

Practice Makes Perfect: Integrating Business Practice in Business Education

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Integrating professional practice in higher education business curriculum is challenging. The challenges are vexing because student learning is affected by variables such as faculty preparation, pedagogy, student preparation, target labor market human capital requirements and institutional resources. Anchoring student learning based on integrating the liberal arts with expectations of the business community provides an excellent starting point for developing both the art and science of business. Using knowledge mapping strategies, an integrated professional curriculum can be developed that meets the needs of all institutional stakeholders. Successful institutions begin with the graduates' target labor market. Understand the needs of this market and then work backwards from future state student learning needs matching them with future state curricula. Calculate the gaps and devise workable strategies to close the gaps. Rich, integrated and active learning strategies that close the gap are not easy fixes, but are achievable based on a structured student learning outcomes approach.

INTRODUCTION

When educators discuss program excellence in higher education, a myriad of competing thoughts runs through their minds. This is normal since educators, even from the same department, tend to have different filters and perspectives. Because these different perspectives exist it is essential to establish parameters for the notions of excellence, knowledge levels, professional practice and integration.

Ernest L. Boyer (1990) stated it best when he defined quality, or excellence of education:

All forms of scholarship require a broad intellectual foundation. To prepare adequately the coming generation of scholars, we must ensure the quality of both their undergraduate and graduate education. Simply stated, tomorrow's scholars must be liberally educated. They must think creatively, communicate effectively, and have the capacity and the inclination to place ideas in a larger context.

Armed with a definition of quality education that fosters excellence, the root of education – knowledge – must be defined.

EDUCATION AND KNOWLEDGE

Defining knowledge begins by evaluating the role knowledge plays in human capital. Tom Davenport (1999) provides an excellent working definition of human capital. Davenport posits that human capital is composed of essential components, some are additive and other components are multipliers. The components consist of:

- Ability and ability is decomposed into additive building blocks such as knowledge, skill, and talent.
- Behavior.
- Effort – a human capital multiplier.
- Time – a human capital multiplier.

Davenport suggests that knowledge represents the intellectual or cognitive component of personal performance. Skill comprises the “means and methods” of accomplishing tasks. Talent is “inborn faculty” for task completion. Davenport notes that talent is roughly synonymous with aptitude. Behavior is the observable actions that contribute to task accomplishment.

Human capital is essentially developed through the acculturation process, experiences, and during periods of education and study (Hewlett 2002). Theodore Schultz, an economist, coined the term *human capital* (1961). Schultz identified the venues for the accretion of investments in human capital typically as “schooling,” on-the-job training, and access to economic information. Schultz also considered collateral effects on human capital such as health and migration (efficiency of human capital). Human capital, and measuring the investment in human capital, has been extensively researched over the last forty plus years.

The early theoretical underpinnings of human capital relate investment in education to economic growth (Bowman, 1964; Denison 1962; Psacharopoulos, 1981; Schultz 1961) and economic development (Bowman, 1980; Carnoy 1977). Additional early research focused on investments in human capital and how it informed consumption decisions and labor productivity (Dean, 1984; Welch, 1970, Mincer, 1972; Mincer, 1974).

Clearly there is a relationship between formal schooling and human capital development. The relationships between human capital, economic development, personal decisions, and labor productivity are empirically established. But how does higher education, specifically for business graduates, shape human capital?

Linking Business Education to Human Capital Development

A good starting point to evaluate the efficacy and design of programs, teaching methods, and textbook usage is to match them to human capital components. Davenport’s model of human capital (1999) provides an excellent rubric to evaluate education effectiveness. The major components of human capital can be evaluated by

how they are conditioned and developed by the components of “business education,” i.e., faculty’s human capital, student experiences, support resources, textbook usage, as well as course and program designs.

Davenport’s human capital model is composed of ability, which includes knowledge, skill, and talent, is added to behavior, time, and effort. The combination of these human capital variables are the prime determinates of quality and efficiency of task accomplishment. Davenport’s definition of skill, talent, behavior, time, and effort are all tailor made to fit into the design and implementation of business curricula; however, the notion of knowledge – a primary ingredient of the higher education experience – needs to be sharpened and refined. One of the most practical definitions of knowledge for crafting business ready graduates embraces the notion of professional intellect, which consists of differing levels of knowledge development (Quinn, Anderson, and Finkelstein, 1996).

