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INSTITUTIONALIZING AND STANDARDIZING ASSESSMENT METHODOLOGY FOR MULTIPLE ACCREDITATION AGENCIES

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ABSTRACT

After successfully maintaining ACBSP accreditation and subsequently adding the attainment of AACSB accreditation as an important objective, the College of Business Administration at Texas A & M University–Kingsville is institutionalizing and standardizing student learning outcome assessment. The business education accrediting bodies place great emphasis on student learning outcomes assessment and on using the results of assessment activities to fuel continuous improvement; however, the administration of these assessment activities varies widely. The purpose of this investigation is to discuss the implementation of institutionalizing an assessment methodology and standardizing the assessment process for multiple assessment agencies at College of Business Administration at Texas A & M University–Kingsville.

JEL: I20, I21

KEYWORDS: Assessment Culture, Business Education Accreditation, Multiple Accreditors, Standardizing Assessment, Assessment Continuous Improvement

INTRODUCTION

Accreditation plays an extensive role in higher education as the primary means by which institutions of higher education in the United States assure and improve quality (Eaton, 2003). Accreditation agencies require higher educational institutions to verify their effectiveness across a number of dimensions; one of the most important measures of institutional effectiveness is student learning outcomes. As Secretary of the U.S. Department of Education, Margaret Spellings commissioned a study that concluded, “Accreditation agencies should make performance outcomes, including completion rates and student learning, the core of their assessment as a priority over inputs or processes (U.S. Department of Education, 2006). While accrediting agencies clearly require assessment and assessment is, appropriately, an important component of academic institution culture (Sujitparapitaya, 2014), there is no single set of guidelines for implementing an assessment culture. Many higher education institutions are finding their own best practices for institutionalizing assessment thereby prioritizing student learning outcomes (Garrett et al, 2012)

This study describes the approach taken by the College of Business Administration at Texas A & M University–Kingsville (The College) to institutionalize and standardize assessment of student learning outcomes. The paper first reviews literature pertinent to use of and methodology of assessment. The literature review is followed by a discussion of the institutionalizing process at The College. In covering the institutionalizing process, the institutional setting and assessment history are presented to provide context for the discussion of the new assessment approach. Following the new approach explication, possible future additional components are discussed along with ongoing evaluation of the standardization.

The paper concludes with a discussion of important lessons learned to date and sample assessment rubrics are appended.

LITERATURE REVIEW

Traditionally, accreditation has been the primary means of defining and measuring quality in higher education functioning as the check that protected consumers from fraud and assured institutions were eligible to receive a portion of the almost \$100 billion in federal and state loans and grants. Although accreditation has been in place for over 100 years, the role of accreditation is changing (Schray, n.d.a.). In the two decades since researchers declared that a shift had occurred in higher education from an instructional paradigm to a learning paradigm (Barr & Tagg, 1995), the emphasis on assessment has grown dramatically. Concern about the mounting cost and sometimes questionable value of higher education has led to increased scrutiny and mounting pressure on accrediting agencies and thus on institutions of higher education (Basken, 2007). In 1995 the National Advisory Committee on Institutional Quality and Integrity (NACIQI) criticized some accrediting bodies for failing to require institutions to show sufficient data demonstrating student achievement. This incident illustrated a shift in focus by NACIQI after the membership had recently become dominated by Department of Education appointees. Central to the dispute was the question of the power of government to control an agency that could mandate what colleges measure, define the metrics by which to measure and determine what accreditors should be doing to monitor the quality of institutions and programs (Basken, 2007).

Students at institutions without the endorsement of a federally approved accreditor are ineligible for federally subsidized loans, grants or federal work-study programs. The percentage of students receiving federal financial aid through these programs was 57% in 2012 and the average amount of annual support exceeded \$10,000 (Marklein, 2013). A total of \$112 billion was disbursed for student loans alone in 2012 (Delisle, 2013). This is but one source of federal funding upon which institutions depend. It does not include additional funding from the Department of Defense or Veterans Affairs, from research grants nor the \$6.6 billion in tax credits awarded in 2012. In addition, there were approximately \$33.2 billion of other tax credits and incentives claimed for educational purposes in 2012. Economists disagree on how to calculate the impact of federal spending and subsidies on higher education (Delisle, 2013). However, by any measure, whether direct or indirect, federal funds are a considerable source of revenue. Institutions, increasingly starved for state and local support, can ill afford to ignore federal support. Judith S. Eaton (2013) president of the Council for Higher Education (CHEA) contends that accreditation is rapidly changing to become “an instrument of government policy.”

In addition to the dependence of measurable tuition revenue on accreditation, evidence suggests that accreditation plays a part in student's choice of college. As delivery modes change to include online education that provides an opportunity for students to choose from institutions worldwide, students are less likely to depend on personal knowledge in making the choice of an institution in which to matriculate. Accreditation becomes a more significant factor in that decision under these circumstances (Colleges and Degrees, n.d.a.). The role of accreditation has become more important as it becomes more visible to this public scrutiny (Eaton, 2013). Much of the pressure imposed on educational institutions by accrediting agencies originates in the pressures the accrediting agencies themselves feel from governmental entities including the Department of Education, and Congress. The George W. Bush administration was marked by contentious battles over the measurement of quality in education. Far from abating, the transition into the Obama administration brought new criticisms and pressures from the white house to institute stricter controls and charges that the current system with six regional and seven national accrediting agencies is working (Kelderman, 2010). The College of Business Administration at Texas A & M-Kingsville is accredited by or seeks accreditation from three agencies: Southern Association of Colleges and Schools Commission on Colleges (SACS), Accreditation Council for Business Schools and Programs (ACBSP), and The Association to Advance Collegiate Schools of Business (AACSB). Each accrediting authority

provides its own guidance for assessment of student learning outcomes. This variation across accrediting entities increases resources required for compliance with assessment requirements.

SACS is the accrediting body for institutions of higher learning in the southern United States. As such, it does not accredit The College or its programs specifically; it accredits Texas A & M University – Kingsville (TAMU-K) and The College must comply with SACS principles. A principle of SACS accreditation is that institutions must demonstrate institutional effectiveness; in order to comply with this principle accredited an institution seeking accreditation “identifies expected outcomes, assesses the extent to which it achieves these outcomes, and provides evidence of improvement based on analysis of the results (of)... educational programs, to include student learning outcomes” (SACS 2010). SACS does not strictly define the assessment methodologies institutions must employ; SACS Comprehensive Standards for Institutional Effectiveness require an institution to identify and assess student learning outcomes (SACS, 2010). Because SACS is concerned with assessment across multiple disciplines, it does not specifically enumerate business education expected outcomes. SACS is a member of The Council of Regional Accrediting Commissions (CRAC), which did promulgate a framework providing guidance to institutions on five principles for focusing on student learning (CRAC, 2004). The five principles outlined by CRAC (2004) and to which SACS refers institutions are:

1. The institution defines educational quality—one of its core purposes—by how well it fulfills its declared mission on student learning.
2. The institution demonstrates that student learning is appropriate for the certificate or degree awarded and is consistent with the institution’s own standards of academic performance.
3. The institution derives evidence of student learning from multiple sources, such as courses, curricula, and co-curricular programming, and includes effects of both intentional and unintentional learning experiences. Evidence collected from these sources is complementary and demonstrates the impact of the institution as a whole on the student.
4. The collection, interpretation, and use of student learning evidence are a collective endeavor, and are not viewed as the sole responsibility of a single office or position. Those in the institution with a stake in decisions of educational quality participate in the process.
5. The institution uses broad participation in reflecting about student learning outcomes as a means of building a commitment to educational improvement

While SACS accreditation is partially dependent on institutions being able to demonstrate a focus on the above principles, the implementation of procedures that foster an environment with a focus on student learning is left up to the intuitions. Additionally, SACS does not specify program content at the college level (CRAC, 2004). The ACBSP accredits business schools and programs globally. As part of its guidance, the ACBSP provides information to institutions in its Standards and Criteria for Excellence (2014). Because ACBSP accredits business programs, it does require certain specific areas be taught to students in an institution’s programs. Standard 6 provides guidance for institutions on appropriate curriculum in business programs and suggests the curriculum at ACBSP accredited institutions contain a Common Professional Component (CPC) as well as areas of specialization within degree programs. The CPC requirements for all students regardless of specific business degree include ethics, global business, information technology and an integrating experience. Additionally, the ACBSP requires curricula be designed to include what is referred to as general education in communication and critical thinking skills (ACBSP, 2014). In order for institutions to confirm they adhere to ACBSP curriculum guidance in Standard 6, the institutions must assess and document student outcomes for the CPC, the general education and the

degree specific curriculum areas. ACBSP guidance on assessment is found in Standard 4, which relates to measuring student learning outcomes. Standard 4 requires each accredited business school to document student outcomes and to use the information gathered in the outcome assessment to improve the programs. Outcome assessment programs must meet the four criteria of the standard, which are paraphrased as follows:

1. Have an assessment program,
2. Identify trends over a minimum of three periods,
3. Collect assessment data to allow data comparison over time and to benchmarks, and
4. Demonstrate assessment data was used to improve the program (ACBSP, 2014)

The AACSB also accredits business schools and provides authoritative information for assessment in its Eligibility Procedures and Accreditation Standards for Business Accreditation (2015). Standard 8 as promulgated by the AACSB provides more latitude to institutions than ACBSP in the area of curriculum. The AACSB suggests general skill areas appropriate to business degrees; however, the AACSB states the skills are suggestions and not an exhaustive listing. The AACSB suggested curricula overlaps with ACBSP in several area including ethics, communication, and information technology. Additionally, Standard 8 recommends curricula incorporate analytical and reflective thinking as well as teamwork and multicultural instruction (AACSB, 2015). The AACSB discusses specifically how an institution might implement and provide assurance of learning with respect to a curriculum conforming to Standard 8 in its white paper titled AACSB Assurance of Learning Standards: An Interpretation (2013). Guidance for assurance of student learning outcomes is outlined in Standard 8 from the AACSB. All AACSB accredited institutions conduct a process, which ascertains how well student learning outcomes align with the curriculum based goals. In order to assure student learning outcomes, AACSB accredited institutions will perform and document the following processes:

1. Define student learning goals and objectives
2. Align curricula with the adopted goals
3. Identify instruments and measures to assess learning
4. Collect, analyze, and disseminate assessment information
5. Use assessment information for continuous improvement including documentation that the assessment process is being carried out in a systematic, ongoing basis (AACSB, 2013).

A comparison of some of the aforementioned critical elements of assessment for the three accrediting agencies is in the following Table 1.

With the increased emphasis on accreditation, the stakes have been raised for institutions seeking to establish accreditation and maintain it. This is evidenced by the value of resources devoted to accreditation by institutions. The direct costs associated with attaining and maintaining accreditation include fees paid to the accrediting agency. The AACSB charges an eligibility application fee of \$1,000 USD, an initial accreditation fee of \$5,400 USD and an initial accreditation visit fee of \$14,000 USD. Once accredited, AACSB charges an annual fee of \$5,400 USD (AACSB, n.d.a.). In attaining initial accreditation, institutions frequently incur additional expenditures for consultants, peer reviews teams, mock reviews, and infrastructure upgrades, which averaged around \$54,700 in Heriot, Franklin and Austin's study (2009).

Of far greater significance than agency fees and are increased recurring annual expenditures associated with accreditation. Heriot et al (2009) surveyed institutions and find AACSB institutions incur increased expenditures for faculty salaries, professional development, and conference participation among other items. Additionally, embedded within total cost of achieving and maintaining accreditation are costs associated with assessment of student learning. Kelley et al (2010) surveyed deans of AACSB accredited institutions and found over 47% of the institutions budgeted \$15,000 annually for assessment of learning.

Brink and Smith (2012) compared institutional costs to institutional resources for institutions affiliated with AACSB, ACBSP and a third accreditor, International Assembly for Collegiate Business Education (IACBE). As part of their study, they found institutions do appear to select accreditation agencies based on institutional resources available. When substantial costs are involved, it is logical to infer accredited institutions and those seeking accreditation will endeavor to conserve financial resources through consolidating and streamlining the activities required by multiple accrediting agencies.

Table 1: Comparison of Assessment Critical Elements for SACS, ACBSP, and AACSB

Agency	TAMU-K Accreditation Date	Curricula Guidance for Areas to Be Assessed	Student Outcome Assessment Requirements	Use of Assessment Data for Improvement
SACS	1933	Does not provide program level guidance on curricula	Must derive evidence of learning from multiple sources.	Reflect on student learning to build commitment for improvement
ACBSP	1988	Curricula must include ACBSP specific Common Professional Core	Must assess to be able to identify trends over a minimum of 3 periods	Demonstrate assessment was actually used to improve the program
AACSB	N/A	Program must incorporate General Skills in curricula with specific skills at program discretion	Must identify measures for assessment and collect, analyze and disseminate information collected	Document the assessment is systematic and used for continuous improvement

This table summarizes the differences between critical elements of assessment for SACS, ACBSP, and AACSB, which are discussed in the preceding paragraphs.

INSTITUTIONALIZING ASSESSMENT

Institutional Setting and Assessment History

Texas A & M University–Kingsville (TAMU-K) is located in south Texas around 100 miles north of the U.S. –Mexico border. Established in 1925 as South Texas State Teacher’s College, TAMU-K draws its student population primarily from south Texas and the students reflect the demographics of the area. Of the total population of 8,700 students, 62% of TAMU-K students are Hispanic, 24% are non-Hispanic white, 5% and about 4% are international students. TAMU-K has five colleges: Agriculture, Natural Resources and Human Sciences, Arts and Sciences, Business Administration, Education and Human Performance, Engineering and Graduate Studies offering 56 undergraduate degree programs. The Graduate Studies programs offer 61 Master’s programs and six doctoral programs. The Southern Association of Colleges and Schools Commission on Colleges (SACS) originally accredited TAMU-K in 1933 with the most recent affirmation being in 2005. TAMU-K offered its first business courses in 1925 and established the College of Business (The College) in 1929 (TAMU-K, n.d.a.)

The Texas A & M University-Kingsville College of Business granted its first baccalaureate degree in business in 1929. In 1988, The College was among the first to be granted accreditation by the ACBSP when the accrediting organization was established. The college has a Department of Accounting and Finance and a Department of Management, Marketing and Information systems. Each department has its own department chair; the MBA program has a director who is also the Assistant Dean. The College faculty consists of six professors, three associate professors, four full time lectures, eight tenure-track assistant professors, and one professor of practice for a total of 22 full time faculty. Additionally, The College has five adjunct faculty members. Four out of 22 faculty members carry administrative responsibilities. Standing faculty committees, through their representative nature and through the work in which they engage, embody essential components of healthy shared governance at TAMU-K College of Business Administration. These four standing committees are Assessment Committee; Curriculum and Standards Committee; Faculty Development Committee; and Strategic Planning Committee.

In addition to the previously discussed SACS and ACBSP accreditation, The College is in the process of aligning itself with AACSB standards with the expectation of achieving AACSB accreditation. Aligning The College with the accreditation standards of three accreditors is not without cost. Some direct expenses are born solely by The College and include the previously discussed annual accreditation agency membership fees along with expenses associated with participation in accreditation workshops and conferences and accreditation consultants fees. Other expenses for accreditation are indirect and are difficult to disaggregate from expenses incurred for changes made as opportunities to improve arose from the ongoing desire to improve The College. Additional indirect expenses for The College include: faculty record database fees, resources for faculty to maintain their academic and professional credentials (e.g., Thompson Financial, SNL Financial, Capital IQ, etc.), hiring additional faculty/staff or/and faculty release time. In addition, there are direct and indirect costs of the assessments providing assurance of learning. Assessment at The College requires both financial and human resources expenditures associated with training, faculty release time, assessment committee meetings, and assessment software. Some of the accreditation expenses (e.g., undergraduate advising, career counseling, library databases, etc.) are shared with other units across campus. All accreditation entities require faculty engagement in teaching, scholarly, professional and service activities. College leadership and faculty carefully assessed its alignment with AACSB standards using gap analysis and built on the existing accreditation infrastructure in order to attain its goal of dual accreditation.

At The College, the Assessment Committee is charged with the development of and implementation of a systematic assessment program. The Assessment Committee is responsible for the assessment of the College-wide learning goals adopted by the faculty. It oversees the collection of data relating to each learning goal, interprets the results of the data, communicates results to appropriate policy-making committees and administrators, proposes changes in curricula and pedagogy based on the results, and reviews the effectiveness of such changes. The College's Curriculum and Standards Committee assists and supports faculty in development and oversight of the curricula. It facilitates fair and transparent curricula processes and practices that embody the faculty's roles and responsibilities for developing and overseeing The College curricula in service to the College mission.

The Assessment Committee and the Curriculum Committee work closely together although they remain separate committees. The two committees work together to ensure that "closing of the loop" takes place and monitor that proposed changes in curriculum and pedagogy based on assessment results are carried out. The two committees make sure data is collected, analyzed, and reviewed by faculty to determine the effectiveness of such changes. The chair of the Curriculum Committee is an ex-Officio member of the Assessment Committee and vice versa. Before the new assessment approach, faculty relied heavily on course-embedded questions to assess students learning. Very few faculty used integrated cases in classes. Results for the Major Field Test (MFT) demonstrated a downward trend for The College's students. Assessment results were less than satisfactory especially among accounting and finance majors. Over the years, faculty struggled with improving student's learning outcomes specific to the major for accounting, finance, information systems, and marketing. Additionally, for these majors, critical thinking, integration and communication skills did not show signs of significant improvement either. Before the new approach, the Capstone class curriculum did not call for simulation, group or individual project, case presentation, or any other assignments, which would require student to apply and demonstrate competency in ways other than exams. The College did hold regular faculty retreats to discuss assessment results and brainstorm about "closing the loop" initiatives. However, when faculty implemented these initiatives in the classrooms, the desired results were not achieved at the major level and improvements would be only marginal at the College level. At the same time, faculty would be overwhelmed with assessment demands and workload. Overall, The College climate was one of complacency and the faculty was disengaged. "Closing the loop" initiatives were made in silos, which may have contributed to ineffectiveness of changes. Quite often, it was difficult to understand whether a major-specific "closing of the loop" initiative was successful. College faculty no longer carried out two embedded faculty responsibilities – development and oversight of the

College curricula in service to the College mission – effectively. The situation became even more challenging when, in fall 2013, College faculty and University administration decided to pursue AACSB accreditation.

New Assessment Approach

In spring 2014, The College adopted a new mission statement, a new vision, and new core values. The mission statement was developed through a systematic process involving faculty and other College stakeholders who included students, staff, Advisory Board, and Advisory Councils with controls to ensure the new mission was compatible with the University mission.

In spring/fall 2014 The College administered an Educational Benchmarking Inc. (EBI) survey to its stakeholders, which included alumni, employers, Advisory Board members and Advisory Councils members. One of the main goals of the EBI survey was to gather information regarding specific skills, abilities, knowledge, competencies and behaviors that are essential for The College's BBA graduates to possess in order to capitalize on their college degree become employable and develop successful careers over time. In addition to the EBI survey, The College gathered information from in-house instruments consisting of the Senior Survey, the Advisory Board survey, and the Faculty survey. In fall 2014, based on information gathered from the EBI survey and the additional surveys, The College faculty revised learning goals and objectives for the BBA program and consecutively for all undergraduate majors. Faculty also engaged in curricula mapping and developed an assessment plan for each of six majors.

All six majors have at least one (e.g., "communicate effectively") in some me cases two common (e.g., "communicate effectively," "demonstrate ethical consciousness") learning goals and as many as five common learning objectives (e.g., "critically evaluate options and their implications," "formulate alternative solutions," "oral communication," "written communication," "ethical consciousness"). Overlapping of learning goals and objectives across business majors is not surprising due to business discipline integration. Of course, each business major has major specific learning goals as well. For example: students graduating with a BBA in Information Systems are expected to possess programming skills; students graduating with a BBA in accounting must recognize impact of cost vs. equity method used to report the investment and use the results in decision-making; students graduating with a BBA in marketing are expected to prepare a marketing plan; students graduating with a BBA in management are expected to put together resources allocation plan and make recommendation to a company management about optimal resources allocation.

After the AACSB Initial Accreditation Committee (IAC) approved The College's AACSB Eligibility Application in summer 2014, and College started developing initial Self-Evaluation Report (iSER) in fall 2014, it became evident that College should streamline its ACBSP and AACSB assessment efforts. In order to facilitate direct assessment, The College invested in Student Tracking Evaluation & Portfolio System (STEPS), a web-based assessment software application used to collect, analyze, document, store and distribute direct assessment data. STEPS stores all process documentation including course assessment matrices, minutes, interventions, reports in its repository; organizes documentations for each program/major; retrieves assessment history by individual program/major; tracks and records progress on assessment activity and program/major improvements; prepares reports. Accreditation bodies place increasing emphasis on program/major assessment using direct measures (e.g., course-embedded assessment rather than surveys and constituent satisfaction measures). There is an increasing pressure to track individual student progress. Web-based software application allowed our College to support implementation and collection of direct assessments efficiently and cost-effectively.

