (1987) put that publications intended for and acceptable to other academics ‘count,’ while publications intended primarily toward the practitioner ‘don’t count.’ This sentiment may still exist at some, if not many, universities. In his 1993 presidential address to the Academy of Management, Donald Hambrick (1994, p. 13) criticized the lack of impact of the work of its members on the business community because of the “incestuous, closed loop” nature of academic research and writing.

Bennis and O’Toole (2005) noted: “A renowned CEO doubtless speaks for many when he labels academic publishing a ‘vast wasteland’ from the point of view of business practitioners. In fact, relevance is often systematically expunged from many business journals” (p. 99). These authors state that young, untenured business faculty at many large universities are urged to “avoid work with practitioners; concentrate your research on narrow, scientific subjects” (p. 100). Young business faculty that publish practitioner articles to the exclusion of

theoretical articles run the risk of being denied tenure at some universities. Consequently, many business faculty and most business PhD students know considerably more about academic publishing and sophisticated statistical techniques than problems of the workplace.

Discontent between the business community and academia has become more pronounced of late as businesses are struggling to survive the economic recession. Although business schools and business education have been commercial successes, there are substantial questions about the relevance of their educational product and doubts about their effects on both the careers of their graduates and on management practice (Pfeffer & Long, 2002). One need only contrast business schools with other professional schools—such as medicine, engineering, nursing, and law—to see the disassociation between curricula and industry practice. Seth Godin (2000, p. 322) attended Stanford’s Graduate School of Business, studied this issue, and said “the core curriculum taught at business schools is irrelevant, and the utility of a business school degree is not based on learning.” In contrast, law professors are expected to be first-rate scholars, and articles published in law reviews are often cited in trials. Similarly, medical school professors usually publish advanced biological research, but these faculty are often also practicing doctors.

Pfeffer and Long (2002, p. 84) note “a large body of evidence suggests that the curriculum taught in business schools has only a small relationship to what is important for succeeding in business.” Ideally, business schools provide students the necessary training to compete favorably for jobs in the business world. Mintzberg and Gosling (2002, p. 28), however, reported that “contemporary business education focuses on the functions of business more than the practice of managing.” More than a decade earlier, Leavitt (1989, p. 40) concluded that “business schools have been designed without practice fields.” Leavitt also noted that “we have built a weird, almost unimaginable design for business education that distorts those subjected to it into critters with lopsided brains, icy hearts, and shrunken souls” (p. 39).

3. The research: Content analyses

To achieve the primary and secondary purpose of this research, we performed content analyses of (1) corporate job descriptions; (2) business student résumés; (3) business course syllabi; and (4) business textbooks. We examined documents from five AACSB-Accredited business schools located in the

Table 1. Profile of participants and variables

Business area	# Résumés	# Job descriptions	# Course syllabi	# Textbooks	# Licenses/Certifications	# Skills
Management	50	40	20	4	14	15
Marketing	45	44	17	4	7	19
Finance	28	51	14	4	20	3
Accounting	18	26	15	4	8	10
MIS	20	39	15	4	14	30
MBA	39	0	19	0		
TOTAL	200	200	100	20	63	77

eastern United States: Francis Marion University, University of Texas at Tyler, Georgia College and State University, La Salle University, and University of Rochester. We believe these schools are representative of the population of business schools, but certainly every school has unique policies, programs, students, and faculty.

3.1. Corporate job descriptions

Job descriptions reveal specific business licenses, certifications, and technical skills that companies require candidates to have before applying for various positions. A total of 200 corporate job descriptions were examined, resulting in identification of 140 specific competencies that included 63 business licenses/certifications and 77 technical skills. As indicated in Table 1, these 140 required competencies for various entry-level jobs were organized under five typical majors in a bachelor of business administration (BBA) program. Under Management there were 29 unique requirements, 26 under Marketing, 23 under Finance, 18 under Accounting, and 44 under MIS. The job descriptions were obtained from websites such as monster.com and careerbuilder.com; the various jobs were available across the United States and spanned all academic majors and many industries. The job descriptions were gathered by graduating BBA and MBA students actually in the job market.