Quinn et al. (1996) posits that professionals’ command a “body of knowledge” that should evolve through levels. They suggest that the professional intellect embodying this knowledge operates at four levels. The four levels are:

- Cognitive knowledge or “know-what” gained through study and certification. This is typically considered declarative knowledge.
- Advanced skills or “know-how” is gained through experience and initial elaboration. Attainment of this level of professional intellect denotes that ability to solve application level problems employing cognitive knowledge. This is typically considered procedural knowledge.
- System understanding or “know-why” is grounded in deep critical capability with extensive knowledge elaboration. At this level the individual understands “cause and effect relationships underlying a profession.” This is the embodiment of conditional knowledge with high levels of abstract reasoning.
- Self-motivated creativity or “care-why” is the backbone of employing knowledge, constructing positive behaviors, and creative effort required for success.

Using these levels of professional intellect allows curriculum, instructional methods, and assessment to be crafted in business programs that not only build “know-what” but begins in parallel to develop the “know-how, know-why and care-why” levels of professional intellect. Business programs in the United States and most developed countries do credible jobs of developing “know-what.” Honing these four levels of professional intellect to “professional” expectations establishes what can be achieved through formal education. What do the consumers of business school products – the employers – want developed by business schools?

Human Capital Requirements of Business Graduates

Clues to defining graduate human capital requirements can be gained from economic writings and observations. The Austrian school of economics postulates that entrepreneurs are integral to the market; in fact, Hayek and Mises argued that markets are entrepreneurially driven processes (Kirzner, 1997). Hayek suggested that the

equilibrating effects of the market are based on knowledge attained through market interactions. The Austrians suggested that the entrepreneur serves the market through alertness and discovery – higher order critical thinking skills. These roles imply care-why and know-why levels of professional intellect.

Focus group results that capture desired human capital required from graduate data built upon survey devices from local, national and international business executives can also be extremely useful in constructing the appropriate pedagogy. At Minot State University, in preparation for a comprehensive undergraduate and graduate curriculum revamp, such a study was undertaken from local and national business and not-for-profit leaders in all business functional areas (Ross, 2002). The thirteen desired outcomes identified in the study are listed below:

- Demonstrate effective decision making skills grounded in adaptability, courage, decisiveness, risk-taking, confidence, temperament, and objectivity.
- Demonstrate effective critical thinking skills that evaluate differing perspectives, effectiveness and appropriateness of decisions, and outcome forecasting skill.
- Employ effective writing skills in all media.
- Employ effective oral communication and presentation skills through varied media.
- Demonstrate effective leadership skills including motivation, behavior, and change management skills.
- Demonstrate effective interpersonal skills.
- Demonstrate professionalism, which includes honesty, integrity, accountability, and responsibility as well as ethical behavior.
- Demonstrate an integrated knowledge of current legal issues in business.
- Demonstrate a working knowledge of accounting principles that includes budgeting, cash analysis, financing decisions and sources of cash, and financial statement analysis. Interest was also expressed by business leaders in assisting graduates to understand how operations are affected by accounting regulations and procedures.
- Demonstrate effective use of technology including all forms of business software, communication media, and collaborative tools.
- Demonstrate effective sales and marketing skills.
- Demonstrate effective management skills.

In all cases, the business leaders preferred action oriented capabilities, not “familiarity with” or a general understanding of concepts. They want graduates capable of integrated critical knowledge of these thirteen business functions that the leaders believe essential to business success.

Scanning publications from professional organizations also provides insight into the taxonomy of knowledge used within the professions. For finance professionals, two good source publications include *Strategic Finance* from the Institute of Management Accountants – includes accounting, finance, and information management – and *AFP*

Exchange from the Association for Financial Professionals – focuses on cash management, treasury, and e-business.