Prior to the 2014–2015 academic year, The College’s faculty used course embedded quiz and test questions for direct ACBSP assessment. The results of students’ learning outcomes were inconsistent: student learning outcomes measured on a major level would demonstrate improvements; however, students’ performance on the Major Field Test (MFT), which was taken during their last semester before graduation, would continue to decline compared to the peer institutions. “Closing the loop” initiatives did not prove themselves as effective as faculty have anticipated. Because all BBA majors had overlapping learning goals, for example, students in all business majors were expected to be effective communicators, it was important to assess similar learning goals in a consistent way across majors. Prior to the new assessment approach, grades on presentations or scores on the assignments seldom provided such consistency across assignments and majors. Therefore, in spring 2015, faculty decided to switch to standardized rubric assessment. Faculty developed rubrics to assess ethical consciousness, global consciousness, discipline specific skills, written communication skills, and oral communication skills because these were common ACBSP learning goals across BBA majors. Switching to rubric assessment allowed The College to standardize assessment of student learning outcomes and perform evaluation based on desired traits using uniform six-point grading scale (“1...2” deficient; “3...4” competent; “5...6” exemplary) rather than a subjective grading or scoring (Appendix A).

Based on the previous assessment experience, faculty learned that lower-level major classes should be used to introduce and emphasize concepts rather than actually assess the concepts. The faculty decided to administer assessments in 400-level (senior) major classes, if possible, after the learning goals and objectives have been introduced and emphasized, preferably in more than one major class. During the same semester, faculty developed a "curricula map" for each major (Appendix B). This map guides faculty where a concept is introduced, emphasized, and assessed. The Assessment Committee created “Assessment Corner” in the Dean’s Office – an interactive bulletin where assessment information is displayed (e.g., major and program learning goals and objectives, assessment map, assessment schedule, etc.). This bulletin is updated on as needed basis but no less frequent than once a semester.

Once rubrics were developed and prior to deployment, faculty went through "calibration" exercises to ensure consistency in assessment. The practice assessments using the rubrics helped with reliability in assessment and minimized "outliers." In fact, there were no extreme (too high or too low) cases in spring assessment across all majors. The calibration exercises helped faculty to develop a standardized assessment approach. In addition, each STEPS student record had room for faculty to write down notes if needed. These notes were used later by Assessment Committee and College faculty at fall 2015 retreat in analyzing assessment results. For example, finance majors demonstrated exceptionally low scores on oral communication "engaging audience" trait. In response, the Assessment Committee generated a STEPS report with faculty notes and suggested additional "closing the loop" initiatives to finance faculty to help finance majors with this learning deficiency.

Most importantly, rubric assessment demonstrated that students across majors share common deficiencies. For example, a common deficiency in oral communication exhibited by all business majors was low competency in "engaging audience" trait. Faculty found students across all majors read information from slides instead of presenting it. In the past, faculty recognized their major specific students' deficiency in oral communication and addressed it. Applying rubric assessment provided a systematic way of assessing all students, regardless of major in a systematic way. This rubric-based assessment gave faculty a broader and uniform picture. Employing the same rubric across all majors allowed faculty to develop a systematic plan to address students' learning deficiencies in a methodical way. They hope to increase effectiveness in "closing the loop" outcomes in future semesters. Faculty also learned that assignments used for assessment purposes must be meaningful in terms of overall class grade and agreed that most evaluations should be conducted 50%-75% into the semester. Using end-of-the-semester assignments for assessment purposes should be minimized with exception of timing of MFT deployment and Capstone class.

Overall, The College's faculty became much more proactive in "closing the loop" initiatives. During spring 2015, a brainstorming session was dedicated to ACBSP assessment results and "closing the loop initiatives." In the past, initiatives were "flat," redundant, repetitive (e.g. "additional attempts on each test were utilized to increase the student's retention on these topics," "students were made aware of how important is to take assessment seriously in order to be competitive in business world," "incorporate discussion questions at the end of the lecture during class"). Rubrics assessment allowed faculty to see a "bigger" picture in student's learning processes and started changing The College's assurance of learning culture. Faculty agreed to minimize using multiple-choice; true/false questions in class as graded deliverables used for assessment purposes. Instead, faculty began to utilize integrated cases with questions for assessments. The undergraduate business curriculum is undergoing vast changes based on the indirect (e.g. EBI survey of alumni, employers, students' exit survey results, Dean's Advisory Board survey, etc.) and direct assessment. All undergraduate courses are in the process of being reviewed and redesigned by College faculty when necessary.

Summary of Changes to College Process Influencing Assessment Culture

The College's assessment plan is a work in progress. Activities of the Assessment Committee and the overall assessment process continue to have a positive impact on the College of Business Administration. Direct assessment activities have produced several modifications in College practices. The undergraduate business curriculum is undergoing vast changes based on the indirect (e.g. EBI survey of alumni, employers, students' exit survey results, Dean's Advisory Board survey, etc.) and direct assessment. All undergraduate courses are in the process of been reviewed and redesigned by College faculty when necessary. This process will continue in fall 2015. The capstone course was already revised substantially. It is now required that all students taking this course prepare a presentation for the end-of-semester case competition event. External judges measure the performance of groups in the case competition event.

The college adopted a standardized syllabus template. A course description master copy, which includes course description, goals and objectives addressed by the course is now associated with each course. The rules of APA Style®, detailed in the Publication Manual of the American Psychological Association, which offers sound guidance for writing with simplicity, power, and concision was adopted as the standard for courses requiring writing. Revised BBA advising forms ensure an on time completion of mandatory Student Professional Development Program (SPDP) and an immersion experience (e.g., students can choose a study abroad, faculty-student research collaboration, or an internship). Several academic and nonacademic processes have been modified in response to assessment results. As an example, a mid-semester "Scavenge Hunt" assignment was added to the University Success course to familiarize freshmen with the College faculty, staff, students' associations, and administration. Utilization of ExamMatrix – CPA review software – in upper level accounting classes helps prepare students and encourage more accounting majors to sit for the CPA exam. Utilization of CapitalIQ.com in business classes enhances students' critical thinking and financial statement analysis skills. Management faculty now leads student Professional Development Program (SPDP). SPDP workshops were redesigned (e.g., networking element was added to one of the workshops). All business students are required to register with Career Services and attend University Career Fair. Faculty developed an MFT study guide for BBA students and conduct review sessions to help students to prepare for MFT. The college developed closer ties with Center for Student Success. To better serve undergraduate students, meetings were held with the Vice President for Student Success to add another full-time undergraduate advisor. An accounting lab was created to assist sophomore students with the fundamentals of financial and managerial accounting.

The chair of the Assessment Committee is an Ex-Officio member on the Curriculum and Standards Committee and vs. versa to ensure that two committees work together seamlessly on "closing the loop." The undergraduate Advisor is a member of the Curriculum and Standards Committee to ensure more effective curricula management process. The Assessment Committee met together with the Curriculum and

Standards Committee at the end of spring 2015 semester to discuss the results of the first round of assessment. Their recommendation to faculty: 1. Assessment Committee will continue to rely on teams of faculty volunteers to conduct AACSB assessment; 2. assessment Committee recommends faculty volunteers to go thru “calibration exercise” prior to assessment; 3. the best time to deploy assessment is midterm or ¾ after the beginning of the semester (assessment conducted in capstone class is an exception); 4. faculty should rely less on test-bank true/false and multiple choice questions. Assessment committee recommends using integrated and discussion questions. 5. Finally, faculty are encouraged to experiment with “flipped” classrooms and other innovative pedagogies.

Culture Changes Subsequent to the Process Changes

The changes in processes discussed in the preceding section quickly led to changes in The College’s assessment culture. Faculty embraced the idea of continuous improvement and became eager to assist students in addressing deficiencies in the area identified through the assessment of learning. During the August 2015 Faculty Retreat, the faculty brainstormed closing the loop initiatives and made the following recommendations for the following, which are being implemented: In an effort to improve writing, faculty encourage students to visit the University Undergraduate Writing Center located on the second floor of Jernigan Library for help with the structure of their written assignments, grammar, and spelling. Traits and rubrics for written communication have been given to students as guidelines on how to prepare written documents using the rubrics; faculty will provide students with feedback on all written assignments. Faculty will discuss the most common writing errors in class, as well as the most common techniques for improvement writing assignments. In addition to changing their writing pedagogy, faculty attended Writing Center workshops and invited the University Writing Center Director to the first fall 2015 faculty meeting.

In an effort to improve oral communication, faculty require student to “dry run” their presentations, utilize College Media Lab, PowerPoint media or other tools to record their presentation and submit recordings to instructor for feedback prior to graded class deliverable. Faculty now provides verbal and written feedback to student teams regarding their strengths, weaknesses and areas of improvement throughout their teamwork. Faculty now incorporates team projects in classes throughout the BBA program and encourages team diversity. When students are working in teams, faculty emphasize the importance of team cohesion, communication, accountability and professionalism. To be more effective at development of critical thinking skills and their application in the field of study, faculty give students multiple opportunities to analyze problems, evaluate data, solve problems and reflect on the solution and process. Using cooperative learning strategies (i.e., teams representing different majors) – group learning situations foster active, critical thinking with continuous support and feedback from other team members and faculty. The addition of Case Study/Discussion/Conference method now augments traditional lectures.

CONCLUDING COMMENTS

This paper presents a case study of a small business school pursuing two goals: maintaining ACBSP accreditation and pursuing AACSB accreditation. The College of Business Administration is surrounded by competitors who are AACSB accredited and operates in the unique market where students often choose college based on its proximity to their family along with many other factors. Institutions of Higher Education are facing many challenges and one of them is the decrease of state funding. Maintenance of accreditation and pursue of additional accreditation(s) could be viewed as capital investment. Recruits and their parents regularly inquire about College accreditation status at recruiting events. College stakeholders expect accreditation information to be easily accessible, available, and current. Mounting attention to assessment has raised pressure on business education to be accountable. Each business school and college has to develop their own assessment program and at the same time reach a realistic balance between faculty load, staff support, and resources availability. A viable assessment program can significantly improve

student learning, contribute to betterment of the college or school perception by its stakeholders and the community; further solidify relations between college and the university administration.

In this paper, we discuss the implementation of institutionalizing an assessment methodology and standardizing the assessment process for multiple assessment agencies at College of Business at Texas A & M University–Kingsville. The major lesson learned from this case College success in maintaining accreditation and attaining additional accreditation(s) is a faculty driven process. There is no one single "right" way to do assessment. Depending on local conditions, a variety of approaches may satisfy major/program/college needs. Using a variety of assessment methods driven and developed by individual faculty members or by a group of faculty can lead to a stronger "bottom-up" approach to quality assurance and tangible continuous improvements. Because this paper represents a single case study, it has some limitations. This research was conducted in a small College of Business Administration. Our findings may not be generalized to a larges schools or different majors. Future research will address the outcomes of curricula changes and the results of loop closing initiatives.

APPENDICES

Appendix A: Example of Assessment Rubric

Learning Goal 3: Graduates Will Demonstrate Ethical, Sustainable, Cultural, and Global Consciousness					
Objective 2: Students Will Define Key Components of Sustainable, Cultural, and Global Issues in a Business Context.					
Traits and Rubric For Sustainable, Cultural, and Global Consciousness, Undergraduate					
Objective	Trait	Deficient (1... 2)	Competent (3... 4)	Exemplary (5...6)	Score
Students will define key component of sustainable, cultural and global issues	Identification of global economic trends	Students cannot identify any trends or distinguish between economic and other trends.	Students will correctly identify the main economic trends pertaining to a specific national/regional market.	Students will correctly identify the main economic trends pertaining to a specific national/regional market, along with their impact on businesses.	
	Identification of socio-cultural factors	Students cannot identify any trends or distinguish between socio-cultural and other trends.	Students will correctly identify the main socio-cultural trends pertaining to a specific national/regional market.	Student will show a deep understanding of the impact of socio-cultural factors on businesses.	
	Identification of sustainability issues	Students cannot identify any trends or distinguish between sustainability trends and other trends.	Students will correctly identify the main communication/ technological trends pertaining to a specific national/regional market.	Student will show a deep understanding of the impact of communication/ technological factors on businesses.	
	Link global economic, socio-cultural and sustainability opportunities to threats in business context	Students can't make the link.	Students can correctly identify how various trends in the business environment produce opportunities or threats.	Students can correctly identify how various trends in the business environment produce opportunities or threats, and explain the nature of these opportunities or threats.	

Appendix B: Example Curriculum Mapping of Assessments

I=Introduced E=Emphasized A=Assessed P=Post		Principles of Accounting I	Principles of Accounting II	International Business	Business Communication	Business Finance	Organizational Theory and Human Behavior	Principles of Marketing	Business Law	Strategic Management in a Global Business Environment
Learning Goal 3: Ethical, Sustain, Cultural, Global	Ethical	I	E	I	E	E	E	A	P	P
	Sustainability			I		E	E	A		P
	Cultural			I		E	E	A	P	P
	Global			I		E	E	A		P

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OPEN INNOVATION ALLIANCES AND COMMUNITIES IN HIGHER EDUCATION

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ABSTRACT

This study develops an extended taxonomy of innovation types by actor and learning type. The concepts of invention and collaborative and networked innovations are extended to crowd innovations, which is a new concept. The study introduces open innovation alliances and communities to promote innovations in higher education and presents a stakeholder map for such open innovation alliances and communities. Empirical evidence is presented from a European innovation alliance, which has been favorable for promoting research and development projects and student and staff exchanges in higher education. Empirical evidence is also presented from innovation communities, where crowdsourcing is used to search and evaluate new ideas. Finally, these ideas are forwarded for further development and implementation to produce crowd innovations.

JEL: O34

KEYWORDS: Innovation Alliances, Innovation Communities, Crowdsourcing, Research and Development, Learning, Higher Education

INTRODUCTION

An inventor is a person who creates inventions. The interjection “eureka” is used to celebrate an invention made by an inventor as in the times of Archimedes. The complex structures and processes of the modern society have reduced the importance of inventors and taught people to innovate. This dynamic and turbulent environment has forced higher education institutions (HEIs) to realize the value of collaborative and networked innovation to build open strategic networks that are involving external partners in their innovation process. Innovation has become too important to be left only in the hands of inventors.

A traditional innovation paradigm where a single scholar in a university internally generates a new idea and publishes the results in a journal takes time and is also inefficient because only very few people outside the HEIs read these articles and utilize the results. The traditional concept of developing unique competence through innovation within the institution as a competitive asset has become inadequate in today’s fast changing and complex global economy. The closed innovation environment of research and development simply is typically too slow and costly to produce competitive results. The traditional approach to innovation can thus be challenged and improved by producing open innovation networks.

Open and collaborative innovations can be characterized as an emerging area in HEIs, which have established innovation alliances and created mechanisms for how research and development can be integrated into their education. Open innovation alliances provide their partners advantages that facilitate learning and knowledge complementary to their current capabilities and strategic drivers for organizational growth in knowledge-intensive organizations. Individual scholars from various institutions work together in innovation alliances to create different types of creative ideas and innovative solutions to achieve the objectives of their institutions and their networks.

Lee et al. (2012) comment that “co-innovation is a new innovation paradigm where new ideas and approaches from various internal and external sources are integrated into a platform to generate new organizational and shared values.” Strategic networks show high potential as drivers of co-innovation because they provide access to new knowledge, skills, technologies, and markets by sharing risk and integrating complementary competencies (Romero and Molina, 2011). Problem solving is no longer only the activity of the individual genius; it can be radically distributed beyond the boundaries of professionalism.

The concept of open innovation generally includes inbound and outbound knowledge flows and their combined processes (Chesbrough, 2003, Chesbrough et al., 2006, Gianiodis et al., 2010, and Lichtenthaler, 2011). An open networked co-innovation is a form of external actor involvement in innovation, wherein actors from a diversity of backgrounds collectively solve complex problems via a virtual network (von Raesfeld et al., 2012, and Song et al., 2013). Inbound knowledge flows will utilize the discoveries of others, while outbound knowledge flows involve passing on internally developed knowledge, skills, and technologies and their combinations.

Internal team-based and often multidisciplinary collaborative innovation processes can also be extended to externally distributed networks and crowdsourcing activities. Crowdsourcing represents the action of an organization that is then outsourced to an undefined and generally large group of people as an open call. An important characteristic of crowdsourcing is that organizations have carried these actions themselves, but in this new situation they use the open call format to communicate to an innovation community consisting of a large crowd of innovators.

The purpose of this study is to present a taxonomy of innovation types and illustrate open strategic innovation alliances and communities so as to create a new stakeholder map for HEIs. Empirical evidence is presented on five European universities of applied sciences that have created an innovation alliance to promote collaboration in education, research, and development. The partners outside the network are able to join the research and development projects as well as the student and staff exchange. This study also presents a web-based innovation platform, which is a technical tool for an innovation community. That platform is a forum where new ideas from the general public can be also evaluated, improved, and further transferred for implementation.

The remainder of this paper is set up as follows. Section 2 includes the literature review, which depicts the evolution of innovations, open innovation alliances and communities, the extended taxonomy of innovation types and the stakeholder map of innovation alliances and communities. Section 3 describes the data and methodology and presents the cases from the Consortium on Applied Research and Professional Education (CARPE) and Innopankki platform. The results and discussion in Section 4 present networked learning and crowdsourcing as a means to promote innovations. The final Section 6 offers final comments.

LITERATURE REVIEW

The Evolution of Innovation

The dynamic forces of the environment have changed, so that an institutions' own competencies are not sufficient enough to develop sustainable competitive advantage. The traditional closed and critical approach of self-sufficiency and self-reliance has become virtually impossible to use to produce valued added for business companies and the public sector. Higher education institutions (HEIs) have now started to follow business companies where many new forms of partnerships, strategic alliances, and joint ventures have become increasingly popular.

HEIs used to develop knowledge and competencies internally, so that the researchers or institutions could be the first presenter of the new knowledge. It was thought that the researcher was a critical source of innovation even though in a few cases cooperation was extended to other researchers. Cooperation was, however, more distant than collaboration in many cases. The innovation process has gradually evolved from closed innovations to collaborative innovations and open networked innovations, wherein people outside the institution also participate in research and development.

Collaborative open value creation is not restricted only to HEIs, because the ideas and innovative efforts flow inside-out and outside-in between research institutes, business companies and public sector. Such open innovation builds a value chain through establishing an innovation ecosystem where various partners can combine their contributions into coherent value creating solutions. These research and development projects connect solution seekers to solution providers. The core of open innovation is the cumulative competence of the researchers and the institutions with external expertise.

The importance of collaboration with students and other stakeholders in the development of innovative services and products has emerged in recent years. As a result, such collaboration has become a major component in those HEIs that want to carry out research and development projects to promote innovations. These projects allow researchers to utilize partner knowledge and those capabilities for the improvement of services and products. Collaboration with external bodies has grown substantially as institutions have taken a paradigm shift from lecturing and exams to applied research and development which is then integrated into the delivery of education. These improved processes also create new capabilities for students to participate in development work after graduation.

Open Innovation Alliances

An open innovation alliance is a coalition between two or more parties to promote innovations and secure common interests. Open innovation alliances evolve over time, as the participating members are free to enter and leave the alliance (Kunsoo et al., 2012). Open innovation alliances have a number of benefits, including 1) pooling complementary skills, 2) accessing external knowledge, 3) accelerating product development (Pittaway et al., 2004), and 4) earlier and closer customer interaction in product development (Corso et al., 2001). There is extensive literature on the positive contributions of networks to innovation (Burt, 2005, Faems et al., 2005, and Perks and Jeffery, 2006). The business literature indeed shows that strategic alliances can lead to positive returns (Reuer and Koza, 2000).

HEIs use open innovation alliances to apply for funding and collaborate in research and development projects to better serve customers in their region and all of society. Han et al. (2012) suggest that the type of innovation process and the degree of openness are significantly associated with the profitability of open innovation alliances. This new paradigm of open and collaborative innovation alliances emerged and extended in higher education when countries joined the European Union, an event that required collaboration between several countries in its funding programs. Such projects differ substantially from traditional projects with no partners or international collaboration. It is important to assess and understand that research and development projects and their funding have changed their strategic scope and do require new and open innovation alliances to be most effective.

The strategic innovation alliances of HEIs and their partners facilitate value co-creation through joint design and the success of completed research and development projects, joint educational programs, and student and staff exchange. These alliances are expected to generate competitive advantage (Kaplan et al., 2010). Competitive advantage is created by entering the project or task based on an agreement. The majority of these agreements are made for research and development projects funded by external funding sources and student exchanges between HEIs.