Within each business major, the 140 licenses, certifications, and skills were grouped into homogeneous sets. We will call these autonomous sets *academic tracks* because these proposed groupings could provide the basis for a business school to either establish for the first time or modify their existing tracks within business majors. This key matching information is provided in Tables 2 through 6 for Management, Marketing, Finance, Accounting, and MIS, respectively. In addition, these Tables also provide a breakdown between licenses/certifications

available versus technical skills required across all academic tracks. Note in Table 2 that the 29 job description-derived skill sets in Management were organized under two academic tracks: Production/Operations Management and Human Resource Management. Also note that across these two tracks, 14 different management licenses/certifications were available and 15 different skills were cited among 40 management-related job postings.

Table 3 reveals 26 Marketing job posting-derived proficiencies organized into three tracks: Sales, Advertising, and Marketing Research. Note that there are only 7 license/certifications in Marketing versus 19 technical skills. For example, under the Advertising track, we only found one certification available: the Advertising Skills Certification (ASC). Note the Microsoft certifications and skills under Marketing Research. These are useful proficiencies for jobs across several majors and tracks but we included them only here since they were most commonly associated with Marketing jobs.

Table 4 provides 23 Finance proficiencies grouped into three tracks: Corporate, Banking/Insurance, and Investment/Brokerage. In direct contrast to the Marketing breakdown, note that there were 20 Finance licenses/certifications available versus only 3 technical skills found among the 200 job postings. This information suggests Finance curricula in schools of business should perhaps include or expand coverage of license/certification content areas.

As illustrated in Table 5, the 18 Accounting job description-derived proficiencies were grouped into three tracks: Tax, Financial, and Business Services. The breakdown was 8 license/certifications and 10 technical skills. Three technical skills—QuickBooks, Turbo Tax, and Quicken—showed up quite often in the job descriptions, yet Accounting curricula at the sample business schools do not provide coverage of these software packages.

Table 6 reveals 44 MIS licenses, certifications, and technical skills organized into three academic tracks:

Website Design/Support, Network Security/Support, and Database Management. There were 14 MIS licenses/certifications and 30 proficiencies found in the job postings. All but one of the licenses/certifications were within the Network Security/

Support track. Job postings require various technical skills in the Website Design/Support and Database Management areas.

The matching information provided in Tables 2 through 6 could benefit any business school that

Table 2. Corporate job description-derived management skill sets within two academic tracks (Production/Operations and Human Resources)

Licenses/Certifications	Skills
<u>Production/Operations Management</u> <ul style="list-style-type: none"> • Certified Supply Chain Professional (CSCP) • Certified in Production & Inventory Management (CPIM) • Certified Six Sigma Black Belt (CSSBB) • Business Process Management (BPM) • Certificate • Certified Quality Technician (CQT) 	<u>Production/Operations Management</u> <ul style="list-style-type: none"> • Lean Manufacturing • Kanban • ISO 9001 and ISO 14000 • Project Management • Occupational Safety & Health Administration (OSHA) • Project Kickstart Pro 5 • Microsoft Project (MSP)
<u>Human Resource Management</u> <ul style="list-style-type: none"> • Certified Compensation Professional (CCP) • Work-Life Certified Professional (WLCP) • Certified Benefits Professional (CBP) • Professional Human Resources (PHR) • Certified Human Resource Professional (CHRP) • Global Professional in Human Resource (GPHR) • Senior Professional in Human Resource (SPHR) • Chartered Human Resources Analyst Certification (CHRAC) • Associate in Management (AIM) 	<u>Human Resource Management</u> <ul style="list-style-type: none"> • Human Resource Information System (HRIS) • Team Building • Interpersonal • Public Speaking • Writing • Leadership • Computer

Table 3. Corporate job description-derived marketing skill sets within three academic tracks (Sales, Advertising, and Marketing Research)