To assess the level of knowledge targeted by articles, articles from three magazines of each publication listed above from the year 2003 were randomly selected, reviewed, and categorized along the same professional intellect levels defined by Quinn et al. (1996): know-what, know-how, know-why, and care-why. Although the publications have themes, it is noteworthy that the mix of knowledge levels targeted between the levels of professional intellect was consistent among editions. The use of cluster analysis to identify target knowledge levels is revealing since the articles are typically written by practitioners for practitioners and reflects the current state of professional knowledge in the finance profession.

The following journals from the year 2003 were reviewed: *Strategic Finance* (June, July, and August 2003) and *AFP Exchange* (23(1), 23(3), and 23(4)). Articles were categorized based on their dominant knowledge level. The table below reveals the results of the 67 articles reviewed:

| | Know-what | Know-how | Know-why | Care-why |
|------------|-----------|----------|----------|----------|
| Articles | 10 | 30 | 22 | 5 |
| % of total | 15% | 45% | 33% | 7% |

The profession’s revealed preferences for knowledge shows that “know-how and know-why” knowledge are dominate in the professional target audience.

Once professional knowledge expectation results are matched against student learning expectations, pedagogical methods can be devised to develop desired human capital characteristics. In a recent survey of students enrolling at Minot State University for a Master of Science in Management degree, the three principal reasons cited for seeking additional education included (Cresap, 2002):

- Gain knowledge and skills.
- Increase career options.
- Increase self-esteem and personal satisfaction.

Clearly to meet professional and student expectations there needs to be a balance by educators to craft learning experiences, scholarship, and integrated learning that facilitates multiple levels of professional intellect knowledge as well as human capital components.

WHAT ARE WE TEACHING?

It is virtually impossible to gain an appreciation for every finance or business course taught in institutions of higher learning in the United States, or even within a

single University for that matter. Yet, by reviewing the popular textbooks used in finance courses, one can gain an appreciation for the level of professional intellect and human capital development structure in undergraduate and graduate finance education.

The text books reviewed included introductory, intermediate, and introductory graduate textbooks (Block & Hirt, 2005; Brealey, Myers & Marcus, 2004; Brigham & Houston, 2004; Brigham & Ehrhardt, 2005; Keown, Martin, Petty & Scott, 2005; Moyer, McGuigan & Rao, 2005; Ross, Westerfield & Jordan, 2003). Several leading finance text book publishers were informed of this research project and asked to send a copy of their best selling finance texts for review. Each text book was reviewed based on a suggested “course outline” for the text’s treatment, or development, of the elements of professional intellect (Quinn et al., 1996) as well as other malleable elements of human capital (Davenport, 1999) such as skill and behavior. Skills and behavior expectations are defined by potential employers’ desired characteristics for graduates (Ross 2002).

The findings are highlighted in the table below.

| Category | Know What | Know How | Know Why | Care Why | Skill | Behavior |
|-----------|-----------|----------|----------|----------|-------|----------|
| % covered | 100% | 14% | 0% | 0% | 1% | 3% |

Textbooks, by definition, are heavily weighted toward know-what knowledge. Most textbook companies and authors have made great progress in attempting to incorporate issues of practice with accompanying CDs, case-studies, and websites with interactive materials. Unfortunately, many of the skills required by potential employers of graduates are critical thinking, integration, communication, and reasoning skills. Finance textbooks remain bastions of declarative knowledge.

The major differences found between introductory and more advance finance textbooks are the addition of topic complexity, more quantitative treatment of topics, and more topics. The employers’ desired skills such as critical evaluation of world trends, and elaboration with other business topics were strikingly weak in all reviewed texts. In short, higher education textbooks in finance, as with most other topical areas are essentially foundation material that exposes students to a body of silo knowledge focusing on know-what and occasionally know-how levels of knowledge. To move beyond these levels of knowledge, a thorough “gap” analysis needs to be constructed for courses and the entire curriculums.

STRUCTURING COURSES THAT INTEGRATE PROFESSIONAL PRACTICE

Gap analysis identifies the difference between the textbook and the expectations of the professional world. The gap is mitigated by the faculty influence and other resources. Before deciding on these other resources might consist of, the faculty member should consider the essential characteristics of linking the text to the desired outcomes through identifying key elements to be addressed. These items can include contextualizing skills, linking the liberal arts to the study of business, critical thinking,

reasoning skills, and communication skills. In short, business courses need to be elaborative as well as schema building courses.