The open innovation alliances of HEIs are formed and maintained based on several unique governing principles, such as open project membership and student and staff exchange, regulation of the funding bodies and self-monitoring and evaluation of HEIs for quality assurance. Open alliances evolve dynamically over time in terms of partner composition and the funding of projects and exchanges. Also, the focal areas of the European Union change when new program periods start. The evolutionary aspects of open strategic innovation alliances have positive implications for research and development project partnerships. HEIs must look for new partners according to their strategic plans and the changing environment, indeed not possible in a closed strategic network.

Innovation pedagogy was developed for HEIs, so that lecture-based education could be extended to collaborative and networked learning (Kettunen, 2011, Kantola and Kettunen, 2012, and Kettunen et al., 2013). Innovation pedagogy responds to the development needs of the companies and the public sector in the region and integrates research and development projects into education. Typically, the development needs are multidisciplinary, and innovations are improvements to existing processes, services, and products. The literature indicates that customer involvement tends to prefer incremental innovations (van der Panne et al., 2003), while radical or disruptive innovation may face resistance from customers (Christensen, 1997).

Individual-based knowledge is the basis of a self-sufficient profession, which has a small ambition, narrow applications, and is only incremental in its impact. The creation of innovations has gone through the evolutionary steps to collaborative innovation and open innovation during the past decades (Lee et al., 2010). In this study then, innovation pedagogy is extended from collaborative and networked learning to larger innovation communities where learning takes place as innovations are created based on the development ideas and evaluations of the greater public.

Open Innovation Communities

Von Hippel (2005) defines “innovation communities” as meaning nodes that consist of firms that are interconnected by information transfer links that may involve face-to-face, electronic, or other communication. Innovation communities are open and not limited to membership groups. Innovation communications can have users as customers or contributors, and they can offer sophisticated support, collaboration, evaluation, and assistance in developing and applying innovations.

Von Hippel (2005) emphasized the importance of users in the innovation process. Users join together in networked communities that provide a useful innovation platform for their interactions and the distribution of innovations. These innovation platforms can increase the speed and effectiveness with which users and customers can present, evaluate, and diffuse their innovations. Innovation with customers has become popular, because individual customers can be an important source of tacit knowledge, particularly, as it relates to a product’s use and design (Greer and Lei, 2012).

Crowdsourcing is a model used to attract an interested and motivated crowd of individuals to produce solutions that are superior to the ideas of individual genius or teams working in traditional forms of business. Under the right circumstances, this crowd is able to present a solution that is better than the ideas of a scientific researcher. The wisdom of crowds is not derived from averaging solutions, but rather, the crowdsourcing user must find situations wherein mediocrity is excellence and the solutions can be aggregated in the same way that markets and intelligent voting systems do (Surowiecki, 2004).

The conditions for collective wisdom are 1) diversity of opinion, 2) independence, 3) decentralization, and 4) aggregation of the crowd (Surowiecki, 2004). These four specifications can be implemented on the web, which is the necessary technology for decentralized individuals to be able to communicate on a

single platform. As the literature has noted, firms now perform these aspects of product development on a virtual basis (Greer and Lei, 2012).

Crowdsourcing is a distributed problem-solving model that is not necessarily open-source practice in business companies, because problems solved by the crowd may become the property of companies. The crowd knows this aspect when it participates in problem solving. A company posts a problem online, a vast number of individuals offer solutions to the problem, the winning ideas are awarded some form of a bounty, and the company produces the idea for its own gain. For business companies, it is reasonable to own the ideas it acquires from the crowd (Brabham, 2008). HEIs are open because they primarily publish the results of research and development.

The purpose of crowdsourcing is to take users and customers into the development processes to create valued that is then added for the producer and the customer (Brabham, 2008). Innovation communities and alliances are based on the collective intelligence distributed among people. Collaboration is desirable because one individual does not know everything and every individual knows something to add value to a project. A growing number of organizations have adopted such concept and implements online platforms to engage motivated individuals in their activities (Baldwin and von Hippel, 2011). This new ecosystem includes knowledge-based organizations where individuals and organizations are networked and interdependent. The co-innovation process of this ecosystem includes internal collaborative and external networked learning that converges to create a shared value. Collaborative and networked intelligence and crowdsourcing are possible through formal electronic channels and social networks. Diverse forms of learning and innovation can also be used, depending on their context and the situation.

Innovation Types

Innovation types can be classified based on the actor and the corresponding learning types. Inventions and collaborative and networked innovations are well known, but the concept of the crowd innovation is semantically new. The crowd innovation is based on crowdsourcing where innovations are obtained from an open innovation community. It is clearly a different process from the previous types of innovation because individual geniuses from the greater public present the idea and then evaluate the ideas of other people before the ideas are forwarded for implementation.

Table 1 depicts the innovation types by actor and learning type in an innovation ecosystem. An inventor is a researcher or developer who acts and learns individually and produces an invention that is related to a new or improved process, service, or product. Inventions have developed into collaborative innovations that are produced by internal innovation teams using collaborative learning. Innovation alliances provide possibilities for networked learning and innovation that can then be divided into networked inbound and co-creation innovations. Networked inbound innovations are those wherein explicit knowledge or technology is transferred from external partners. Networked co-creation innovations are created in collaboration with external partners. Innovation communities are based on crowdsourcing, where ideas and opinions of crowds are used to create crowd innovations.

Table 1: Innovation Types by Actor and Learning Type

Actor types	Learning types	Innovation types
Inventor	Individual learning	Invention
Team	Collaborative learning	Collaborative innovation
Innovation alliance	Networked learning	Networked innovation
Innovation community	Crowdsourcing	Crowd innovation

This table displays the taxonomy of innovation types by actor and learning type. An inventor, team, and innovation alliance are well known in the literature. The concept of crowd innovation is new and is based on crowdsourcing of the innovation community.

Stakeholder Map of Innovation Alliances and Communities

Various internal and external sources present new ideas or approaches in co-innovation to create new value for partners, users, and other stakeholders (von Hippel et al., 2011). Innovation alliances and communities can be described using the stakeholder map (Kettunen, 2015b), which was developed for this study to describe networking and crowdsourcing. Co-innovation is especially relevant in terms of value creation with partners and customers who are actively involved with the HEI to create value for themselves and the general public at large.

Figure 1 depicts the open innovation alliances and communities in the stakeholder map. The HEI is embraced by the strategic network. Other institutions and organizations outside the strategic network are partners in those research and development projects that are funded by the European Union or other funding bodies. Students outside the strategic network are able to enroll in education as exchange students. Also teachers and other staff join from outside the strategic network to exchange ideas. The innovation community is a larger concept than the more formal structure of institutions and partners. It consists of users and customers that produce ideas and give feedback using the basic principles of crowdsourcing.

The students and staff of HEIs are internal stakeholders, while other institutions, partners, users and customers are external stakeholders. Stakeholders clearly have various roles that relate to the institution. These roles have been described by Kaplan, Norton and Rugelsjoen (2010) using the balanced scorecard approach. Following those perspectives, some of the institutional stakeholders are related to 1) processes and structures, 2) finance, 3) innovations and learning, and 4) the external impact of their institutions. These perspectives are presented as a stakeholder map.

DATA AND METHODOLOGY

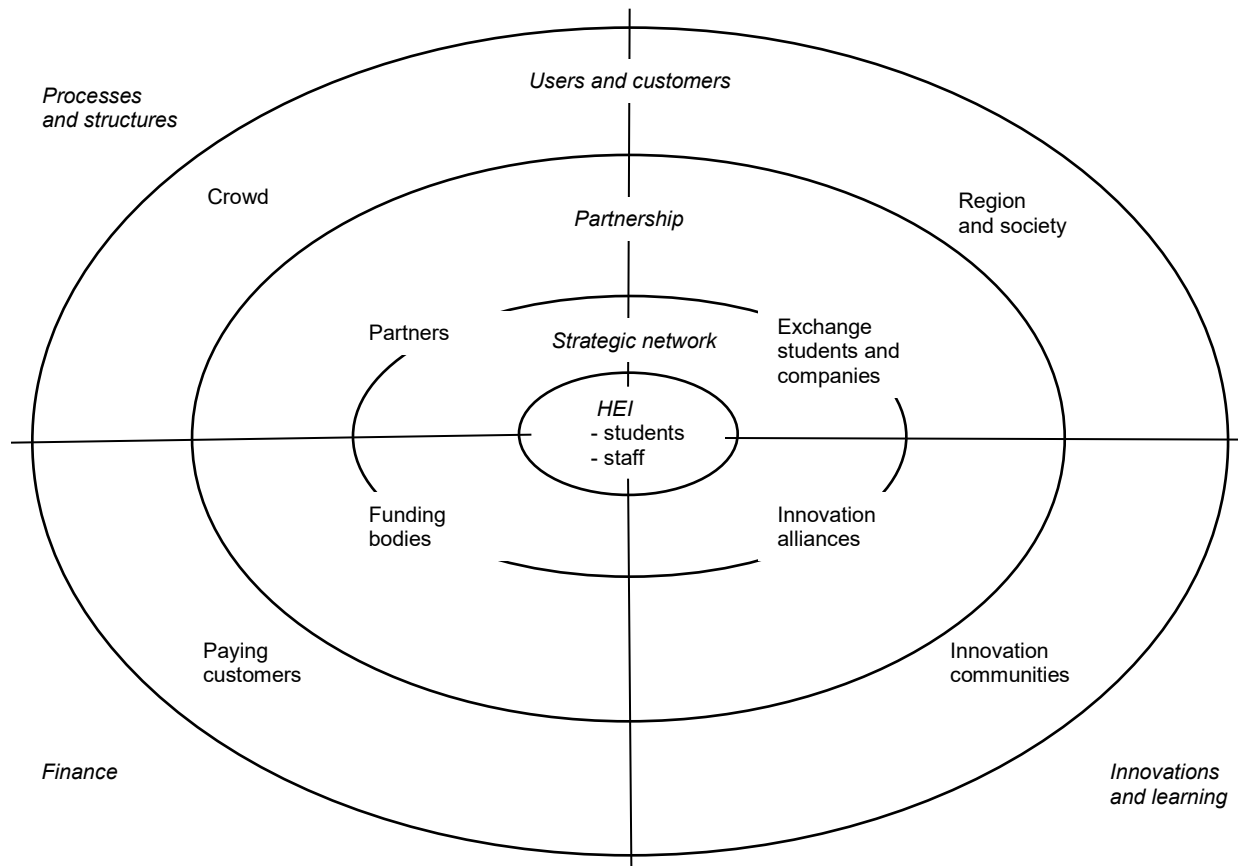
Networked learning in an open strategic network provides opportunities for inbound and co-creation innovations, indeed an innovation paradigm that helps a higher education institution (HEI) and its networks and partners create value for users and customers. The Consortium on Applied Research and Professional Education (CARPE) is an example of an innovation alliance and is the first European strategic network of its kind (Kettunen, 2015a, c). Crowdsourcing is a learning type where students, teachers, and other staff create and evaluate ideas for innovative processes, services and products. The project outcome called Innopankki by several educational institutions is an example of crowdsourcing.

CARPE is an open strategic innovation alliance that includes the following member institutions: 1) HU University of Applied Sciences Utrecht (Hogeschool Utrecht), 2) Turku University of Applied Sciences (Turun ammattikorkeakoulu), 3) Polytechnic University of Valencia (Universitat Politècnica de València), 4) Hamburg University of Applied Sciences (Hochschule für Angewandte Wissenschaften Hamburg), and 5) Manchester Metropolitan University. The agreement for the strategic network was signed in November of 2011. The key objectives of the network are 1) exchange and collaboration in European research programs, 2) the development of joint study programs, 3) an exchange of students and staff, and 4) the establishment of a strong European reputation.

A case study on the innovation communities and crowdsourcing can be found in South Savo in Finland, where the Center for Economic Development, Transport, and the Environment allocated funding from the European Union for a project titled “Kinos”, which then developed the web-based platform Innopankki to collect development ideas from the crowd. The University of Helsinki, Aalto University, Mikkeli University of Applied Sciences and the Mikkeli University Consortium joined Otava Folk High School and South Savo Vocational College to develop and maintain the innovation platform. This study is an

interesting example where ideas were collected from the wider audience that included users and customers so as to meet their needs and gather their views of development.

Figure 1: Open Innovation Alliances and Communities in a Stakeholder Map



This figure displays the stakeholders of a HEI. Open innovation alliances include a strategic network and its partners. Open innovation communities include users and customers. These stakeholders are classified according to their perspectives of the processes and structures, external impacts, innovations, and learning and finance.

The overall methodological approach for research design in this study is to connect the research questions and theoretical concepts as empirical data and select relevant tools and procedures as the coherent whole following the outlines presented by Bryman and Bell (2011) and Punch (2005). Qualitative research is used for this study to interpret the behavior at HEIs. A case study described by Yin (2003) involves an interpretative approach, which is used here too to capture the open research, development, and education in innovation alliances and communities. An interpretative study seeks a subjective understanding and enlightened details about the institutional management that is commonly omitted in quantitative studies (Mason, 2002).

RESULTS AND DISCUSSION

A Strategic Network That Promotes Innovations

A strategic alliance is expected to increase the resources and complementarities of the participating members and also improve their competitiveness. The partners outside the alliance are likely to take advantage of free-riding benefits as allied members provide them partnership in an open innovation alliance. The study by Han et al. (2012) supports the argument that these non-members can benefit from

the open strategic innovation alliance if they take part in the innovation ecosystem. Research and development projects and student and staff exchange all provide feasible ways to participate and thus take advantage of the innovation alliance.

The degree of openness may vary from one open innovation alliance to another depending on the access and decision making of that network. Access can be defined as the extent to which the external partners are allowed to enter the innovation alliance. Decision making describes the extent to which a partner of the open innovation alliance is authorized to participate in its operational and strategic decision making. The formal agreement of the Consortium on Applied Research and Professional Education (CARPE) was planned to create trust between partners and take responsibility for the core processes of member institutions, which included education, research and development projects, and support services (Kettunen, 2015c). However, the agreement did not limit the activities to member institutions only.

CARPE is an open strategic network because other higher education institutions (HEIs) and partners can join its research and development projects whenever it is deemed necessary to achieve the objectives of the projects. CARPE is also open in the sense that students and staff from other HEIs outside CARPE are able to participate in exchanges with the member institution of CARPE. Active collaboration opens up new possibilities for outsiders to acquire associate membership and finally full membership. Such active collaboration generates trust and improves the quality of that collaboration.

Crowdsourcing to Promote Innovations

Collective intelligence from multiple perspectives can be created when people from a diversity of backgrounds become involved in an online innovation process. Bartel et al. (2007) argue that next generation innovation management systems should take into account the stimulation of interactive and efficient innovation development. In this context, a web-based platform is promising for fostering such crowd innovations. An open innovation platform can be used to extend an invitation to the greater public to contribute to the innovation process.

The educational institutions located in South Savo developed the innovation platform, Innopankki, based on crowdsourcing. The users of the platform can register for free on Innopankki, as it is a virtual platform developed for sharing and evaluating ideas to promote innovations. Teachers are able to use these ideas in education and promote their research and development activities with partners. The ideas can also be used for a strategy process to evaluate the opportunities and threats in the environment. In addition, the ideas are collected to develop the campus environment further.

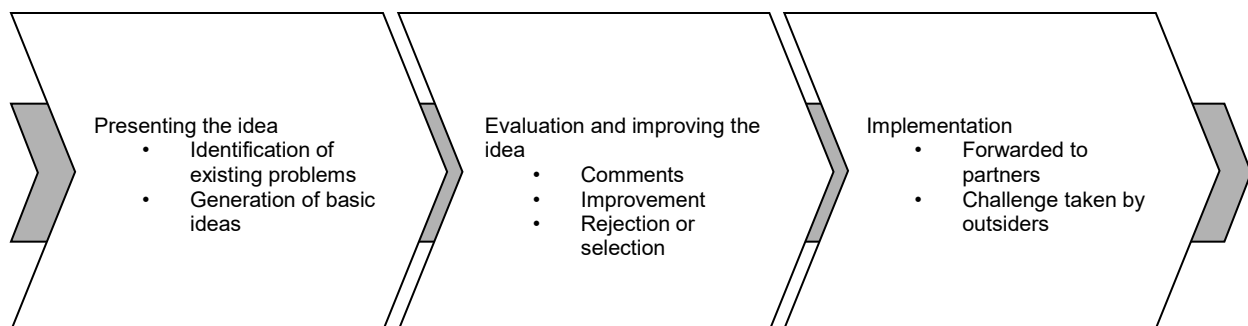
The generic innovation management process includes phases of search, refinement, selection, implementation, and capturing (Reinhard et al., 2012). Innopankki follows these phases and allows anyone to present, like, and comment on ideas on the platform. The diverse opinions of all the participants are aggregated when other people comment and improve the ideas through use of the web. The ideas are listed and finally forwarded for further development and implementation if the idea eventually meets the requirements of the challenge.

Figure 2 depicts the generic innovation process of the Innopankki platform. A user presents an idea at the first stage. That idea is usually based on an existing problem that needs a solution. The idea is commented on and improved by other users in the second stage. The idea is then rejected or selected for further development. It is important to reject the idea before implementation if the idea cannot lead to any benefits. The rejected idea can be left in the platform for further development. In the final stage, the evaluated and improved idea is forwarded to partners or taken on by any outsider for implementation.

The registered and anonymous users of the platform are able to present ideas that are in their field of expertise or area of interest. Users are able to follow the full development of the idea. They can also comment and improve on the ideas presented by other users of the platform. In this way, the wisdom of crowds can be collected to create or improve a new service or product, and the companies or other organizations are able to obtain the views of users for their development of services and products even in the planning phase. The generated ideas are open and free for anyone to implement.

An example of crowdsourcing was minimizing waste food in student restaurants. One of the facts was that there was surplus food after the lunch period in restaurants. The idea was to sell the excess food on the cheap for students in the afternoon. An improved idea was to freeze the remaining food into boxes, so that students could take them home in the afternoon. The idea was liked by 382 users and commented on by 7 users. Finally, the idea was moved ahead for further development and practice.

Figure 2: The Innovation Process for the Innopankki Platform



This figure displays the generic innovation process of the web-based Innopankki platform. Any user or customer is able to present an innovative idea, which is then evaluated and improved on in the second stage of the process. Finally, the idea is forwarded for implementation in the third stage of the process.

CONCLUDING COMMENTS

This paper presented a taxonomy for innovation types, illustrated the open innovation alliances and communities in higher education, and created a stakeholder map for them. Empirical evidence was presented from the Consortium on Applied Research and Professional Education (CARPE), a pioneering example of an innovation alliance in higher education. Evidence was also presented from the innovation community, Innopankki, where the principle of crowdsourcing is used to collect and evaluate ideas and develop innovations. These case studies demonstrate that closed innovation systems have given way to open co-innovations that now create shared value for institutions, partners, users, and customers.

The study shows that the traditional inventions of inventors and the research of single scholars have extended and expanded to internal collaborative innovations and networked innovations that consist of inbound, outbound and co-creation innovations. The study presents a new innovation type, namely, “crowd innovation” to correspond to those innovations created by crowdsourcing. It is not reasonable to limit innovations to a specific type whenever various types of innovations can be used in suitable situations. The limitations of this qualitative case study are unlikely to have a significant effect on the validity and reliability of the results because the objective of the study was not to generalize, but rather provide new insights and innovation types for higher education institutions (HEIs).

The empirical evidence supports the recommendation that HEIs create strategic innovation alliances to reform the structure of networking that promotes research and development, activates student and staff exchanges, and provides opportunities for HEIs and other partners to collaborate. The empirical evidence

also supports the reasoning that HEIs can use crowdsourcing to encourage the public at large to present and evaluate innovative ideas for further development and implementation.

These various types of innovation alliances and communities can be modified for various countries and regions to improve collaboration, collect and evaluate new ideas and forward them for further development and implementation. These partners, users and customers can help the institution improve or create new services or products. A challenge and indeed a fruitful topic for further study is to analyze the complementary competencies expressed herein to build innovation alliances in higher education. Another important challenge is to encourage and motivate the greater public to present innovative ideas for evaluation and further development in this endeavor.

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IMPLEMENTING ENTERPRISE RESOURCE PLANNING EDUCATION IN A POSTGRADUATE ACCOUNTING INFORMATION SYSTEMS COURSE

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ABSTRACT

The importance of Enterprise Resource Planning (ERP) systems education, its inclusion and evaluation in a university teaching context are the subjects of this article. As the importance of ERP systems has increased in the corporate world, so too has its importance increased in education. Many universities have recognized this need and the potential for using ERP systems software to teach business concepts. In this paper, the approach adopted is to develop a course that integrates theoretical accounting and business concepts together with a hands-on practical component. The course aims to empower postgraduate accounting students with knowledge regarding the process of adopting and exploiting ERP systems software to develop and maintain competitive advantage for organizations in a global marketplace.