Licenses/Certifications	Skills
<u>Sales</u> <ul style="list-style-type: none"> • Certified eMarketer (CeM) • Marketing Skills Certification (MSC) • Professional Certified Marketer (PCM) 	<u>Sales</u> <ul style="list-style-type: none"> • Point of Sales (POS) Software • Customer Relationship Management (CRM) • ACT! By Sage • Microsoft Outlook
<u>Advertising</u> <ul style="list-style-type: none"> • Advertising Skills Certification (ASC) 	<u>Advertising</u> <ul style="list-style-type: none"> • Microsoft Publisher • Desktop Publishing (DTP) • Adobe Photoshop & Illustrator • Adobe InDesign & Flash • Adobe Dreamweaver • Search Engine Marketing (SEM) • Quark Xpress
<u>Marketing Research</u> <ul style="list-style-type: none"> • Microsoft Certified Application Specialist (MCAS) • Microsoft Office Specialist (MOS) • Microsoft Office SharePoint Service (MOSS) 	<u>Marketing Research</u> <ul style="list-style-type: none"> • Access • Microsoft Excel • Microsoft PowerPoint • Statistical Package for the Social Sciences (SPSS) • Statistical Analytical Software (SAS) • R software & language

desires to more closely align its courses and curricula with post-graduation job requirements. The job description analysis definitely suggests that business students nearing graduation need more than communication skills, computer skills, interpersonal skills, and listening skills on their résumé. They need to be proficient, licensed, or certified in something specific within their major. Well, are they? To answer this question, we gathered and analyzed résumés, syllabi,

and textbooks to assess the degree to which post graduation job requirements are being provided by existing academic curricula at those institutions.

3.2. Student résumés

After compiling the list of licenses/certifications and skills, the degree of congruence between business school focus and business community needs

Table 4. Corporate job description-derived finance skill sets within three academic tracks (Corporate, Banking/Insurance, and Investment/Brokerage)

Licenses/Certifications	Skills
<u>Corporate</u> <ul style="list-style-type: none"> ● Chartered Financial Analyst (CFA) ● Certified Financial Planner (CFP) ● Chartered Financial Consultant (ChFC) ● Certified Financial Management (CFM) ● Chartered Asset Manager (CAM) ● Hyperion Financial Management (HFM) 	<u>Corporate</u> <ul style="list-style-type: none"> ● Financial Statement Analysis
<u>Banking/Insurance</u> <ul style="list-style-type: none"> ● LSU's Graduate School of Banking Diploma ● Chartered Life Underwriter (CLU) ● Life, Accident, & Health (LANH) ● Property & Casualty (PC) 	<u>Banking/Insurance</u>
<u>Investment/Brokerage</u> <ul style="list-style-type: none"> ● Certified Funds Specialist (CFS) ● Certified Annuity Specialist (CAS) ● Chartered Investment Counselor (CIC) ● Chartered Alternative Investment Analyst (CAIA) ● FINRA's Series 6, 7, 24, 63, and 65 ● NASAA's Series 66 (combines Series 63 and 65) ● Certificate in Investment Performance Management (CIPM) 	<u>Investment/Brokerage</u> <ul style="list-style-type: none"> ● INTEX ● Calypso (Calypso Technology, Inc.) ● Cornerstone's Power Investment Tools

Table 5. Corporate job description-derived accounting skill sets within three academic tracks (Tax, Financial, and Business Services)

Licenses/Certifications	Skills
<u>Tax</u> <ul style="list-style-type: none"> ● Certified Public Accountant (CPA) ● Accredited Business Accountant ● Accredited Tax Preparer ● Accredited Tax Advisor 	<u>Tax</u> <ul style="list-style-type: none"> ● QuickBooks ● Turbo Tax ● Quicken ● Lacerte
<u>Financial</u> <ul style="list-style-type: none"> ● Certified Management Accountant (CMA) 	<u>Financial</u> <ul style="list-style-type: none"> ● Generally Accepted Accounting Principles (GAAP) ● International Financial Reporting Standards (IFRS) ● Microsoft Dynamic SL ● Deltek GCS
<u>Business Services</u> <ul style="list-style-type: none"> ● Certified Fraud Examiner (CFE) ● Certified Patient Accounting Management (CPAM) ● Certified Clinic Account Manager (CCAM) 	<u>Business Services</u> <ul style="list-style-type: none"> ● Peachtree Quantum ● Property Automation's Tenant Pro 7

Table 6. Corporate job description-derived MIS skill sets within three academic tracks (Website Design/Support, Network Security/Support, and Database Management)