Gerald Nosich (2001) suggests that developing high meta-cognitive graduates steeped in communication, reasoning, and critical thinking skills requires the faculty members as well as students be studied in the practice, pedagogy, and standards of critical reasoning. This is a much different way of looking at business courses than merely resonating with students on textual material and providing a context for application.

Methods to create these human capital rich business courses include, but are not limited to (Elder & Paul 2004; Hiler & Paul 2002; Paul & Elder 2004):

- Learn in a business environment – take the students out of the classroom and into business for a semester or longer – let the students work as employees with real responsibilities or do research for small and medium size businesses.
- Establish professional experience requirements prior to the program or during the program.
- Incubate businesses within the institution with students as the employees.
- Engage students in faculty research and consulting practice.
- Team-teach liberal art courses and business courses as joint ventures elaborating knowledge among disciplines.
- Teach students “how to study and learn” business subjects as well as creating explicit methods to integrate other learning experiences.
- Require students to integrate knowledge (elaboration exercises) among business topics and include opportunities for students to communicate in a variety of media.
- Integrate professional behavior standards into the curriculum, i.e., performance, dress, grooming, manners, and professional performance standards.
- Hold high standards in courses, such as satisfactory development of student learning outcomes to pass the course.
- Assess against professional standards established in program mission statements as well as the established student learning outcomes.
- Focus on student learning or active learning and promote elements of entrepreneurship in the curriculum, i.e., discovery, independent thought, and critical analysis.
- Use strong active learning pedagogy that focuses on pre-writing, constructive dialogues, learning logs, debates, collaboration, and self-assessment.

If higher education is to achieve the desired human capital development that adequately prepares business graduates for the “profession” then comprehensive and integrated curriculum and pedagogy methods needs to be constructed. How can this be done in the typical 120 – 130 semester hours available to higher education institutions at the undergraduate level and 30 - 60 semester hours available to graduate institutions?

Crafting Human Capital Rich Business Curricula

Certainly, know-what, or declarative, knowledge must remain a mainstay of business education; however, to achieve the knowledge, skills, and behaviors required by our ultimate customers – business, a structured and evaluative approach that focuses on professional needs must become the center of curricular design as well as pedagogical methods.

The steps to crafting a human capital rich curriculum include:

1. Research the human capital needs of businesses and industries that are typically targeted by the institution's graduates (market labor requirements).
2. Craft or validate the mission statement of the business department or college that aligns institutional capabilities with the unique nature of the target labor market.
3. Determine gaps between current curriculum, faculty capabilities, and resources and target market oriented curriculum.
4. Use the gap analysis to develop a curriculum that is comprehensive and designed to develop the human capital components required by the market.
 - a. Integrated.
 - b. Action and experiential oriented.
 - c. Elaborate among business topics and liberal art skills that enhance human capital – make direct connects and overlaps between experiences, courses, and professional market expectations.
5. Develop, and hire, faculty that complements scholarly, curricular, and service needs of target market – begin closing faculty human capital gaps.
6. Structure institutional resources and student experiences to close resource and learning gaps between current state and future state.
7. Establish student learning outcomes for courses and programs that integrate market needs.
8. Assess the professional human capital elements associated with the identified course materials and determine the gap between student learning outcomes and the course materials, i.e., textbooks, cases, etc....
9. Establish an assessment program that evaluates student mastery of market driven learning outcome as well as outcomes that are longitudinal and evaluate the “latent” and “indirect” effects of learning.
10. Use the assessment program and environmental scans of market human capital needs to evaluate the efficacy of programs, courses, and resources and make necessary adjustments.

The path to implementing the mission and crafting excellence is shared among the faculty, program directors, chairs, and deans as well as the complete higher education staff. Excellence is also a shared concept that implies excellence in learning by students; contributing scholarship by faculty (individually and in concert with students); technology and library resources that shape students' learning experiences; diversity of experiences and ideas; as well as the selecting appropriate methods of learning delivery, i.e., classroom, field, online, correspondence, etc....