JEL: I20, I29, M15, M40

KEYWORDS: Enterprise Systems, SAP, ERP, Curriculum, Business Process

INTRODUCTION

Organizations worldwide continue to invest in Enterprise Resource Planning (ERP) systems to develop and maintain competitive advantage. ERP systems provide management with a better understanding and transparency of their business operations and have become the mainstay of practically every organization (Winkelmann and Leyh 2010). Accordingly, as educators it is our responsibility to bring the issues and practices of industry into the classroom (Ayyagari 2011).

ERP systems are integrated software applications that consist of various modules such as accounting and finance, human resource management, sales and marketing, manufacturing and production that are built on a central database. The primary objective of these systems is to integrate organizational information from all functional areas thereby increasing efficiency and enhancing flexibility (Davenport 1998).

Teaching practical hands-on ERP skills is important for several reasons. First, learning ERP is identified as an important IT skill (Kim et al. 2006). Organizations need specialist users to utilize ERP systems in their daily tasks. Despite this requirement, most of the students in higher education rarely come across ERP systems (Strong et al. 2006). Second, advances in pedagogical approaches place emphasis on active learning. Teaching approaches based solely on lectures are criticized for making students passive learners (Toqeer 2013 ; Phillips and Trainor 2014). The active learning paradigm continues to gain prominence among educators and researchers as students seek opportunities to apply their knowledge to simulate realistic situations.

The demand for trained ERP planning professionals has motivated a number of universities to join alliances with ERP software vendors such as SAP (Becerra-Fernandez et al. 2000). The intent of such ERP initiatives being the education of managers to lead future organizations using skills acquired during their studies.

Exposing students to ERP education that includes a hands-on experience will equip these graduates to effectively analyze, administer and manage business processes within the organization. It is essential that students be taught about cross-functional processes that will assist them in relating to a variety of processes (for example, sales and purchases). It would be most beneficial to students if they can ‘see’ how events created in one unit initiate events for other units.

The remainder of this paper is organized as follows: section 2 reviews the literature on ERP education. Section 3 describes the data used and the methodology followed. The results and discussion are presented in section 4. Section 5 outlines the main conclusions, contributions, and implications drawn from this study.

LITERATURE REVIEW

ERP systems are integrated or packaged business software systems that are designed to streamline the flow of data in an organization with the intention of matching the physical flow of goods from raw materials to finished products. This flow of data may extend well beyond the boundaries of an organization to include the supply chain at one end, and the customer at the other (Kamhawi 2008 ; Koch and Wailgum 2008 ; Presley 2006 ; Norris et al. 2000). These systems adopt a structured approach to optimizing an organization’s internal value chain by linking various components of an enterprise through sharing of common data. For example, when a sale is recorded, this information is used to update other areas in an enterprise such as inventory, procurement, invoicing and recording of all related ledger postings (Deshmukh 2006 ; Musaji 2002 ; Norris et al. 2000). ERP systems, therefore have the following distinctive characteristics (Norris et al. 1998); i) multi-functional in scope – it tracks financial results (dollars), procurement (material), sales (people and goods) and manufacturing (people and resources); ii) integrated in nature, that is, when a piece of data is entered regarding one function, data regarding other functions is changed and, iii) modular in structure, that is, it can be used in a way that is as expansive or narrow as required.

Two main themes can be identified from the review of the extant literature in ERP education (Ayyagari 2011). The first focuses on how to integrate and teach ERP courses in a business curriculum. Studies include teaching tips, cases and frameworks as well as guidance on teaching (Pellerin and Hadaya 2008 ; Jane et al. 2004). The second focuses on the importance of teaching ERP concepts. These studies include evaluation of technical and ERP skills, and studies that report on skills required of business graduates (Boyle and Strong 2006 ; Strong et al. 2006).

Watson and Schneider (1999) identified several opportunities for incorporating ERP education into an Information Systems program. Their work emphasized experiential learning. The curriculum they proposed focused on enriching the student’s experiences by working on real ERP systems. They also discussed topics such as costs involved in implementation and critical success factors. Corbitt and Mensching (2000) responded to the AACSB graduate level standards requirement to provide an integrated cross-functional experience as part of an MBA program. A cross discipline faculty team developed a student-centered and industry driven curriculum. They also provided training to the rest of the faculty to show them what the product did and how it was being used in the courses. Subsequently recruiting by industry became more intense for students with these skills.

Becerra-Fernandez et al. (2000) demonstrated how integrating ERP may be used to enable the change in business education delivery from one that is functionally-oriented to a business-process oriented model with the ultimate goal of integration across several courses in the curriculum. They adopted an incremental approach that commenced in the undergraduate program and progressed into the graduate business program. They concluded that such an undertaking required redevelopment of course work that focused on core business processes rather than functional areas such as accounting, finance, marketing, management and information systems. Cannon et al. (2004) described an approach to business curriculum integration

that entailed the use of a fictitious model company and its implementation in an ERP system. Their approach provided students with multiple exposures to a single company and an opportunity to become familiar with its products, processes and industry. Students were able to examine the company from different functional perspectives while remaining cognizant of the organization as a whole. Their model was a result of the development efforts of a cross-functional team. Johnson et al. (2004) sought to provide students with exposure to and experience in ERP systems. They found that students entering their institution had very little context for understanding business processes or the flow of information across these processes. Textbook and theoretical knowledge proved to be frustrating to students. They developed a case study approach integrated with SAP business processes to deliver their ERP curriculum. They found that some students focused on the mechanics of the software and activities rather than understanding the underlying processes.

Davis and Comeau (2004) adopted a novel approach of combining a management learning stream with a hands-on lab component. They found the combination of hands-on lab learning on a live enterprise system and management learning to be a powerful yet challenging outcome to achieve. This difficulty was magnified by students having diverse educational, employment, and cultural backgrounds. The lab component was deemed by students to be useful although the actual learning outcomes sometimes varied from those originally anticipated. From a management learning perspective, students came to appreciate the complexities of mastering the enterprise system well enough to use it in a production environment.

Since 1972 SAP-AG has been providing business software solutions to the market, starting with SAP R/2, SAP R/3, and the evolution towards mySAP. SAP defines mySAP as a complete e-business platform that provides a range of solutions for its customers and users. mySAP is therefore the common name that SAP uses for all technologies that it produces. It is an open, flexible and comprehensive business solution that integrates both SAP and non-SAP applications. mySAP is capable of integrating internal business processes as well as providing a collaborative platform among business partners (Hernandez 2002). SAP is a 'single-vendor', packaged enterprise system, but it has the ability to integrate with non-SAP systems (Best 2005). Traditional SAP applications are categorized in three core functional areas: financial, human resources, and logistics. SAP also develops and provides special modules that complement core modules. These are targeted at vertical industries such as retail, manufacturing and government. These packages are known as SAP Solutions for Industries (SAP-AG 2009 ; Hernandez et al. 2006 ; Vogel and Kimbell 2005). The core areas include hundreds of business processes to address all the needs of modern business applications.

Many organizations have realized that SAP solutions are important to their success. SAP solutions provide an organization with competitive advantage. Several Fortune 500 companies use SAP exclusively for their core day to day operations (Gartner 2010 ; BOS 2009), which include accounting and financial applications, procurement, order processing and supplier management, inventory management and HR management and payroll functions. SAP ERP systems are fully integrated, enabling transactions to be processed organization-wide, and consequently they contribute to an overall improvement in an organization's operational efficiency (Wailgum 2008).

DATA AND METHODOLOGY

Students completed an in-class survey on their experiences in using SAP ERP over three semesters (Semester 2, 2013 to Semester 2, 2014). The instrument consisted of 4 questions (see Table 1) ranked on a 5 point Likert scale, and one open-ended question inviting additional comments. There were 147 students enrolled in the course during this period. One-hundred and thirty five (135) responses were received, representing a response rate of 91.8%. The results of the survey were used to determine the appropriateness of including SAP ERP education in the course.

Course Aims and Objectives

The course aims as stated in 2013 were:

Knowledge of accounting information systems is critical to success in the business world. Regardless of the position held i.e. accountant, manager, or auditor, students need to use accounting information systems (AIS) to achieve the results that they are responsible for. The course aims to provide an understanding of the concepts, processes and issues of accounting information systems and the way they are designed, documented and controlled. The student will learn how to use productivity tools and enterprise system software to improve their productivity on the job, and they also learn the potential value that 'big data' can create for organizations and sectors of the economy.

Upon successful completion of the course students are expected to demonstrate knowledge in the following:

Describe the basic activities performed in the major business cycles in an AIS.

Apply tools for documenting an AIS.

Understand concepts of databases and 'Big Data' and apply them to achieve AIS outcomes.

Apply data analytics tools to achieve business objectives.

Understand what data need to be collected to plan, evaluate and control business activities.

Understand how IT developments improve efficiency and effectiveness of business processes.

Understand the risk of fraud and the motives and techniques used to perpetrate fraud.

Explain internal controls and risk management.

Understand the basic steps in system development to design and improve an AIS.

The course is a 10 credit point core course in the Master of Professional Accounting and also an elective in the Master of Accounting respectively. It has an accounting prerequisite. Topics taught include accounting information systems principles, Big Data concepts, business processes, systems development and documentation, database management, accounting cycles, fraud and cybercrime, AIS controls and auditing, and AIS development and implementation. The focus of the course is on exploring and understanding how theoretical accounting and auditing principles may be implemented in practice in a real-world ERP environment.

Implementation Process

The primary objective was to introduce students to a real-world ERP environment. The academics involved in this project have extensive SAP training and experience, and therefore no additional training was required. Historically they also taught SAP related curriculum at other institutions. Practical hands-on assessment tasks were designed and developed based on the Financial (FI) module. This module deals with managing financial transactions in an enterprise. It supports reporting requirements, is flexible and functions well in any type of economic situation, be it a small organization or a larger one. Its primary purpose is to access, in real-time, the financial position of an enterprise in the market (Padhi 2010).

The institution joined the SAP Academic Alliance program and obtained the necessary licenses for 800 logins separated into two clients. Within each client, 5 logins were reserved for system administrators and

the remaining 395 were available for student use. Initially the 2nd client was used for backup purposes. The SAP GUI client was installed by the IT Services division in all student accessible computer laboratories via a remote image. The benefit of this approach was that students could walk in to any available computer lab and work on their SAP activities.

Computer workshop activities were designed based on financial transaction processing. This included customer and vendor transactions in both the accounts receivable (AR) and accounts payable (AP) business cycles. AR activities included creating new customers (customer master records), processing sales, entering customer invoices, configuring discounts (terms of payments), recording returns (credit memos) and processing payments. AP activities included similar tasks as related to vendor account processing. Reporting was based on processing general ledger (GL) transactions and producing financial statements. Students were exposed to data extraction procedures which involved identifying relevant SAP tables, using the SAP system browser to download data to a spreadsheet, and to analyze the extracted data using spreadsheet software.

Configuration tasks required students to design and create their own company, selected appropriate charts of accounts, managed G.S.T and currency settings. The intention was to provide students with an experience that encompassed all aspects of using SAP as well configuration and implementation. The justification being the learning objective: *“Understand the basic steps in system development to design and improve AIS”*.

Course assessment tasks included weekly problem solving scenarios (10%), mid-semester exam (20%), practice-based SAP project (20%) and final exam (50%). The SAP assessment was scenario based, however, the practical knowledge required to successfully complete the project required students to attempt and understand all learning activities and tasks. The project was designed with the intention of providing students with a hands-on experience in SAP that encompassed configuration, transaction processing, reporting and auditing.

It was not mandatory for students to attend weekly computer workshops as each student was provided with a copy of the SAP GUI to install on their personal computers. Tutor support was available during laboratory sessions and specific consultation times outside these sessions to assist students with operational issues. Students were encouraged to contact the SAP hosting center for technical or installation issues.

RESULTS AND DISCUSSION

Findings indicate that a significant number of students appreciated the experience, in general (see Table 1). Students enjoyed learning about SAP, especially the practical aspects. They also felt that it was appropriate to be included in the course and that it was an important aspect of their job marketability. This sentiment is further reflected in qualitative feedback received indicating that *“...the practical aspects of learning SAP are useful especially for (my) career...”*

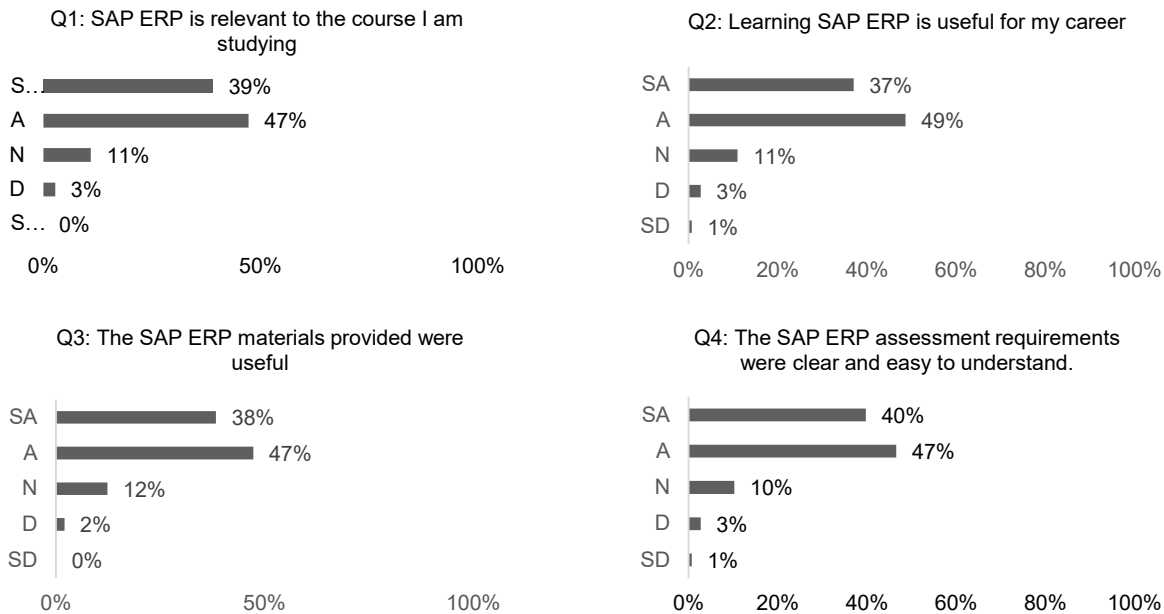
Students agreed that incorporating SAP in the course was useful and relevant to their studies (Q1, 86%, see Figure 1). A small number felt that this was not the case. This may be due to these students being employed in small firms that were using COTS or packaged accounting solutions such as MYOB and QuickBooks. These students were presumably unable to appreciate the value-add provided by including ERP education in the course.

Table 1: Descriptive Analysis

	Q1	Q2	Q3	Q4
Mean	4.2260	4.1849	4.2192	4.2192
Standard Error	0.0621	0.0652	0.0611	0.0656
Median	4	4	4	4
Mode	4	4	4	4
Standard Deviation	0.7499	0.7879	0.7381	0.7921
Sample Variance	0.5624	0.6207	0.5447	0.6275
Kurtosis	0.4599	1.5916	0.1708	1.6698
Skewness	-0.7955	-1.0274	-0.6865	-1.0883
Range	3	4	3	4
Minimum	2	1	2	1
Maximum	5	5	5	5
Sum	617	611	616	616
Count	135	135	135	135
Confidence Level (95.0%)	0.1226	0.1289	0.1207	0.1296
Key: Q1	Learning SAP ERP is relevant to the course I am studying			
Q2	Learning SAP ERP is useful for my career			
Q3	The SAP ERP materials provided were useful			
Q4	The SAP ERP assessment requirements were clear and easy to understand.			

This table provides a summary of the main features of the sample collected. It provides measures of central tendency and measures of variability to describe the dataset. Data indicates that students enjoyed learning about SAP, it was appropriate to be included in the course, and it was an important aspect of their job marketability.

Figure 1: Responses for Individual Questions



This figure shows the combined responses for each individual question. Responses were ranked on a 5 point Likert scale. Responses are predominantly in the upper quartile indicating that students appreciated the SAP experience.

Students agreed that learning SAP was useful for their careers (Q2, 86%, see Figure 1). A small number felt that this was not the case. Again, it is our opinion that as this may be due to these students being employed in small firms that were using COTS or packaged accounting. These students, most probably, felt that learning SAP had no immediate benefit for their careers. Instead they preferred learning alternative software packages such as MYOB. These sentiments were echoed during lectures, computer workshops and in the qualitative feedback received from a few students.

SAP workshop activities provided students with an opportunity to access, install and practice SAP either in the university computer laboratories or in their own time using their personal computers at no cost. This they believed to be very useful (Q3, 85%, see Figure 1) and may contribute to their future careers. A small number of students expressed some disagreement (4%). This is most likely due to unfamiliarity with the software, especially the SAP GUI (as it is different to the standard Windows environment). They spent a fair amount of time familiarizing themselves with the user interface, suggesting that the software is not intuitive. However, during the workshops it was emphasized that SAP is widely used in industry and therefore the benefits of learning a different user interface outweighed the additional time required to learn it.

The SAP assessment requirements and activities were succinct and accordingly were seen as being easy to understand and complete (Q4, 87%, see Figure 1). Students found them clear and straightforward as the tutors provided detailed explanations of the requirements during contact time and consultations. A small number of students expressed some disagreement (4%). Based on the collection of attendance data for the computer workshops, it is our opinion that students that did not attend class and/or consultation sessions may have had some difficulty interpreting the assessment requirements.

The novelty of the course is its mix of comprehensive theoretical accounting and business concepts combined with a hands-on lab component. The hands-on lab component was considered to be useful by students and they appreciated the complexities of using an ERP system well enough to use it in a real-world environment. They also gained some insights related to designing, developing and managing information systems using a variety of acquisition strategies. The mix of theory and practice on a live ERP system is potentially a very powerful technique in delivering enterprise system education to business students, but it was a challenge to balance the two components and to relate the practical aspects with the theoretical concepts. This difficulty was magnified by the students diverse educational, employment, and cultural backgrounds (Davis and Comeau 2004).

Integrating ERP education into business classes is ambitious. Many faculty members that teach traditional business disciplines such as accounting and finance do not typically have the necessary information systems training or background. Students majoring in accounting and/or finance may not be inclined in general towards hands-on assignments. However, both these groups must accept that careers in these disciplines are intertwined with information systems (Jane et al. 2004). Consequently, several administrative and technical challenges were observed throughout the implementation and operational period of the implementation.

The first challenge related to the time and effort required to plan, design and develop the required SAP teaching materials and assessments. It is operationally complex to introduce an ERP system in a business course. To bring current business IT tools such as ERP systems into the curriculum required significant modification for teaching purposes. The curriculum had to be appropriate to business students that had very little or no prior knowledge of ERP systems in particular, and large IT systems in general. Computer workshop activities and assessment items were self-paced practical tasks that required clear and detailed instructions. Several interactive demonstrations and videos from the SAP Learning Hub and YouTube were made available to students. Additionally, tutor guided sessions and demonstrations were conducted during computer workshops.

Computer literacy of students' was a significant challenge. Despite the fact that the teaching staff assumed that all students had basic computer literacy skills, several students had difficulty in performing basic computer tasks such as logging in to activate their SAP user IDs and changing their password, creating an appropriate file/folder structure to save their files for future use, and navigating the SAP GUI. Extensive support was provided to students during computer workshops and face to face consultations. Students that did not attend these sessions experienced difficulty and in several instances required additional support

from teaching staff and SAP hosting center consultants. Furthermore, while students claimed that repeating the exercises helped them to understand the connection between the operations they performed and the related business processes learnt in class, many students still seemed to focus on completion of the exercises without understanding how these individual steps contributed to a bigger picture.

Teaching staff had to deal with administrative issues such as generating username/passwords and frequent password reset requests from students. They also dealt with technical issues relating to students attempting to install the SAP GUI client on their personal computers. For a large cohort this was time consuming. Lastly, a small number of technical issues were experienced by the IT Services division as the SAP GUI client was packaged as part of the standard student desktop that was remotely deployed to laboratory computers. This required additional configuration and was resolved after several service calls to the SAP Hosting center staff.

Several factors are critical to the success of such a project (Watson and Schneider 1999):

Resources – the faculty/department should expect to spend considerable time and resources to plan and acquire access to an ERP platform.

Management support - high-ranking managers/ administrators are committed to this initiative. Top management support will ensure access to resources (financial, technical facilities and human resources).