Licenses/Certifications	Skills
<p><u>Website Design/Support</u></p>	<p><u>Website Design/Support</u></p> <ul style="list-style-type: none"> ● WordPress ● Cascading Style Sheets (CSS) ● HTML and XHTML ● Asynchronous JavaScript XML (AJAX) ● Search Engine Optimization (SEO) ● Simple Object Access Pool (SOAP) ● Website Management System (WMS)
<p><u>Network Security/Support</u></p> <ul style="list-style-type: none"> ● Cisco Certified Entry Networking Technician (CCENT) ● Cisco Certified Network Associate (CCNA®) ● CCNA® Routing & Switching Certification ● Cisco Certified Design Expert (CCDE™) ● Software Quality Engineer Certification (SQEC) ● Certified Software Business Analyst (CSBA) ● Microsoft Certified Systems Engineer (MCSE) ● Certified Network Administrator ● Certified Network Engineer ● Project Management Professional (PMP) ● Certified Information Systems Security Professional (CISSP) ● Certified Identity Theft Risk Management Specialist (CITRMS) ● Certified Information Privacy Professional (CIPP) 	<p><u>Network Security/Support</u></p> <ul style="list-style-type: none"> ● Crystal Reports ● JavaScript, Java EE, and Java SE ● Geographic Information System (GIS) ● Citrix Software ● ARIS ● Linux
<p><u>Database Management</u></p> <ul style="list-style-type: none"> ● CompTIA A+, Network+ Certification 	<p><u>Database Management</u></p> <ul style="list-style-type: none"> ● Structured Query Language (SQL) ● MySQL ● Advanced Access ● Advanced Project Management ● Transportation Management System ● Data Warehouse Management ● Data Mining ● Business Intelligence and Reporting Tools (BIRT) ● Business Objects XI ● Extended Spreadsheet Database (Essbase) ● Oracle Database ● Enterprise Resource Planning (ERP) ● Hibernate ● SAS and SPSS

was assessed in three ways. First, 200 BBA and MBA student résumés were reviewed to determine the extent to which licenses/certifications were included on these documents. A total of 161 résumés from BBA students nearing graduation were reviewed, along with 39 résumés from MBA students close to receiving their degree.

Content analysis of the student résumés revealed that the vast majority of graduating BBA and MBA students lack experience in the license/certification and skill areas identified in this research; indeed, 95% of the sample résumés gave no mention of any license/certification or technical skill listed in

Tables 2 through 6. Almost without exception, students were not trained in the specific areas needed by businesses. Students who submitted the résumés were not interviewed, so it is possible that some of these individuals might possess a certain skill set not listed. As these technical skills and license/certifications take substantial time and effort to achieve, however, we believe most—if not all—students would include proficiency on their résumés if they possessed that credential.

No student, of course, would need proficiency in all the license/certification and skill areas cited in their major/track. Indeed, proficiency in a single

Table 7. The sample textbooks

Author(s)	Title	Publisher*	Year
Management			
Certo	Modern Management: Concepts and Skills	PH	2009
Katz/Green	Entrepreneurial Small Business	M/I	2009
Krajewski/Ritzman/Malhotra	Operations Management	PH	2010
Boyer/Verma	Operations and Supply Chain Management	SW	2010
Marketing			
Boone/Kurtz	Contemporary Marketing	SW	2010
Lamb/Hair/McDaniel	Marketing	SW	2010
Price/Ferrell	Marketing	SW	2010
Zikmund/Babin	Essentials of Marketing Research	SW	2010
Finance			
Ross/Westerfield/Jordan	Fundamentals of Corporate Finance	M/I	2010
Welch	Corporate Finance	PH	2009
Saunders/Cornett	Financial Markets and Institutions	M/I	2009
Berk/DeMarzo/Harford	Fundamentals of Corporate Finance	PH	2009
Accounting			
Nilolai/Bazley/Jones	Intermediate Accounting	SW	2010
Spiceland/Thomas/Herrmann	Financial Accounting	M/I	2009
Harrison/Horngren/Thomas	Financial Accounting	PH	2010
Libby/Libby/Short	Financial Accounting	M/I	2009
MIS			
Haag/Cummings	Management Information Systems	M/I	2010
Kroenke	Using Management Information Systems	PH	2009
Valacich/Schneider	Information Systems Today	PH	2010
Laudon/Laudon	Management Information Systems	PH	2010

* PH represents Prentice Hall; M/I represents McGraw-Hill/Irwin; SW represents South-Western.

technical skill area or license/certification set may be sufficient to land an excellent job. But, senior accounting majors were not proficient in QuickBooks, and thus gave no mention of QuickBooks on their résumés. MIS majors were not proficient in WordPress, a widely used website design tool. Marketing majors had used SPSS, but too little to include it on their résumé.