Implementing the Steps in Crafting Excellence: Focus, Outcomes, and Assessment

The most important element in the sequence that leads to excellent programs is the idea that quality faculty craft excellent programs. They should structure a central statement or focus (mission) for their programs. Once the focus of the program is established, an integrated curriculum that embraces the elements of quality specified by mission should be crafted. During the curriculum and mission development, the faculty should validate that their programs meet the needs of their constituency. During curriculum development the faculty establish student learning outcomes and assessment mechanisms.

Student learning outcomes are not mystical notions. Simply define seven to eight critical learning objectives that students must possess when they leave the program. The faculty shape students through their course of study; the learning outcomes are the guideposts for this shaping exercise. These outcomes may be knowledge, skills, ability enhancements, or behavioral components. Then the program should contain two to four (direct and indirect) methods for demonstrating evidence of achievement of the learning outcomes – this is the program assessment process.

Assessment evaluates the success of the faculty, efficacy of the resources employed to shape student learning, institutional support for learning, and curricular successes in shaping the student. Tom Angelo and Pat Cross (1993) provide the fundamental reason we assess learning:

Assessment is an approach designed to help teachers find out what students are learning in the classroom and how well they are learning it. This approach is learner-centered, teacher-directed, mutually beneficial, formative, context-specific, ongoing, and firmly rooted in good practice.

Student learning outcomes may be specific to a course, several courses, research, projects, thesis, or other integral parts of the program, but they should be explicitly identified. Assessment techniques, or tools, may focus on one or several of the student learning outcomes (Wehlburg, 2002).

Many accrediting bodies have guides for using rubrics and plans for student learning outcomes and assessment. For instance, the International Assembly for Collegiate Business Education (IACBE) publishes a guide for formulating student learning outcomes, assessment tools, assessment plans as well as instruments that may be useful in outcome assessment (Outcomes Assessment in Higher Education, 2002). The instruments identified by IACBE include the following:

- The Noel-Levitz Student Satisfaction Inventory.
- Employer's Survey.
- CIMBA- Barton Case Study and Program Objectives.
- MSIS-ICCP Exam and CCP Certification.
- Alumni Survey.

- Graduate Survey.
- MBA Pre- and Post-Tests.
- Mid-Term Course Evaluation.
- End-of-Term Course Evaluation.
- Culture Survey - Faculty and Staff Satisfaction Inventory.
- End-of-Term Commentaries.
- Writing Rubric.

The Association to Advance Collegiate Schools of Business International (AACSB) also addresses standards for achievement of learning goals (Eligibility Procedures and Accreditation Standards for Business Accreditation, 2004). The list of learning goals is tied to the institution's mission statement. Direct and indirect measure may be identified to support the knowledge and skills identified. Methods identified by AACSB include:

- Selection of students with pre-existing skills.
- Course-embedded measurements.
- Demonstration through stand-alone testing or performance.
- Alumni surveys.
- Employer surveys.
- Other indirect measurement tools.

Naturally, these are just examples and not an exhaustive list of assessment instruments. Both IACBE and AACSB require direct and indirect measurements of student learning outcomes.

Academic freedom in teaching and research should not be restricted by this process, but enhanced. Johnson and Johnson (1999) tie forms of cooperative, competitive, and individualistic learning together with assessment. Their work suggests a wide umbrella of pedagogical styles compatible with learning outcomes and assessment methods. Teachers still retain tremendous flexibility and individuality in methods of teaching to achieve student learning outcomes. Many excellent books elaborate pedagogical methods that can be tailored to meet program goals (Champagne, 1995; Christensen, Gavrin, & Sweet, 1991; Davis, 1993).

CONCLUSION

In summary, integrating professional practice into business and finance education is a structured and informed process. It's just good sound business, business of education that is. Half of the battle is in appreciating that the integration process must be thought through in a backwards fashion. Start with the needs of the business community served (customers), then analyze how students need to be shaped to meet the communities need (structuring the product), then take account of current resources to shape the students (methods and processes), and finally close the gaps between the target state and current state (lead and manage the process). By adding professional intellect, skills, and behavior

to the curriculum truly ensures that “practice makes perfect” the students’ learning experience in higher learning institutions.

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