Faculty team – are responsible for learning the system and embedding it within the curriculum.

A training program - ensures the teaching team receives the necessary information and knowledge about the ERP product and training in and how to effectively develop assessment tasks including marking and integrating ERP into the curriculum. The teaching team must establish clear learning outcomes for students. Students play a vital role in the curriculum development efforts.

Monitoring effectiveness of curriculum – students play an important role in determining effectiveness. Conducting student surveys and interviews can provide these insights and should lead to relevant modifications thereby assisting the curriculum development efforts.

CONCLUDING COMMENTS

The primary goal of this study was to introduce postgraduate AIS students to a real-world ERP environment. The approach adopted was to develop a course that integrated theoretical accounting and business concepts together with a hands-on practical component. Students completed an in-class survey on their experiences to determine the appropriateness of including SAP ERP education in the course. Findings indicated that a significant number of students appreciated the SAP experience. They enjoyed learning about SAP, indicating that it was an appropriate inclusion in the course and that it was an important aspect of their job marketability.

This paper makes an important contribution by providing information regarding student experiences with using ERP in an AIS course. We conclude that learning hands-on ERP skills is important and very relevant for a student's career. Student experiences show that this approach provides them with a practical real-world view of information flows within an organization. The course integrated theoretical accounting and business concepts with a hands-on practical ERP component. Students had the opportunity to examine an organization from different functional aspects, while remaining aware of the organization as a whole. We believe that this integrated approach provided students with a better context for understanding business processes.

Limitations of the study include; i) the technical background of students, and ii) study of a single SAP module, i.e. the financial (FI) module. Whilst several students initially experienced some technical difficulties due to their non-IT background, many of them familiarized themselves with the concepts and subsequently appreciated the experience. They felt that the inclusion of SAP ERP content in the course was very relevant to both their studies and future careers. The study was restricted to implementing a single SAP module in the course, i.e. the FI module. In order to expand the SAP experience, best practice dictates incorporating other modules to demonstrate integration of organizational business processes. This would require cross curriculum integration with other courses.

In the future it is planned that the breadth of coverage will be expanded to use include other SAP modules and integrate ERP education across multiple courses in the curriculum.

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BIOGRAPHY

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COGNITION AND THE TEACHING-LEARNING SYSTEM

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ABSTRACT

The progress knowledge and information technologies has significantly influenced education and the form of teaching-learning systems. The intention is a change to the teacher-pupil relationship placing the classroom center stage the learning and the interplay among students, and the collaborative engagement of the teacher as agent of change. Another axis of educational change comes from the educative system approach throughout information and communication technologies (ICT's). The command of computer knowledge by teachers is necessary a) to equate their pupil's skills and b) to implement it into teaching strategies. Technologies such as e-mails and the Internet are essential tools for modern development of education. Cognitive systems known as dual, are composed of an automatic system and another system, generally a slower and thinking one. This combination allows the creation of an interface between the mode in which the brain processes information and the mode in which the teaching-learning system uses ICT's to improve the pupil's skills.

JEL: I21, I22

KEYWORDS: Cognition, Education, Information Technology, Learning

INTRODUCTION

The scientific and technological progress of the last decades, mainly in the field of the ICT's, mainly the ones linked to the ICT's, means more and better opportunities to extend education, allowing a reduction of the *time and distance* problem through innovations; the latter covering also the teaching-learning systems. As a result, the new methodologies of study can promote the "learning to learn" concept. Understanding this latter is the tool needed to develop an autonomous knowledge,

Each institution decides to integrate or not to integrate ICT's, according to their infrastructure, interests or skills. This problem appears in the 21st century as a great digital gap (not yet corrected) in the educational environment. The problem has magnified since 2006 with the emergence of cloud computing. This concept is orientated to the use of diverse applications and services for which it is necessary to have an internet connected PC.

Technological progress of the current century generates a projection for a virtual education, supported by digital tools such as Internet, videoconferences, social networks, professional networks and online libraries. The user pupil or teacher gains access to archives and programs stored in an indefinite site, even in other countries, which are not in his/her computer. Hence the origin of the term cloud. Many teachers of secondary and higher education have acquired their competence for cloud applications in training courses in recent years. However, they were not trained in this kind of environment and for that reason a great ignorance exist about dozens of free educative applications available.

Díaz Barriga (w/d), examined the possibility to obtain satisfactory results from the didactic situations to which people have been faced. Many times they have learned to learn, because: 1. They control their own learning process, 2. They recognize and appreciate what they do, 3. They appreciate the demands of the task and respond accordingly, 4. They plan and review their own achievements identifying hits and errors, 5. They employ appropriate strategies to analyze each situation, and 6. They value the attained achievements and correct their mistakes

The legacy of the French psychologist Gabriel Tarde (1903) is used in the psychological analysis of this work. Tarde's research concerning processes of cognition, decision and rationality were recovered in recent years by Montgomery Latour & Lépinay & Lépinay (2008) who presented a theory on the mode in which people realize the cognition processes based in imitation and creation, the latter being unique to humans (López & Sánchez Criado, 2006; Nocera 2006; Denegri Coria w/o date).

Analysis of the behavioral model of Tarde (Montgomery Latour & Lépinay, 2008; López & Sánchez Criado, 2006; Denegri Coria w/o date) has relation with the two systems model, named S1 and S2 by Stanovich & West (2000). This model is sustained by rationality models and validated by means of justifications providing the necessary support (García Campos, 2008, 2009; Stanovich & West, 2000, 2003; Vieira Cano, 2008; Estrada Gallego, 2006). It is directly related to education, because it indicates the form by which human beings acquire signification, starting from rational processes, as a necessary step towards comprehension and acceptance of reality and knowledge.

The purpose of the paper is to interpret difficulties encountered due to the advancement of information technology and new forms of education. This work continues with a literature review. Next, we present the methodology section that develops the different epistemological positions. Finally, the paper closes with some discussion and the conclusion.

LITERATURE REVIEW

The Behavioral Model of Gabriel Tarde

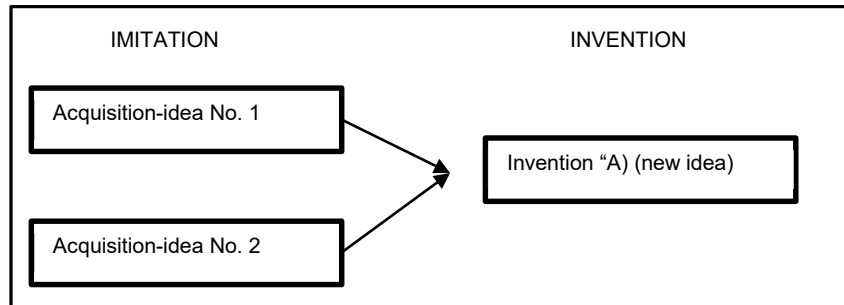
According to Denegri Coria (w/o date, p. 10) "Tarde claims that the social behavior is explained by means of the complementary concepts of imitation and invention". Imitation is the crucial phenomenon to explain human relationships starting from individuals. It is a kind of hypnotic state that leads individuals to repeat automatically the conduct previously developed by models. Imitation is the psychological procedure by which ideas are repeated and spread among society, starting from internal states such as beliefs and desires.

Imitation allows Tarde to claim that social reality is a result of psychological states, resulting from the association of individuals, allowing the construction of a group psychological representation. Then, the level of reality are the grouped individuals and the collective effect on the individual conscience (López Parra, 2008). Therefore, group construction of the psychological reality imposes conditions to the group components into an attitudinal and sentimental reference frame. In this framework individual decisions are adopted. In contrast to Gabriel Tarde (1903), Gustave Le Bon (1896) introduced the "collective mind" concept, claiming that when individuals are part of a collective, psychological traits emerge that are absent in subjects taken in an isolated mode. Instead, Le Bon (1896) states that some psychological behavior exist and emerges spontaneously as a consequence of their reunion.

The concept of invention is more important for human development, because it allows evolution starting from certain recognized situation, by means of imitation, to a new realization, invention. This evolution permits individual progress at the knowledge level as society progress. Meanwhile, Denegri Coria (w/o date) defines invention as *any thinking or creation that arises from the combination of two or more ideas acquired previously by means of imitation and by contrasting and opposition between imitation, accepted*

idea, and the existing practices, as shown in Figure 1. Features of individuals especially talented, are followed and copied by the *human mass*. The society advances thanks to inventions and creations.

Figure 1: Behavior Model by Tarde



Studies by Afternoon assume that human beings act in two ways: by copying ideas or actions through repetition, which is the usual way to proceed; or achieving an invention (new fact) that requires prior knowledge more an act of creation. In this way knowledge advances and societies increase their knowledge through inventions. Source: prepared by the authors

The idea on which Gabriel Tarde (1903) works has two well differentiated aspects, but simultaneously and perfectly related and complemented to explain the form in which human beings incorporate concepts and ideas. Concepts and ideas change humans, able to realize rapid decision making and to acquire and store new knowledge, by means of imitation. Tarde states that imitation and repetition are adequate instruments for the acquisition of abilities and skills by human beings. These instruments may be applied by means of *creation*, understood as the sum of two concepts already seized, that may only be available to those who possess a remarkable degree of cognition and reasoning.

The model of behavior suggested by Tarde (1903) implies certain laws that may be applied to education to explain that: 1. Imitation may explain either fashion or productive processes and cycles of teaching-learning, 2. The *homo economicus* is explained (in psychology) by the causes of desire and beliefs, 3. The *knowledge consumer* is a being made of desires to satisfy, according to a gradation of preferences, 4. Learning depends on the imitation concept, 5. Research is related to technological innovation, i.e. with invention.

The Dual Reasoning Model

The dual reasoning model is also sometimes referred to as the two systems model. The dual theory of systems was developed in the field of cognitive psychology and captivated the attention of an important group of psychologists. This theory has developed steadily since 1990. The theory postulated two diverse processes of reasoning that coexist into the human brain, called S1 and S2 by Stanovich and West (2000).

For Evans (García Campos, 2008, p. 68) and Stanovich and West (2000, 2003), S1 contains processes shared only with animals. S2 is a system used exclusively by human beings at large. These authors assign to the S1 system a rapid response capability, great operative capability, computational capability, which enables immediate responses, including to complex reasoning problems. The drawback consist of the fact that answers are not always correct. This system is deemed innate for human beings and archaic in terms of evolution (García Campos, 2008, 2009). Instead, S2 is a slower system of reasoning, but able to meet certain regulatory requirements leading to a more correct answer in terms of rationality. Moreover, this system has capacity, in some measure, to control the *outputs* of S1 and to inhibit them.

Stanovich and West (2003) stated that S1 is a compound of some processes that shared certain distinctive characteristics, common but liable of identification, such as: 1. They are associative processes or processes experimental learning, 2. They are perceptual and language systems, and 3. They are automated processes.

In an ulterior paper García Campos (2008) stated a relationship between the dual theory of reasoning and the concepts of justification and rationality. He argues Justification is a compound of two essential axes:

- a) A “*fundational*”-coherent axis; in “*foundationism*” has two elements. It is: 1) a series of basic beliefs exist that are not liable for justification, because they are the base to justify the universe of “not basic” beliefs; 2) the justification has only one direction: it goes from basic beliefs to no basic beliefs. While, “*coherentism*” adopts one level or status of beliefs and therefore, justification is bidirectional.
- b) The second axis is formed by “*internalist-externalist*” theories. In *internalism*, justification depends on internal states such as reflection, reasoning or memory, to which an experimental subject has immediate access. For “*externalism*”, justification depends on the *external state*, that starts from an individual’s own beliefs that leads to products of an adequate process of cognition.

Defenders of internalism argue that rationality criteria are the possibility to give and to offer reasons and underlies the notion of justification. Those who defend the externalist position suggest that justification entails the idea of inferential processes of induction and deduction. An important definition is the concept of rationality, for which the position of Stein is adopted; he (quoted by García Campos, 2009) called it the “standard vision of rationality” as follows:

“According to this vision, to be rational means thinking in agreement with the principles of reasoning based on the rules of logics, probability and so on”. Assuming that the standard vision of reasoning is correct, then the principles which we must apply to reason are the normative principles of reasoning” (Stein, quoted by García Campos, 2009, p. 66).

Therefore, in this context the rationality is the primary criterion to evaluate human behavior using the rules of logics, mathematics, probability and decision theory. Another definition of rationality exists, called the consequentialist view of rationality. According to this viewpoint, rationality is subject to the achievement of certain results proposed in advance, for which it is necessary to know the obtained results for an assessment of the rationality of an action.

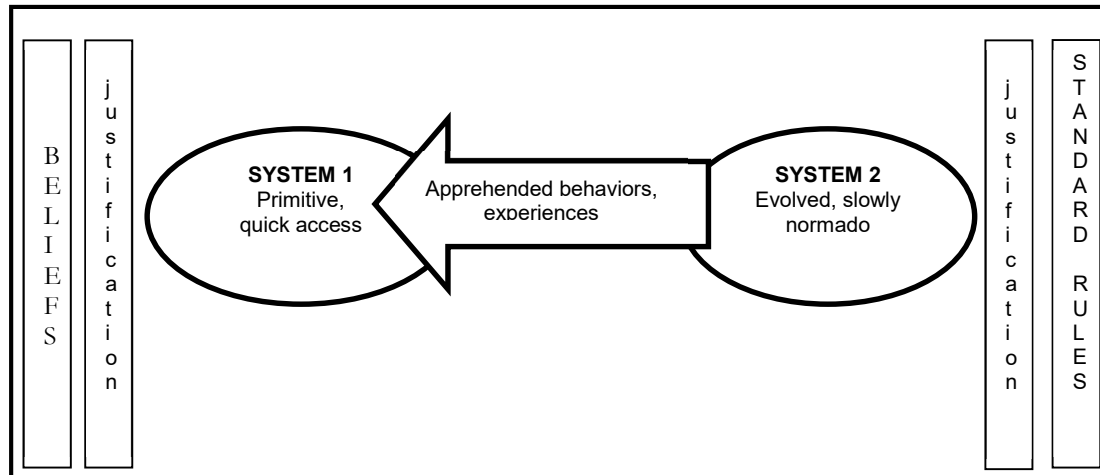
Figure 2 shows the relationships between S1 and S2 and the forms of justification and rationality. We see that rationality (R1) has a relationship with the consequentialist vision, while rationality (R2) is related to the standard vision of rationality. Then, for certain problems it is possible to offer multiple answers. While for R1 an action might be desirable and rational. However, R2 will not necessarily verify this condition under the postulates of rationality 2.

Recall the concept of rationality (R1) is in accordance with certain principles indicating the response to an event. The answer is esteemed as correct because it complies with the requirements of beliefs that are not necessarily verifiable from the *standard* point of view, because it is not a consequence of a ruled reasoning. Instead, if the response system corresponds to rationality 2, the process for decision making becomes responsible for validating the response. S1 is a system without access to the processes, but one that has knowledge of the outcomes, whose rationality is implied and instrumental into a genetic level. Their justification relies on basic beliefs that do not require demonstration (axioms and postulates). It is *consequentialist*-evolutionist.

The dual model explains the human brain responds to a stimulus with one of the two systems named S1 and S2. Meanwhile, each system must be admitted by means of a rationality mechanism conferring confidence to the response. Also, both systems must be validated by means of appropriate justifications. S2 signifies a slower and difficult reasoning procedure, requiring will and decision of the person to operate and a normative frame indicating adequate procedures to identify the correct answer to different stimulus. It usually acts according to the standard notion of rationality or another standard known beforehand. It

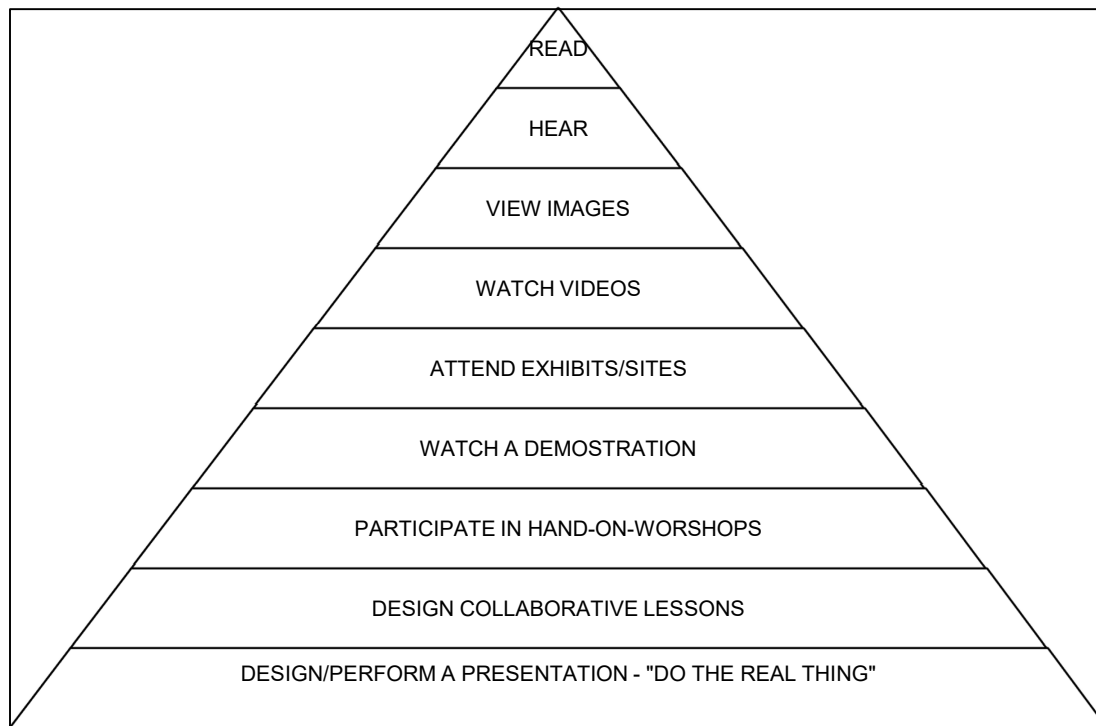
applies the rules of logic, mathematics, probability and decision theory. It finds justification in explicit models, because the process is known and validated. The main difference observable between human beings and other species is the ability to memorize, essential requirement to learn. Edgar Dale (1946, 1954 and 1969) provides a figure that shows the ability of human beings to retain and memorize, according to the activity involved (Figure 3).

Figure 2: Dual Theory of Systems: Reasoning and Justification



The dual model of cognition Stanovich & West (2000, 2003) indicate that in the human brain there are two ways of thinking and acting, a way of "autopilot", in which answers are spontaneous, immediate and effortless.

Figure 3: The cone of learning by Edgar Dale



Edgar cone Dole explained in a pyramid ease of memorization, from the weakest in the top of the pyramid (the reading), even more appropriate to store as videos methods, participate in workshops or perform a presentation. Passive activities are harder to remember, and the ability to memorize increases as will be more active activity. Source: Prepared by the authors based on Dale.

The strategy to be applied to achieve learning depends on each didactic unit. To start with an area or problem is something manageable, but it is possible that we need to deal with a lot of interrelated activities or problems. Individuals learn better when they interact with other individuals, including when that intervention is dramatized and with the exterior milieu in an *active attitude*, than with a passive attitude. With regard to *groups*: their learning ameliorates when each member cooperates to achieve common objectives and possess a common vision. The organization, as a global and integral system, learns by having feedback with the environment and manages to anticipate future changes.

METHODOLOGY

According to the characteristics of a work of theoretical research, the methodological path used is the collection of papers from psychologists who have worked on economic behavior and academic economics. They conduct research in behavioral economics, coupled to the classical theories the administration. It is essentially a descriptive work that tries to provide answers within the academic exploration of Latino culture to the concepts of learning organizations. While it is a qualitative research from the standpoint of the study of specific events, such events do not arise from the empyrean but are the product of observations of primitive work then developed through the filter of cultural vision and mental maps of the authors.

RESULTS

The human being is born in the bosom of a certain society having determinate customs absorbed since his birth. Customs are very strong, affecting the person for the rest of their life. A person receives a social, cultural and economic frame of reference that, like an iceberg, will stay secret, becoming manifest in certain situations or when required by an extraordinary event.

By means of socialization processes and formal and informal education the human adds models of troubleshooting, from S_1 to S_2 to give quick answers: almost always correct, to complex problems. Therefore, the interpretation of economic and social reality will substantiate the answer which will be duly justified by appropriate criteria, according to the type of rationality utilized.

The cycle of formal education begins with schooling, requiring effort of the intellect. For example, reading S_2 must actively participate to bring to mind a set of symbols and to initiate assembly of the puzzle of their conjunctions. This is when children begin to use words, but they do not understand or know what they have read because they have not yet passed to S_1 . The reading process and, therefore, according to Kahneman (2003) lacking the sufficient aptitude to realize two cognitive activities (requiring effort) simultaneously implies they are unable to understand what they read. Contents comprehension begins only when the reading procedure is transferred to S_1 and the child realizes this process without effort. We recognize an identical path for the following stages of schooling and contents of formal education and learning of jobs.