3.3. Course syllabi

Next, to assess the degree of disparity between post-graduation jobs requirements and pre-graduation training, we examined 100 business course syllabi: 81 from BBA courses and 19 from MBA courses (see Table 1). Almost without exception, no licenses/certifications or technical skills needed to obtain entry-level business jobs were mentioned in the 100 course syllabi examined. The syllabi spanned Management, Marketing, Finance, Accounting, and MIS, and were derived from AACSB-International Assurance of Learning documents, individual faculty, and university websites.

Follow-up conversations with business professors confirmed that courses being taught are not aimed at licensing or certifying students in anything. Professors generally said that knowledge of theory, associated with the respective business major areas, would enable students to study on their own outside of class to obtain desired licenses or certifications. Professors were often unaware of job description-derived licenses and certifications available in their respective areas.

3.4. Business textbooks

Finally, four business textbooks in each of the five business major areas were examined to assess coverage of business license/certification/skill content areas as posted in corporate job descriptions. As indicated in Table 7, the textbooks selected all had 2009 or 2010 copyrights and were deemed by respective faculty to be mainstream and widely used. We found that business textbooks largely do not mention the available license/certifications. There are a few exceptions, such as accounting textbooks mentioning

CPA and CMA licenses, and finance textbooks mentioning CFA, CFM, and CFP certifications. However, the sample business textbooks examined did not provide substantial coverage of the respective 140 skill sets identified. We should note here that some faculty do not use textbooks and some supplement texts with course packets; so, in this study we have not assessed all conceivable pedagogical sources of license/certification or technical skill materials.

4. The disparity remains

Our findings suggest an ongoing gap between what is being taught in business schools compared to what is actually needed by companies. Since only five business schools were surveyed, these results may not be representative of all business schools. As mentioned earlier, some business schools do a better job than others in aligning curricula with post-graduation job requirements, as reported annually by publications such as *U.S. News & World Report*.

The disparity between academic focus and corporate needs has an unintended benefit. Any business student today who takes the initiative, on their own, to acquire specific business license/certification/skills may have a distinct competitive advantage over students who rely solely on their academic training to acquire specific competencies needed to get various jobs. For example, International Accounting Standards (IAS) are not being taught in the sample business schools, nor are they covered in most accounting textbooks; yet, all corporations in the United States must adopt these standards by the year 2014. So, a self-motivated senior in accounting could acquire proficiency in this area and have a significant competitive advantage over other traditionally educated applicants competing for the same job. Similarly, WordPress is not being covered in MIS classes among the sample institutions. Students could independently choose to study this technique and then apply for relevant jobs associated with website development and promotion, or open their own business providing website design services. Business faculty could encourage and support such 'on their own' studying; matching information provided in Tables 2 through 6 can help guide these efforts.

5. The new business school

The categorization of post-graduation job licenses, certifications, and technical skills identified in this research regarding business majors and suggested tracks could prove useful to business schools which desire to more closely align their curricula with

corporate needs. The new business school of the future will feature minimal disparity pre-and-post graduation needs of students.

The business schools comprising our sample did not offer tracks within majors, but tracks organized as suggested herein could aid in providing students with more marketable skills and serve to reduce disparity between curricula and corporate needs. Simple inclusion of track information on a student's résumé could make that person more marketable for various jobs. Tracks within majors could also enable business schools to better tailor courses of study to business community needs. Business schools that already provide tracks within majors could compare their existing tracks to those suggested in Tables 2 through 6.

To better serve their students and the business community, the sample business schools should revise their mission to become more practitioner-oriented. There is need of a change in overall philosophy and mission to shift emphasis from theory to practice. This is not an either-or proposition; there simply needs to be more balance between theory and practice, with intrinsic and extrinsic rewards for practice being commensurate with rewards for theory. This fundamental change should be discussed among all business faculty and administrators to ideally achieve consensus regarding a strategic plan for the future.

To the extent that our findings are applicable beyond the sample schools, schools of business should revise their curricula to provide more training on technical skills needed for graduates to get jobs. Business course descriptions in college catalogues need to incorporate an emphasis on practical business licenses, certifications, and technical skills. Various business courses need revising to provide training whereby students who complete the course are prepared to take a particular license or certification exam, or are markedly proficient in some specific business skill. Within newly designed courses, pedagogical tools such as seminars, workshops, guest speakers, and class exercises could be aimed more at bridging the gap between academics and business community needs. Leonard (1992) and Beatty, Larny, Peacock, and Saladin (1996, p. 56) said that "academics must be willing to share the responsibility of crafting the content of courses with executives, and executives must do more than tell a few war stories, give the current state of recruiting, and run out the door."

Another positive change that schools of business could make is to design and offer new courses that specifically train students in license/certification/skill areas deemed most critically needed in their geographic service area. For example, there could

be short courses on SPSS, HTML, WordPress, QuickBooks, and other such technical areas listed in Tables 2 through 6. Business schools could offer more internship opportunities, to provide students with actual work experience in particular business license/certification areas. While it is one thing to have knowledge, it is quite another to have both knowledge and experience in particular skill sets desired by corporations. As an example of structure, students might receive 1-3 credit hours, plus compensation from the employing organization. Some schools already have internship programs; others should invest in the endeavor.

Business schools of the future should also strive for smaller classes in effort to reduce the disparity between academic focus and corporate needs. While some business schools already offer small classes, the overall trend toward voluminous lecture halls precludes the type of clinical instruction that one sees in architecture, medical, or other professional schools. By definition, large classes make some practitioner-oriented pedagogy difficult; consider, for instance, group work, experiential exercises, student oral presentations, visits to area businesses, and even answering students' questions.

Prior research suggests that business schools should hire more faculty who have business experience and credentials. As noted by Pfeffer and Long (2002, p. 90), "the shortage of faculty with a doctorate in business means more business schools are hiring from social science departments such as psychology and sociology." For many years, social scientists have derived power from the scarcity of terminally qualified business faculty. In some schools of business, social scientists have significant or dominant influence over policies and norms as per research, curricula, promotion, and tenure.

Also, to more closely align academic focus with corporate needs, business school accrediting organizations such as AACSB—International could support and advocate the kinds of changes being proposed in this article. AACSB is largely operated by school of business deans. AACSB's strict requirements regarding Assurance of Learning, for example, could encourage—if not mandate—schools of business to more closely align business school training and business community needs. If this does not happen soon, then non-AACSB schools of business that become practical/skills-oriented may gain competitive advantages over traditional schools of business that maintain the status quo of high disconnect between curricula and practice. Already, there are a growing number of short courses being offered by consulting firms and corporations to fill this void. And, likely, there will be more and more non-accredited online institutions and smaller colleges offering exactly

which licenses/certifications and skills corporations need, rather than what the Academy desires. Such innovative institutions could pose a substantial threat to the prosperity of traditional business schools, as society today needs and seeks both knowledge and training from professional school graduates.

Extant research suggests that schools of business could alter their tenure and promotion guidelines to encourage and reward practitioner-based research and consulting from faculty. At too many universities, what goes on in the classroom—as well as consulting—is not nearly as important to tenure and promotion as how many articles the faculty person has published in top journals. Reibstein et al. (2009, pp. 2-3) state:

It is time that promotion and tenure decisions take "contributions to the advancement of practice" into consideration; if it is accepted that part of the purpose of business schools is to advance the practice of business, this should be part of the consideration for tenure, salary increases, and recognition.