In the education process the formalization of behavior occurs and adequate tools are acquired leading to problem resolutions. Interpretation of reality takes the form of beliefs that support justified solutions in complex and unknown environments (Vieira Cano, 2008; Pascale & Pascale 2007; Estrada Gallego, 2006). Bounded rationality is a base for construction of decision making forms at any level (professor or student), slanted by their system of beliefs, values and principles, innate and acquired.

Cognition systems allow that use of new tools provided by ICT's to resolve difficult problems can be separated in two, in order not to exhaust the brain capacity. On one hand, resolution of simple mathematical schemes without major implications (stores in S_1) and, as a second process, incorporate the academic content through S_2 . This does not mean that the tool signifies an extraordinary use of the computational capacity defined by Simon.

The incorporation of simple schemes into the teaching process allows students to acquire concepts, according to their learning strategies. The use of new technologies is a must for teachers today and also the utilization of social networks to communicate with their students and to transmit teachings.

At high levels of education, students are instructed to work with models that have justification in programs according to their understanding of rationality, as stated by the standard model. The environment of excellence of academic cloisters facilitates beliefs in S_1 levels. This occurs when the force of imitation allows the application of complex models apprehended and lodged in S_1 to resolve other kind of problems. However, there are elements justifying their use, either due to the high notability or by its accessibility.

CONCLUDING COMMENTS

Universities are faced with the challenge of actualizing their methods, articulating their careers and promoting common actions between teachers and students as part of the challenges whose origin is the EEES (“Espacio Europeo de Educación Superior, European Space of Higher Education”). This space operates as a guide for American universities trying to be at the forefront of higher education.

The professor attitude must change. Today, access to knowledge is collaborative, not only among professors, but between students and teachers. Available resources continuously change. Chalk and blackboard seem to be things of a distant past. Today, teaching often occurs via WEB, often in the classroom with presence of the professor. The use of blogs and other tools are mandatory to move student on their way to the discovery of knowledge until the time of his graduation.

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BIOGRAPHY

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FACULTY AND STUDENT PERCEPTIONS OF PODCASTING: EMPIRICAL EVIDENCE FROM FOUR HIGHER EDUCATION INSTITUTIONS

Nicole Ortloff, University of Holy Cross

ABSTRACT

Colleges and Universities are looking for ways to reduce student costs and improve student learning retention. Podcasting has been in play for ten years now, giving time for a broader audience to use this technology. This paper presents the findings of a study which looks at use and felt effectiveness of podcasting in online courses by both faculty and students. The survey looks at how podcasting may aid in improving focused student learning. How willing faculty is to use podcasting in place of costly textbooks is answered. The frames of this survey include: awareness, utility, effectiveness, learning styles, technology, and cost. In 2015, surveys were given to online graduate and undergraduate Business students and faculty at four higher education U.S. institutions. Results suggest that faculty should consider using podcasting in online courses to place focus on providing further explanation of stated learning objectives in order to meet the expectations and needs of today's student population.

JEL: A2

KEYWORDS: Awareness, Utility, Effectiveness, Learning Styles, Technology, Cost

INTRODUCTION

Student use of social networking and other Internet technologies has grown over recent years, producing an expectation of further use in education. Student and faculty have shown concern about growing tuition and fees, including the costs of textbooks (Silver, Stevens, & Clow, 2012). The rate of inflation for the price of higher education textbooks has risen by 72% (GAO, 2005). The U.S. Government's aim of providing financial aid to students, helping to ensure accessibility and affordability of higher education, has spurred an investigation into costs associated with obtaining a degree. In order to stay in good graces and to be eligible for aid, Colleges and Universities too are looking for ways to reduce student costs and improve student learning retention. Much research, in the past 10 years, measures student and faculty perception and use of podcasting in higher education. The speed of adoption of new technologies warrants further investigation of where interests stand today. In particular, this paper looks at how podcasting acceptance and use has infiltrated higher education learning. This study examines student and faculty perception of podcast effectiveness in applying multiple learning styles to achieving learning outcomes. The opportunity of using podcasts as a focused response to rising textbook cost is also explored. The remainder of the paper is organized as follows: Section two is a review of prior studies related to the areas of awareness, utility, effectiveness, learning styles, technology, and costs. Section three described the data used and the methodology followed. Sections four presents the findings from the survey results. Section five provides the conclusion, contributions, implications, and notes on future research direction.

LITERATURE REVIEW

Podcasting awareness and use is continuing to see an upward trend, although slowing. An Edison Media survey found that 49% of Americans feel that they are familiar with the term “podcasting”, up from 22% in 2006 (Webster, 2015). Students still want traditional methods of teaching and learning, but in addition are showing signs of acceptance of new methods that they feel increase student learning, such as podcasts (Robson & Greensmith, 2010). Students seek out ways to improve learning including: text messaging, RSS feeds, podcasts, and social networks (Cassidy, Britsch, Griffin, Manolovitz, Shen, & Turney, 2011). Practical uses for podcasting could aid in improving attention and facilitate note-taking, by allowing for repeated viewing (Khechine, Lakhal, & Pascot, 2013; Evans, 2008). The study also showed that some disadvantages include the lack of interaction and visual contact (Khechine et.al, 2013). In a study by Berger (2007), students noted a favorable response to podcasting use in explanation of problem solving. Faculty looks for ways to encourage student interaction in online education. Using video podcasts including: instructor announcements, weekly or chapter attention grabbers, or discussion starters can be a way to promote student engagement. Allowing students to address one another via podcast is another way of making the lessons more personal and interactive. Encouraging students to create and present their own podcasts is an active way to reach course goals when oral presentations are assigned (Carnegie Mellon, 2007). Instructional designers expect to see an increase in information “chunking” (Donnelly & Berg, 2006). Chunking of information allows students to learn targeted information quickly.

McCoog addresses each multiple intelligence learner through activities using technology (McCoog, 2007). Although McCoog proposes using the Internet, he does not mention podcasting and how it can address each learner preference. As technology has become more common, education has heeded the call with an updated approach to learning theory. The widely used Bloom's Taxonomy and Mayer's Cognitive Theory of Multichannel Learning are examples of where this change may occur. All levels of Bloom's may be reached through a combination of podcasts and classroom response systems, known as “clickers” (Graver & Roberts, 2013). Graver and Robert's (2013) reference to using “clickers” to achieve the “do” and “evaluate” concepts, while using podcasts to cover lecture material. Mayer's Cognitive Theory of Multichannel Learning states that students need both words and images to ensure learning (Mayer, 2003). The theory is based on three theoretical assumptions.

Dual channel assumption notes that learning needs to meet two different channels, using both visual images and verbal sounds for full processing to occur (Clark & Paivio, 1991). The limited capacity assumption states how much people can process is limited; potential is there for information overload (Clark & Paivio, 1991). Dual channel, limited capacity, and active learning could all be addressed through chunks: short video and audio podcasts that are focused on important topics. Graver and Roberts (2013), recommend that podcasts be 15 minutes or less for maximum effectiveness. Students will not find podcasts effective if used without supporting material. Using audio podcasts alone could lead to a failure to meet the needs of other types of learners, besides auditory learners (Mayer, 1997). Combining pictures with words in lessons helps to increase learning and memory (Mayer & Moreno, 2003). Mayer & Moreno's research shows that multimedia can be used to stimulate two of the five senses, hearing and seeing (2013). Podcasts used in conjunction with other learning methods can function to aid in success.

In a 2009 Aston University study, researchers found that students did indeed feel that video and voice podcasts noticeably benefit learning, when used with lecturer slides (Parson, Reddy, Wood, & Senior, 2009). Students perceived that learning improved when podcasts were used for reviewing course materials (Robson & Greensmith, 2009; Graver & Roberts, 2013). Evans (2008) added that students preferred podcasts over their textbooks and notes taken. Robson & Greensmith (2010) concluded that faculty should recognize the usefulness of podcasting as a means to engage students learning. Robson and Greensmith (2009) found that students who had experience with using podcasts before the course perceived podcasts to be more valuable. Those students tended to utilize the course podcasts more

(Robson & Greensmith, 2009). This study also found that students used podcasts to listen to and watch introductions, activities, and as review (Robson & Greensmith, 2009). (Robson & Greensmith, 2009) concluded that faculty's lack of familiarity, training, time availability may hinder acceptance and may make them reluctant to create and use podcasts. From this study, faculty indicated that they may have not created their own podcasts for courses (Robson & Greensmith, 2009). Faculty did use podcasts themselves indicating that they see value (Robson & Greensmith, 2009). In order to reach maximum effectiveness from a podcast, use must be aligned with assignments (Garver and Roberts, 2013). Students find it important to know the benefits, purpose, and the connection to the lesson that the podcast brings in order to have buy in of it use (Garver & Roberts, 2013).

Podcasting, in its infancy, was characterized by RSS (really simple syndication) subscription and its push feeds that connected the listener to a recorded series of conversations (Anzai, 2007; Carnegie Mellon 2007; Fizz, 2013). Over time, the process evolved to include more options, such as both video and audio, and flexibility of distribution, which encouraged more widespread use and a broader audience (Brown & Green, 2007; Webster, 2014). In this study, podcasting is defined as a digital audio or video file made available as a link, for downloading to a computer or portable media player, typically available as a series, but could be used separately for topic/lecture information within the learning management systems (LMS) of online courses, or courses that utilize these LMS.

Podcasting is a low cost way of providing focused information to student users (Zeng, 2009). The largest cost of producing a podcast is time and labor (Carnegie Mellon, 2007). The ability of the faculty member to create podcasts might impact the desire to produce. The person producing the podcast must have knowledge of how to generate an RSS feed in order to list the location of podcast episodes (Carnegie Mellon, 2007). Production requires recording hardware, like digital microphones and digital cameras, and software for editing audio and/or video segments (Carnegie Mellon, 2007). Common podcasting economic business models include sponsorships, advertising, and donations. Having a College or University sponsor the faculty made podcast would be a way for the message to target current and potential students. Higher Education institutions could also explore outside sponsorship in order to gain financial support. "Sponsorship is seen as being less intrusive in comparison to advertising, making it more acceptable to users."(Crofts, Diley, Fox, Retsema & Williams, 2005). Sponsorships would work well for institutions that are large and/or offering podcasts for a broader audience. Reaching a broader audience would help to attract sponsors. Listener donations are given in the form of "tips" whereby the listener shows appreciation and support for the podcast by leaving a monetary donation. In education, tips are not an accepted exchange between students and faculty, but donations to institutions may be more welcome. Student and faculty have shown concern about growing tuition and fees, including the costs of textbooks (Silver, Stevens, & Clow, 2012). The rate of inflation for the price of higher education textbooks has risen by 80% from 2002-2012 (GAO, 2013). The U.S. Government's aim of providing financial aid to students, helping to ensure accessibility and affordability of higher education, has spurred an investigation into costs associated with obtaining a degree. A possible way to reduce costs associated with course materials is to include teacher led podcasting.

DATA AND METHODOLOGY

A hypothesis was drawn:

H_0 : Having experience with podcasts has no effect on students' acceptance of replacing required textbooks with instructor selected learning outcome focused podcasts.

H_a : Having experience with podcasts has a positive effect on students' acceptance of replacing required textbooks with instructor selected learning outcome focused podcasts.

In order to validate the research question, a pilot study was conducted. Data was collected by surveying online undergraduate Business students and faculty in one higher education institution. This set a base understanding in order to benchmark how well students understood and used podcasting. In the pilot study, students were asked to define podcasting. Descriptions of podcasting given included: subscription, posted, link, video, audio, and short message. This gave the author reason to believe that understanding of the definition of podcasting has expanded beyond the traditional scope of the push feed RSS subscription as it was originally designed. The author defined podcasting to include links that may be posted to the LMS being used at the surveyed institution. This definition was provided to participants prior to completing the survey.

Following the pilot study, two surveys were distributed. One survey was given to undergraduate and graduate MBA Business students from four higher education institutions and the other to faculty of Business courses at both the graduate and undergraduate levels at the same four institutions. The surveys were distributed in week nine of the program, in both spring and fall, following midterm exams. The student survey was administered through an external party, by providing an invitation and link in the course LMS: Moodle, Blackboard, and Canvas. A total of 508 (91%) out of 557 students completed the student questionnaire. Of the 508 respondents, 32 (6%) students responded that they have no experience in watching or listening to podcasts. The survey was divided into four sections. The first section, completed by all 508 students, collected demographic information such as College/University attending; as well as the level of current standing, undergraduate and graduate. The second section, experience, identified the students who used podcasts, the types used, and how selected. The third section, effectiveness, collected information on student perception of learning styles and value of podcasts. The fourth section, use, questioned self use. In this section, students noted: faculty use of podcasts in courses; whether repeated use of podcast was done for further learning; and felt comfort of using podcasts to focus on course learning objectives in place of a required textbook.

Through an emailed invitation, 165 Business faculty members were invited to participate in a survey. Of the 165 faculty invited, 158 participated. The emailed invitation included the external party's survey link. This was done in order to control the respondent's invitation and responses received. Responses from faculty who teach both online and on-campus were recorded. Faculty and students voluntarily completed the surveys. Student data was assigned random numbers with an associated indicator variable for program level and college. The response rate may normally be noted as impacted by the method of survey, online versus hard print however; in this case measuring the perception of online students via an online method makes sense. These students, who do not normally meet on campus, already are prepared to receive all of their learning materials and direction online. In order to reach online faculty, who like their students, are living in various states, an emailed invitation is the most efficient manner to make contact. Students surveyed took courses that included weekly modules consisting of: written lecture included as notes on the PowerPoint slides, discussion forums, quiz, case-studies that included equations to use in solving problems.

RESULTS AND DISCUSSIONS

In a pilot study, students were asked to define podcasting. Descriptions given included: subscription, posted, link, video, audio, and short message. This gave the author reason to believe that understanding of the definition of podcasting has expanded beyond the traditional scope of the push feed subscription as it was originally designed. This information led to the author defining podcasting to include links that may be posted to the LMS being used at the surveyed institution. In Table 1, the student's selection of podcasts was focused in four areas: education, hobbies, entertainment, and news. The survey results showed that students use podcasts more for educational purposes and entertainment than for hobbies or as a news source. Of the students who have utilized podcasts, either video or audio, 74% noted using podcasts for educational purposes, 58% use podcasts for entertainment, and 39% for hobbies. Students

already accept podcasts as an education medium, as long as the podcasts present information they are trying to obtain.

Table 1: Podcast Types-Student Use

Types of Podcast	Student Choice of Podcast %
Education	74
Hobbies	39
Entertainment	58
News	29

This table shows the reason for selection of podcasts as determined by students. The Column one lists the types of podcasts being utilized by students. Column two indicates the student’s usage of each category type, shown as a percentage.

Table 2 shows both students and faculty perception of student learning styles. When students were asked to share how they learn best, the majority (71%) indicated that they prefer multiple learning style methods. Looking further, the results show that 58% want to receive course information in chunks, whereas none of the students indicated a preference for longer lectures that included complete lesson materials. Students noted long complete lectures, not chunked, covering a broader group of objectives, as being the least effective and valued format for learning. This gives credence to the idea that focused learning and depth is more sought after by students than a broader view. Sixty-eight percent of students indicated that learning objectives are better retained when presented in a manner that may be reviewed multiple times. Only 9% of students saw discussions as being an important tool in reaching learning objectives. Students showed preference for videos (48%) over an audio only option (29%) as a preferred learning mode. This is consistent with Mayer’s (2003) Theory of Multichannel Learning, which states the need of including both words and images.

Faculty was also surveyed to determine how they felt students learned best. The results of the faculty survey showed that faculty and students agree that students learn best when multiple learning styles are addressed. Eighty-two percent of faculty noted that lessons presented in multiple learning styles reach student needs the best. Faculty identified the need to present materials in chunks (67%) over providing information in long lectures (4%), which was consistent with student perception. Thirty-eight percent of faculty perceived discussions to be a more important means of reaching learning objectives than students. Faculty too chose video representation (26%) over an audio format as a preferred learning mode, reflecting that of students. These findings point to the need to deliver information in a shortened, more manageable format, to reach students as they perceive that they learn best; consistent with Donnelly & Berg (2006). This also shows that faculty agrees with this need and should find ways to meet this need. The general principle behind podcasting is to offer video and/or audio in a short focused downloadable format that may be viewed multiple time, meets these goals. Utilizing discussions to reach learning objectives were seen as far more important by faculty (38%) than by students (9%).

Students indicated that they desire the ability to review course learning objective material multiple times. Survey results showed that 65% of students who have watched or listened to podcasts in the past have done so multiple times in order to gain a better grasp of the subject matter. This is consistent with previous studies performed by Robson & Greensmith (2009) and Graver & Roberts (2013), noting that students feel that podcasts used for reviewing course materials improves learning. Faculty in this survey agreed with students and previous student studies when 54% recognized that online students learn best and retain what they learn when learning objectives are presented in a manner that may be reviewed multiple times. Faculty should consider including podcasts that focus on course learning objectives as a review in order to meet students study needs.

Table 2: Learning Styles-Student Preference and Faculty Perception

Method of Learning Preferred	Student Selected Preference %	Faculty Perception of Student Learning Preference %
Visual presentation	48	26
Audio lessons	29	10
Review multiple times	68	54
Discussion format	9	38
Complete lectures	0	4
"Chunks" or short topics of focused lectures	58	67
Multiple learning styles	71	82

This table shows the learning style preferences of surveyed students and faculty. Column one shows the identified learning styles. The weight of the student's felt benefit from each learning style is shown in column two. The weight of the faculty's perception of student learning preference is noted in column 3.

Table 3 shows how students say they study in relation how faculty perceives students actually study. Twenty-nine percent of students stated that they are likely to read the entire textbook chapter from beginning to end, when learning about identified course objectives. Sixty-five percent of students are more likely to search for the answer by looking for important points in the chapter, skipping what does not answer the question. The remaining 6% of the students surveyed indicated that they seek out topic videos. These findings fall in line with how faculty saw student study methods to be true. However, faculty noted an even higher rate of direct searches, citing students to be three times more likely to search for answers by skimming the textbook than to read the chapter. These findings point to the need for faculty to chunk information and include video to support lesson learning objectives. Video podcasts addresses both of these needs. Chunking can allow podcasts to meet the student's instructional needs not provided by textbooks. Chunking enables students to “skim” across video and audio podcasts to find desired instructional material.

Table 3: Student Study Habits-Student and Faculty Perception

Method of Learning Preferred	Student Selected Study Habit %	Faculty Perception of Student Study Habit %
Actually read the entire chapter.	29	10
Search for important points in the lecture and/or chapter.	65	87
Seek out topic videos in order to find answers or extend learning.	6	3

This table shows the student's percentage of study habits of students as indicated by students. Column one shows the identified preferred study habit. Column two shows the student's perception of how they study for course topic information. Column three shows the perception of the faculty as to how students actually study.

Table 4 shows that students emphatically identified video podcasts that contain information on how to solve equations or problems, as the most important use of podcasts in courses (69%). Thirty-four percent of students surveyed felt that podcasts were also helpful in providing an explanation in practical use to Business course topics. Students note podcasts to be much less useful in other areas: explaining a historical perspective, course announcements (1%), anticipatory set attention grabbers (3%), discussion starter (3%) or explanation of theory (1%). The faculty and student surveys show disconnect between perceptions of podcast usefulness in identified areas. Faculty note podcasts shown for solving equations to be least important. This finding is concerning since students value podcasts most when reviewing how to solve equations. Faculty rank using podcasts to explain the historical perspectives, and discussion starters as being the most important (53%), followed by giving an explanation of practical use (48%), using them for attention grabber anticipatory sets (41%), and announcements (35%). Integrating podcasts into the lesson where students find it useful will encourage students to utilize technology in the learning process.

Table 4: Areas of Importance of Podcasting Use-Student Preference and Faculty Perception

Uses of Podcasting in Classes	Student Selected Preference %	Faculty Selected Preference %
Solve equations or problems	69	16
Explanation of practical use	34	20
Course announcement	1	8
Anticipatory set	3	13
Explanation of theory	1	19
Discussion Starter	3	18

This table shows the perceived importance of podcasting in the Business classes as noted by students and faculty. Column one shows the identified uses. The weight of the student's felt importance from each area of learning is shown in column two. The weight of the faculty's felt importance from each area of learning is shown in column three.