Schools of business should seek a balance between theoretical research using student subjects, laboratory investigations, and mathematical models and practical or applied business research using data and subjects from actual businesses. It would also be helpful for journal editors and peer reviewers to insist on all articles providing discussion related to implications for practitioners. Bartunek (2007) reported that 34% of recent articles in *Academy of Management Journal* did not mention implications for practice. Ghoshal, Arzen, and Brownfield (1992) and Beatty et al. (1996, p. 55) noted that the linkage between research and teaching assumes that research "will lead to knowledge useful to business and that such knowledge will flow back into companies through business school graduates and continuing education programs." Certainly, it would be a strange pharmacy or dentistry school whose research output was primarily intended to be only of interest and use to fellow academics, rather than practicing pharmacists or dentists. Articles published in journals widely read by businesspeople actually provide free advertising for schools of business, to an audience they presumably serve (in addition to students) and seek support from: businesses.

To facilitate transition from old school policies to new school practices, it would be helpful for business textbook authors to embrace some of the licenses/certifications and skills identified in this article and incorporate content that offers students proficiency in these areas. There definitely exists a

niche, if not large, market of school of business faculty who desire right now to provide more practical content for their students. Many faculty would greatly appreciate having the opportunity to adopt a textbook aimed at providing practical proficiencies to students. Truly adopting a practitioner theme could provide a distinct competitive advantage to textbooks.

The new business school might also feature an executive in residency program and/or a faculty in residence program whereby corporate executives and business faculty, respectively, spend a semester working inside the other's domain. Beatty et al. (1996) discussed this exchange concept at length, yet few schools have incorporated the idea, likely for financial reasons. Certainly, there are business faculty and business executives who would be interested in participating in a well-designed exchange program. Oftentimes, practitioners of business have knowledge of certain phenomena long before academics do; further, faculty over the years have rightly complained about lack of adequate access to real-world data. It is clear that cooperative efforts between faculty and practitioners are essential in order for relevant research to be conducted.

Over the last 50 years, business schools have generally rejected the so-called trade school model in order to gain 'respectability and approval' on their campuses by conforming to the norms and behaviors of arts and sciences departments. Some, if not many, business schools today need to model themselves a bit more closely after their professional school counterparts in order to simultaneously meet the needs of their students and corporations. If medical, dentistry, law, architecture, nursing, pharmacy, education, and other professional schools on campus can focus on real-world practice, then business schools can, too. Some business schools have guidelines specifically preventing faculty from moonlighting via consulting engagements. More engagement between business faculty and practicing managers may, however, be a good thing rather than a bad thing. Such interaction could result in more classroom coverage of job description-based proficiencies as needed for obtaining jobs today.

6. The bridge between theory and practice

Certainly, there are many other changes that some schools of business need to make in order to simultaneously meet the needs of both students and the business community. More closely aligning academic

tracks within majors, and courses within tracks, with the 140 specific license/certification/skill areas identified in Tables 2 through 6 would be a great start to reduce disparity between academic focus and corporate needs. Hopefully, this article provides incentive and direction for business faculty and administrators to discuss needed reforms in school philosophy and policies. Whenever concepts are being discussed in accounting, finance, marketing, management, or MIS classes, there is a basic assumption of practical utility to managers and organizations; otherwise, the concept would not be worthy of coverage. If schools of business will make some of the changes proposed herein, all stakeholders will benefit, especially students who desperately need proficiency in the specific license/certification/skill areas to be considered for today's corporate jobs.

To conclude their article titled "What Are Business Schools Doing for Business?", Dickinson, Herbst, and O'Shaughnessy (1983, p. 51) noted that "professors routinely suggest. . . corporations should be responsible to society, but few prestigious academics have suggested that business schools should be more responsive to their environments." In writing the present article, we do not claim to be prestigious academics. But, we do encourage business schools that have large disparity between curricula focus and corporate needs to initiate reforms suggested herein, to be more responsive to their environments.

We believe the gap between academic focus and business community needs will eventually be bridged at most colleges and universities. For laggards, however, business students—on their own and of their own volition—should consider becoming licensed or certified in one or more of the areas identified herein. Too many graduating business students today come to their first jobs long on theory and short on know-how. We envision a different future, in which academics and practitioners regularly enter into each other's world without needing to cast aside their own world. Students are, in fact, the bridge between theory and practice, between academics and practitioners. Meeting students' needs as outlined in this article could create a lasting bridge to the day when we can answer "What are business schools doing for business?" by detailing "What business schools are doing for students."

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