Table 5 shows that although all courses utilize podcasts, students did not necessarily make use of the podcasts or notice who authored the podcast. Only 32% of students surveyed noted the podcasts used were made by their own instructors and 3% were made from other sources. Students noted (26%) that no podcasts had been made available in the course. Students who noted instructor made podcasts were being used were 89% more likely to view the podcast. This suggests that identifying faculty made podcasts would increase the use and awareness of podcasts in courses. Students perceive faculty made resources as more valuable than outside sources. Links not differentiated from text or websites could make the podcasts more difficult for the student to identify and use. An area of further research should look into whether or not podcast links including explanation of content, use, and format will increase student observation.

Table 5: Podcast Use in Courses-Faculty and Students

Faculty Using Podcasts %	Faculty Recorded Podcasts %	Students Use of Faculty Created Podcasts %	Students Use of Outside Podcasts %	Students Not Realizing Podcasts Were Offered %
100	22	32	3	26

This table shows the current use of podcasts in courses by both faculty and students. Column one shows the percentage of faculty who are currently utilizing podcasting in the course materials. Column two indicates the percentage of faculty who has recorded their own podcast information to be used in the courses that they teach. Column three shows the percentage of students who noticed that the course faculty member created the podcasts being used. The Fourth column shows the percentage of students who noticed that the podcasts being used were made from sources other than their instructor. The Fifth column identifies the percentage of students who did not realize that podcasts were being offered in the course materials.

Table 6 shows that students feel instructor selected, learning objective focused podcasts as a viable option to textbooks. The majority, 71%, of students noted yes; podcasts would be acceptable in the place of textbooks. Fourteen percent of students noted that required textbooks are absolutely necessary. Another 15% of students were not sure that podcast use in the place of required textbooks could be acceptable. The survey results indicate that students with no podcast experience are more reluctant to choose podcasts over a textbook. Upon further review, of those with no experience with podcasts, half noted that they would not desire podcasts in place of textbooks. The other half noted that they would welcome faculty selected podcasts that focus on course learning objectives in place of a required textbook. Would faculty members consider using podcasts to focus on course learning objectives in the pace of a required textbook? Some faculty (9%) showed that they are currently utilizing podcasts in the place of a required textbook. Thirty percent are against replacing textbooks with podcasts. Twenty-six percent indicated that they would indeed consider using podcasts instead of textbooks. Another 44% noted that they may consider using podcasts in place of textbooks as an option.

Table 6: Podcast Replacing Textbook-Faculty and Students

Preference	Student Choice %	Faculty Choice %
Yes, Podcasts Can Replace Textbooks	71	26
No, Textbooks are Still A Must	14	30
Maybe, Not Sure	15	44

This table shows the preference of textbooks and podcasting by both faculty and students. Column one shows the preference to either utilize podcasts in the place of textbooks, to continue to utilize textbooks, as well as the percentage of those surveyed who are uncertain with their preference of textbook or podcast. Column two indicated the percentage of each student choice. Column three indicates the percentage of faculty preference of each choice.

CONCLUDING COMMENTS

The purpose of this study is to determine if podcasts may potentially replace textbooks by looking at current use. Business courses in four higher education institutions were surveyed. Two surveys were given over two semesters in 2015; one to Business students and a second to faculty. The student survey was distributed to 557 Business students at four higher education institutions. 508 responses were considered appropriate for statistical analysis. 165 Business faculty members received surveys, 158 responses were considered for review. A hypothesis was drawn: H₀: Having experience with podcasts has no effect on students' acceptance of replacing required textbooks with instructor selected learning outcome focused podcasts. H_a: Having experience with podcasts has a positive effect on students' acceptance of replacing required textbooks with instructor selected learning outcome focused podcasts. This study shows students' experience with different information delivery formats has informed their preferences. Podcasting is useful to students when the information meets student needs.

Faculty does not perceive one area of focus for the use of podcasts. Students emphatically point to podcasts that include explaining how to solve specific problems and provide specific information as most important. Students learn best by having information provided in chunks, which allow skimming for knowledge. This is akin to skimming a text for answers. Student also noted that chunking improved understanding and retention. Students acknowledged in the survey that they are reading in a searching pattern in order to answer specific questions, rather than reading the entire chapter from beginning to end. The research does not show that textbooks should be thrown out altogether, but it does show that faculty should start including podcasts, whether self-produced or gathered, that are learning objective specific in their lesson plans. Students prefer podcasts that specifically answer questions related to the lesson. This may lead to preference for chunking and indexed podcasts that are easily searchable. By doing this the faculty will be able to target specific learning outcomes and gain the attention of students, in turn increasing student learning and retention. This study was limited to Business students. Possibly, other disciplines may respond more favorably to podcast. Future research should explore more variables to measure student acceptance and use of podcasting as a primary course resource. Podcasts have the potential to be prepared in "chunked" topic specific recordings, both audio and video. The use of podcasts may address the Cognitive Theory of Multimedia Learning framework more efficiently. A second area of research should study how describing content use and format will increase student observation; thereby increase use of podcasts offered in courses.

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WHAT UNIVERSITIES CAN LEARN FROM BUSINESSES: A CRITICAL RESEARCH STUDY OF ADAPTING CORPORATE ORGANIZATIONAL DEVELOPMENT APPROACH IN UNIVERSITY ENVIRONMENT

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ABSTRACT

Universities are facing dramatic changes in their environment, affecting their strategic competitive positions and organizational effectiveness. High education is a big business, but the business approach to strategic planning and organizational development in a university environment is still rarely used. Change management and organizational interventions are among best corporate practices in addressing external and internal strategic and organizational needs. Is it possible effectively using adapted corporate approaches for strategy-driven organizational development in universities? What are factual and perceived key problems and what are key success factors? What are result's logic, time-frame, and expected benefits? This critical research study is based on 128 structured interviews, followed by open question interviews and employees' anonymous evaluations in five comprehensive organizational development projects in one university. The projects are focused on clusters of centralized business and financial services at a state-supported mid-size northwest university. This study is highlighting a successfully adapted model and a structured implementation framework for organizational development in a specific university environment. The purpose of the study is to help understand and sharing challenges and practitioners' experience answering the overarching question: How to make organizational development project in university work?

JEL: L22, M19

KEYWORDS: Organizational Development, University Environment, Change Management, Strategic Planning, Organizational Interventions, Business Development, Results Logic, Implementation Framework

INTRODUCTION

High education becomes a big and global business, with growing competitive pressures from the game-changing factors. Competitive battles are emerging in the high education diversified markets, increasing needs for strategy-driven organizational development (OD). However, business approach and criteria in planning and implementing strategic and organizational changes in a university environment are still rarely used. Change management and organizational interventions are theoretically well founded, and OD techniques are already being used widely in business corporations. Addressing changes in universities is still on a mostly theoretical level, analyzing “Why?” and “What?” issues, but with very few studies focused on the generic question: How to make organizational development project in university work? In the last decade, there is an effort among a growing number of universities to address strategic and operational business challenges in a more effective way (Starr, 2014, Wells, 2012). Despite an academic and tradition based culture, more and more universities are trying to overcome typically “glacial” approach in comparison to fast and substantial changes in the business world. The search for new OD approach and practices in high education is primarily conducted in universities with advanced Human

Resources Management (HRM) capacities and functions (Rutgers, 2012). Accordingly, research questions emerged. What are best corporate practices in addressing external and internal strategic and organizational needs and challenges? Is it possible to use adapted corporate models and business approach for strategic-driven organizational development in universities? What are factual and perceived key problems and what are key success factors? Are there adapted models and a structured framework for organization development in universities? What are result's logic and expected benefits? Those are issues receiving increasing attention from both practitioners and researchers – and this is the topic of this paper.

Relatively little is known about universities using organizational development in a comprehensive way, for strategy-driven changes. There is very few published research of specific attempts to adapt corporate techniques for the university. Rare OD case studies (Latta, 2006, Torraco, 2005) are helping to gain initial insights into practical initiation and implementation problems. In practice, simply visiting universities' websites across the country, the primary conclusion is that organizational development is still mostly reduced to the professional training program and coordinating external consulting services. This is especially case analyzing mid-size public and state-supported universities. However, in the last several years, there is a growing number of universities assigning a more strategic role to their Human Resources departments. The approach is focused on adding OD as an advanced HRM function (for example, Rutgers University, 2012). It is easier to state this as a strategic intention then implementing an effective change.

The purpose of this qualitative case study, combined with collected empiric data, is to indicate factors that contributed to OD project's initiations, implementations, and results logic. The presented OD model is developed adapting the theoretical foundation and proven corporate practices, aligned with the specific setting and influential factors in a university environment. The paper is focused on providing the OD model overview and highlighting the practical implementation framework that may be adapted for use in other university environments for effective organizational development projects and interventions.

The remainder of this document includes four sections: a) a literature review, b) methodology and data, c) results and discussions, and d) concluding comments. The literature review is reflecting the multifaceted structure of OD as a concept and practice. There is a myriad of references related to OD and its various topics, including implementation experience in the corporate world. However, there are very few references available addressing OD at universities. Methodology section is addressing the OD projects' key phases and steps, with the OD implementation model, extensive interviews' approach, and data summarizing the most important topics and perception gaps affecting the OD goals and priorities. Results and discussion section is focused on types and levels of results and benefits in various OD projects' phases. One of the most valuable results is the OD Strategy map, a single-page view of the logic of the OD projects, with strategic initiatives and their critical success factors in four main perspectives: (1) faculty and staff, (2) work processes, (3) students and (4) stakeholders. Concluding comments are focused on the complex nature of the OD projects results' logic: from inputs, personal, team and organizational unit level's outputs, to the outcomes and an overarching long-term impact.

LITERATURE REVIEW

The organization development (OD) is an applied behavioral discipline. This is OD's theoretical foundation. Professional implementation of OD may simply be described as a methodology or technique used to affect change in an organization or section of an organization, with the overall goal of improving the organization's effectiveness. OD evolved through few strong research and practice waves (1950-ties, the seventies, 1990-ties, and in the last decade). OD focus changed by time, but the main driving force remained: an economic environment where the goal was to improve business efficiency and management. Behavioral science knowledge and practices (as a foundation of applied OD), incorporate concepts such as leadership, group dynamics and teamwork, work design and approaches such as strategy, organization design and international relations (Cummings and Worley, 1997). Since OD has a multifaceted structure,

and a reach applied history in the corporate world, there are myriad of theoretical references. However, there is no consensus on an overarching definition of OD. A literature review on the topic “organizational development in universities,” reveals emphases on generic approaches, reflecting on theoretical foundations and implementation in the corporate environment (Scott, 2013). The related subtopics (organizational change, change management, organizational effectiveness, etc.) in a university environment are also not significantly addressed by researchers so far. Some relatively recent studies are focused on the OD development and changes in high education (Allen, 2013, Sheets, 2012, Ashraf, 2011, Kumar 2008), cases in Europe (Nyhagen, 2013, Diefenbach, 2008) and Australia (Bordia, 2011).

The case studies analyzing OD and change in a university environment are very rare. Torraco (2005) and his team analyzed OD implementations in five universities, in various phases of building OD capacities and practices. Among universities with advanced OD positioning and published reports is Center for Organizational Development and Leadership at Rutgers University (2012). Strategic planning at university adapting corporate planning techniques is a foundation for strategic-driven OD interventions using corporate best practices. Such research studies are also relatively rare, even some research and cases are dating from 80-ies (Kotler, 1981, Aggarwal, 1987, Barker, 1997, Antipova, 2014, Johnsen, 2015).

The literature on applied OD and change approach in the business world is a long list of books and research studies addressing OD principles, practices, perspectives, processes, and performances (for example, Johns, 2014, Delprino 2013, Lewis, 2013, McLean, 2005, Walsh, 2004). In the recent years, OD pays much more attention to the larger environment in which the business operates and aims at helping businesses accomplish their strategic objectives. Some researchers and practitioners were focused on applied OD as a part of an advanced Human Resource (HR) Management, publishing handbooks for strategic HR and best practices in OD (Vogelsang, 2012, Cheung-Judge, 2011). In addition, many consulting companies published their own practitioners’ guides for OD. Among topics related to OD, there are also many books and research reports focused on leadership and leading change (Kotter, 1996), leadership teams and team building, as well as achieving “organizational health” (Lencioni, 2012). In summary, there are numerous research reports and books about OD theoretical aspects, and case studies and guides about applied OD practices in the corporate world. However, OD in high education has a modest number of research and studies mostly focused on theoretical aspects, with very few case studies of OD models and implementation practices in a university environment.

METHODOLOGY

The objective of organization development (OD) is to improve the organization’s capacity to handle internal and external functioning and relationship, improving group dynamics, organization's structure, and effective and collaborative management of organizational culture. Accordingly, the methodology used in related OD projects and in this research study is aligned with the purpose and objective of OD concept and expected results. The OD projects analyzed in this study were initiated in 2013 at one Northwestern university, in the part that has the functions closest to the standard business practices. Five OD projects were focused on clusters of centralized business and financial services at this state-supported mid-size university. In initiating and conducting those complex OD projects, the goal was to reach higher results than with previous OD attempts, this time using and adopting proven best practices from the corporate environment. This critical research study is based on 128 structured interviews, followed by open questions interviews and employees’ anonymous evaluations in five comprehensive organizational development projects. The name of the university and its units is intentionally anonymous. The study is an overview of an adapted OD model, highlighting implementation framework for OD projects in a specific university environment. The OD projects are initiated and implemented in three phases, with the steps presented in Table 1.

Table 1: Organizational Development Project Phases and Steps

Phase I: General Preparation Activities		
Step	Task	Activities
1.	Introducing OD to the university leadership team	Through tailored presentations, meetings, and brief workshops, led by HR department and an assistant director for OD, OD methods and techniques were introduced to the university's top officials (vice presidents, provost, deans, and directors).
2.	Initial priorities for organizational development projects	The university leadership team, based on strategic goals and various performance analyzes, suggested which organizational units should be priorities for organizational comprehensive assessments and adequate organizational interventions.
3.	“Buy-in” process on the organizational unit level	The “buy-in” process involved the management team in the chosen organizational unit. Meetings and presentations were focused on initial assessments, and explaining characteristics and dynamics of OD projects’ framework, process, specific goals, roles, and implementation steps, expected change management challenges and OD benefits, as well as a project’s suggested timeline.
Phase II: OD Project Realization Steps		
4.	In-depth presentations to all managers and supervisors.	Presentation (one or more, if there are various work shifts) explained OD needs and assessments process, OD interventions planning, implementation steps, expected results, and benefits. The important element was emphasizing a transparent approach to reviews and reports, with feedback and follow-up mechanism. Presentations were open to all employees.
5.	Communicating plans and schedules	All employees in the unit are informed about planned organizational development project and related steps and schedules.
6.	Confidential interviews	Structured one-on-one interviews, confidential, followed by open questions individual sessions.
7.	Interviews’ results and findings summary presentation	After all interviews’ results are systemized and analyzed, all employees are invited to the project presentation. The unit’s core management team received just a brief summary prior the presentation.
8.	Initial action plans and OD Team	After the presentation of project’s finding suggested OD interventions and an initial action plan, employees were invited to form an OD Team. This team did not have top managers in it, and it was empowered to contribute to the project related overall coordination and communication.
Phase III: OD Continuous Support, Feedback, and Follow-up		
9.	Project’s first evaluation.	After the anonymous project evaluation from all employees, the ownership of the OD project is transferred to the organizational unit’s OD team, with continuous monitoring and support from OD specialist, including team-building activities, OD-specific problem-solving assistance, etc.
10.	Interim reports, follow up, and continuous support	Follow-up is scheduled and aligned with the OD interventions' steps and phases, and related interim reports. Continuous project and change management support included additional OD/HR services such as coaching, communication, team building workshops, and professional soft skills training, as well as assisted interpersonal conflict resolutions as needed.

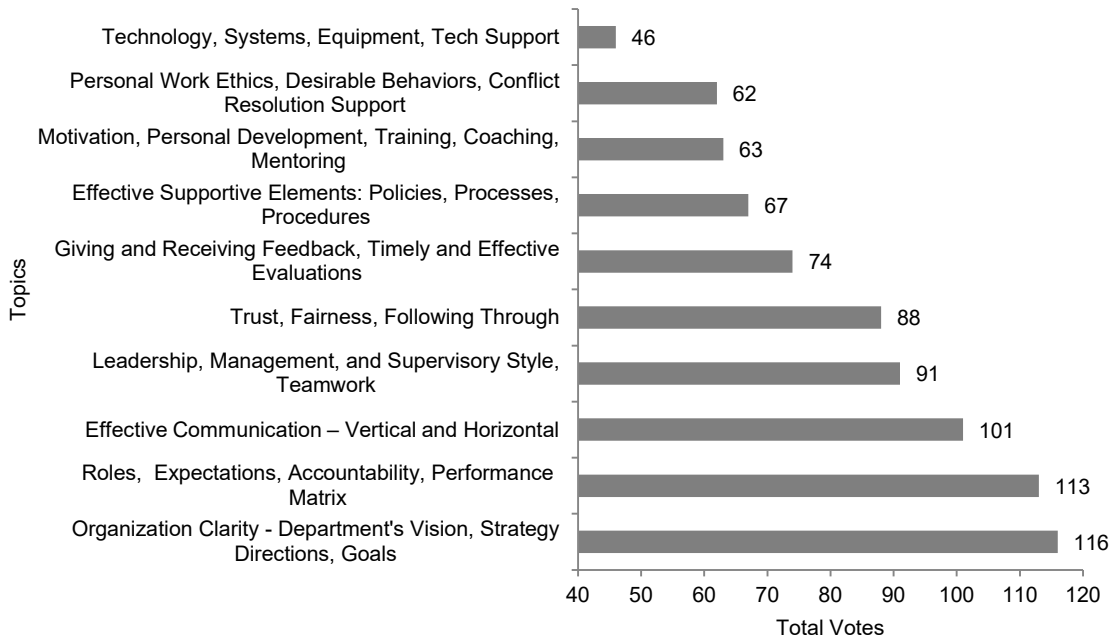
This table shows organizational development project initiation, planning, and realization in 2013, through three phases and 10 major steps.

Following its strategic plan, the university leadership decided actively addressing the critical elements of the overall organizational effectiveness in business, financial and other services supporting the core function – education. In 2013, Human Resources (HR) department was reorganized and staffed to accept the strategic role as a strategic driving force and functional center for Organizational Development and Professional Development in this university. In comparison to some OD activities performed in previous years with mostly external support (consulting, experts), this time, OD was based on a full-time internal capacity, providing in-house expertise and continuous support for OD projects.

Interviews’ data are collected in 2013 and analyzed using content analysis utilizing rank scores. The most often-cited problems, challenges, and expectations raised by interviewees are summarized and grouped under 10 categories. The descriptive statistical method is used. Those data are used to fine tune project’s priorities and steps. Accordingly, the methodology comprises quantitative and qualitative elements.

Interviews identified trends and insights of the organizational culture, leadership and management styles, communication issues, and what employees perceive as critical factors for organizational development. Coding answers, using pattern recognition, and descriptive statistic methods, the most frequent answers are systemized. Figure 1 presents the topics with the highest numbers of total votes. One of the essential elements of OD projects and critical research study is the perception of team effectiveness. In the corporate world, research shows (Rosen, 2007) that CEOs misperceive their top teams’ performance, thinking that things were going better (33-47%) than the non-CEOs did. This study reveals that perception gap at analyzed university is even significantly bigger.

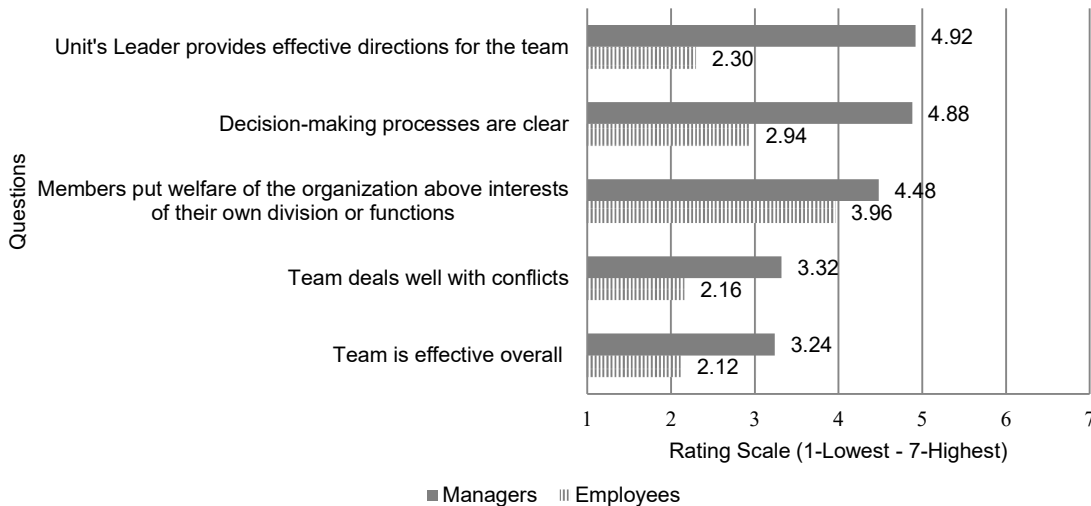
Figure 1: The Most Important Topics from 128 Interviews



This figure shows the 10 category of topics with the highest numbers of total votes grouped and summarized from 128 structured interviews and followed open question and deeper confidential discussion about what employees' perceive as critical factors for organizational development.

Figure 2 presents the team effectiveness perception gap between what employees think and what management and supervisors think.

Figure 2: Team Effectiveness Perception Gap



This figure shows the perception gap about team effectiveness at the analyzed university. As the rating scores summarized from all interviews shows, the unit's management thinks that things were going much better than employees did.

The response to the call for interviews was overwhelming. After initial hesitations, when the entire OD projects concepts, goals, and general framework was explained in the preparation phase, the remaining question was about confidentiality. The OD leader / change agent earned trust being transparent, professionally highly respectable and honest. The confidentiality is emphasized as one of the major tools

in OD projects, and cannot be compromised – otherwise, the change agent will be incapable of continuing with further projects. The number of employees per organizational units and the response rate is presented in Table 2.

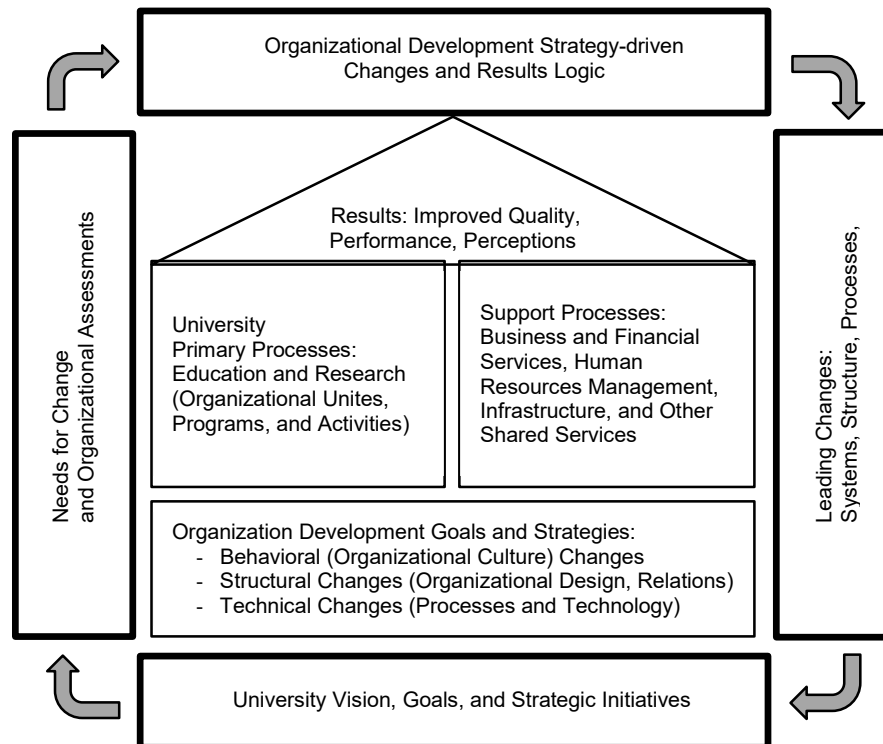
Table 2: the Number of Managers and Employees Interviewed in 2013, and the Response Rate

	Org. Unit 1	Org. Unit 2	Org. Unit 3	Org. Unit 4	Org. Unit 5	Total
Managers	3	4	3	2	1	13
Interviews	3	3	3	2	1	12
Response Rate	100%	75%	100%	100%	100%	92%
Employees	26	38	27	25	14	130
Interviews	22	34	24	23	12	115
Response Rate	85%	89%	89%	92%	86%	88%

This table shows a number of managers and other employees in the organizational units where OD projects were implemented. Interviews are conducted during the calendar year 2013. The response rate among managers is very high, 100% in four units, and 75% in one unit (total 12 from 13 managers responded, i.e. 92% response rate). The respond rate among employees is 88%, i.e. 115 from 130 employees were interviewed. Those who did not respond were mostly people that were just hired and few part-time or temp employees at the entry level job positions.

Data collected through extensive interviews and cooperation with units’ employees, management, and upper-level leadership provided insights and priorities to determine, in the first place, behavioral changes. The aims were organizational culture changes as enablers for further functional and structural changes. Those OD goals were projected into planned organizational interventions and change management plan. After data were collected and analyzed during the OD projects' preparation, the OD team (OD leader and the unit’s management) developed and presented the initial OD Model. Figure 3 presents the structural elements of the OD model adapted for implementation in the specific university environment setup.

Figure 3: Organizational Development Model in University

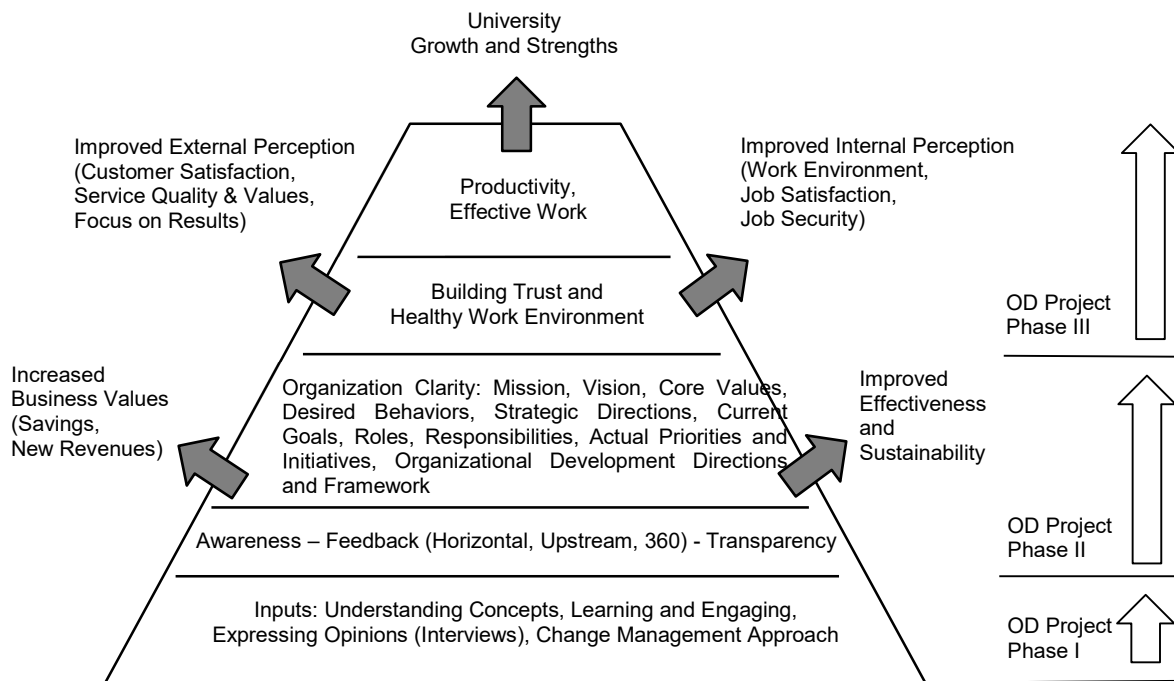


This figure shows the main structural elements of the initial OD model adapted for implementation in the specific university environment setup. The starting point is the university vision and strategy, projected to specific OD goals and interventions in core (educational) areas and support processes. Results are achieved through the OD interventions, leading and evaluating changes through the assessment-changes-feedback loop.

RESULTS AND DISCUSSION

The organization development (OD) projects' expected results were based on projected immediate and long-term effects and benefits. After introducing OD concept, and enabling all employees and management to express their perceptions and expectations, the first and almost immediate result was achieved transparency related to OD projects. Some of the business, financial and infrastructural services at this university have over 100 million dollars annual business values (contracting, purchasing, financial aids, campus safety, and other shared services). When in the early stage of the OD project improved efficiency by 1% was documented, it created a strong positive attitude: "We are one million team." From there, increased motivation and behavioral acceptance of changes become strong success factors. OD projects were accepted by most employees and managers. In the process, there were some personal changes too: new talents were discovered and promoted, while some employees, supervisors, and managers faced a last chance to improve their behaviors and skills. The next and very important result was increased awareness about actual and expected OD effectiveness. Figure 4 presents those basic and following layers of OD projects' expected results and effects.

Figure 4: Organizational Development Expected Results and Effects

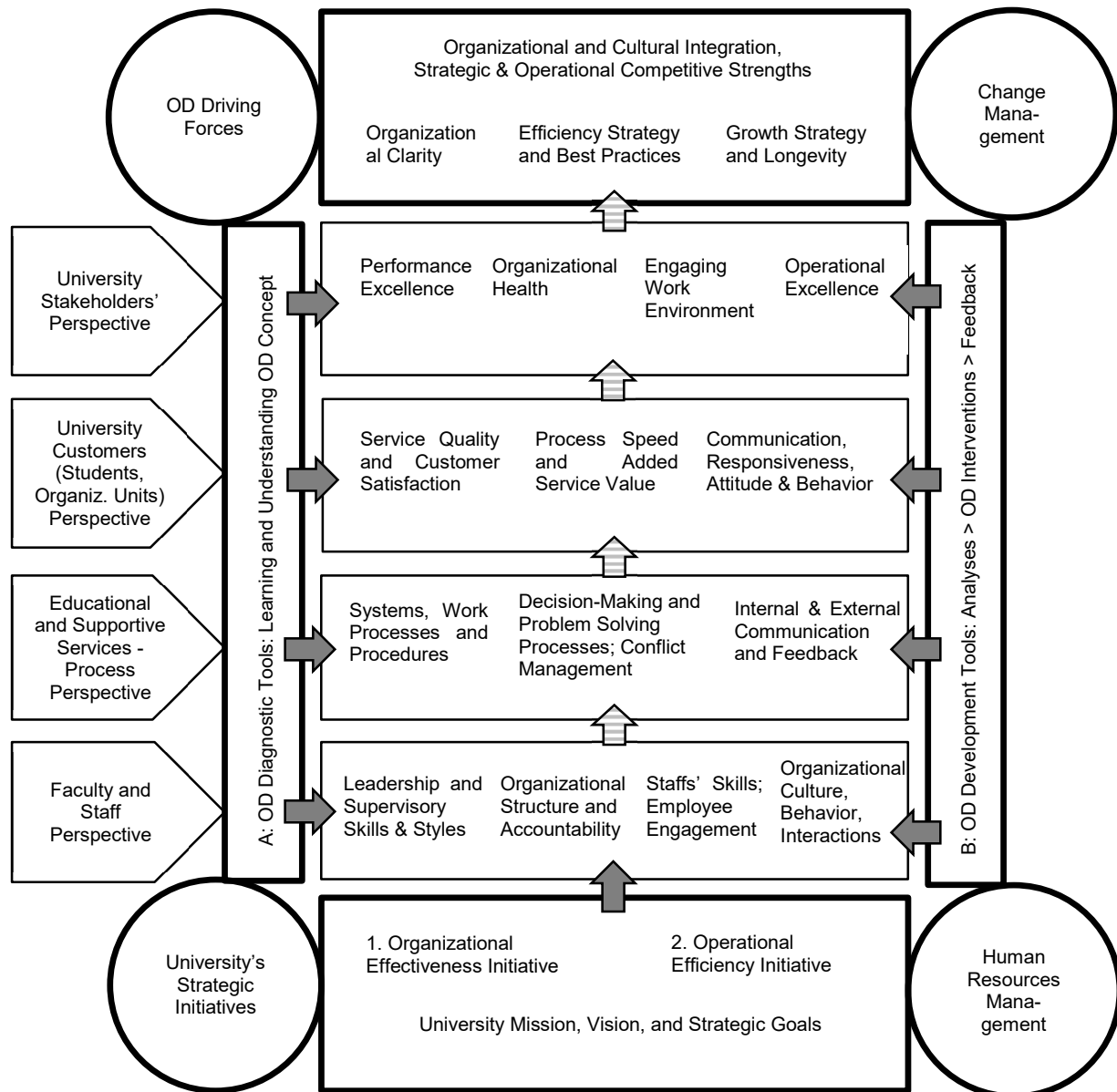


This figure shows layers of OD projects' expected results and effects. The inputs by itself were important starting results: introduced OD concept, conducted extensive interviews, and presented OD findings and initial OD interventions plan. This was followed by very important results: increased awareness about OD needs, expected changes and benefits. The next results' level was achieving an organizational clarity, which led to improved teamwork and organizational efficiency. This positively affected both external customers (core educational departments, students) and internally interrelated services. Job satisfaction and productivity increased, supporting strategic goals and strengthening the university.

In further developing OD model and making its implementation successful, two strategies well used in the corporate world were adapted. First, OD model was built introducing strategy maps and performance measurement. Second, Results-based Management was used as the foundation for the results' logic model. Strategy maps were introduced in 2004 by Kaplan & Norton (Kaplan, 2004), as further development of their performance measurement system "Balanced Scorecard" (1992) and its transformation to a strategic management system ("The Strategy-Focused Organization," Kaplan and Norton, 2001). Strategy maps become used as a strategy development tool in performance management too (Armitage, 2006), and greatly

helped in describing and communicating the strategy among management teams and employees. In OD projects analyzed by this study, the strategy map approach was used to describe the logic of the OD strategy, showing the critical objectives for the four main perspectives: people (faculty and staff), process (work processes, decision-making processes), customers (students, and other organizational units at the university), and financial perspective/stakeholders perspective, customized for the university environment. OD projects were realized through a set of action programs (strategic initiatives). Figure 5 presents the strategy map concept implemented in OD development at a case university, with combined and integrated critical activities, objectives and targets for each of four identified perspectives.

Figure 5: Organizational Development Strategy Map, Strategic Initiatives, and Critical Success Factors



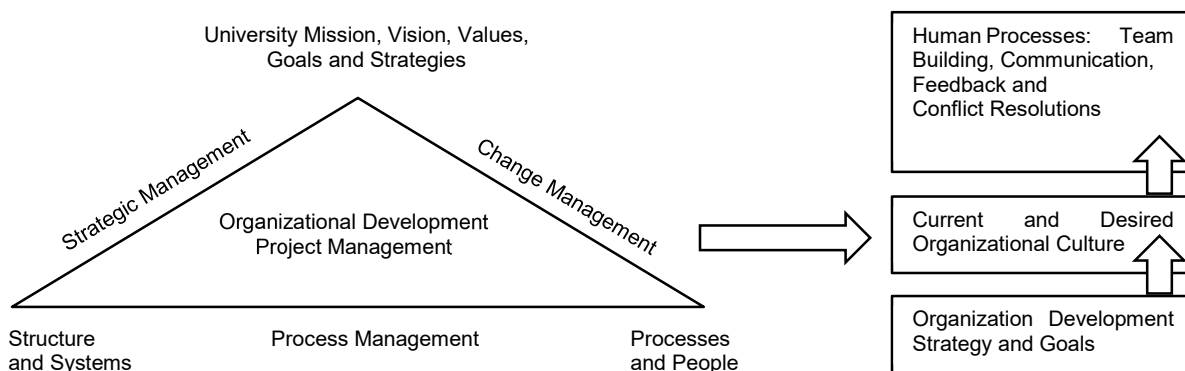
This figure shows how the strategy map approach provides a single-page view of the logic of the OD strategy and projects. The map is visualizing the critical objectives for the four main perspectives: people, processes, customers, and financial results customized to the university environment. This model describes how two strategic OD initiatives are realized through a set of action programs, enabling, combining, and integrating critical activities, and their results. This map also helped to plan, assign, and use related resources: people, funding, and time.

This OD strategy map helped to communicate OD strategy and projects, and their critical activities, objectives, and targets. It provides an overview of OD activities that contribute to people’s learning and growth, improve core and support processes at university, what is critical for customers (students, and other organizational units), and what the ultimate OD objectives from stakeholders’ perspective are.

CONCLUDING COMMENTS

The purpose of the study is to help to understand and sharing challenges and practitioners’ experience answering the question: How to make organizational development (OD) project in university work? Universities are facing dramatic changes in their environment, affecting their strategic competitive positions and organizational effectiveness. High education is a big business, but proven and efficient business approach to strategic planning and organizational development in a university environment is still rarely used. University leadership and OD practitioners are asking: Is it possible effectively using adapted corporate approaches for strategy-driven organizational development in universities? What are factual and perceived key problems and what are key success factors? What are result's logic, time-frame, and expected benefits? This critical research study is answering those questions highlighting elements of a successfully adapted model. It presents an overview of the implementation framework for OD focused on clusters of centralized business and financial services at a state-supported mid-size northwest university. Initiating and implementing organizational development projects, and maintaining achieved changes and results in various levels, is a complex undertaking. Figure 6 presents the interrelations among key OD dimensions (structure, process, people), and specialized management practices utilized to achieve strategic-driven organizational changes.

Figure 6: The Complex Nature of OD Projects



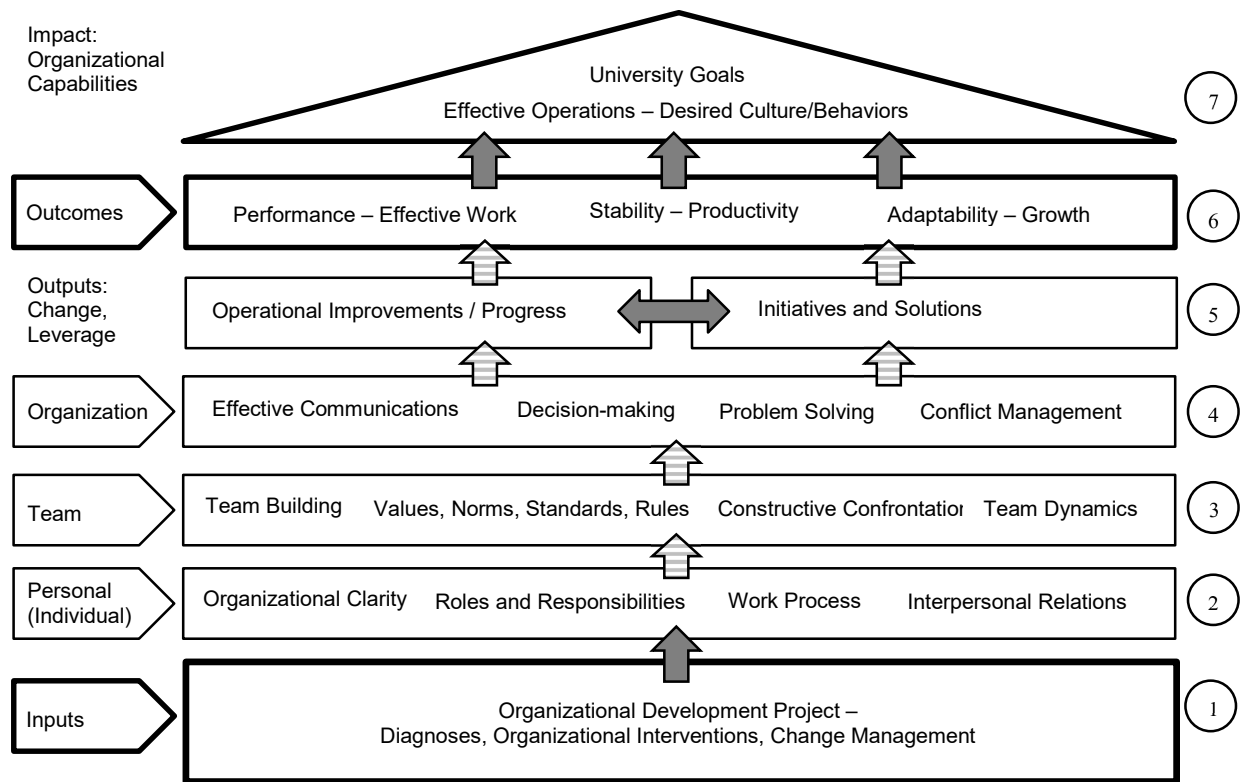
This figure shows OD projects’ complex nature and implementation’s dimensions. OD projects involve strategic management, change, and process management, as well as project management techniques and skills. An integrated approach, based on the proven business practices, is primarily aiming to the human, behavioral side of OD projects. Improving communication, teamwork, and conflict resolution became driving forces in enabling human resources to develop desired OD changes, especially building desired organizational culture. Those “soft” changes are fundamental success factors in developing the “hard” OD dimensions: organizational structure, technical systems, and work processes.

The OD projects initiations came from the university leadership. However, the power that launched OD projects on the path of success came from the employees: in the first critical step, they expressed their opinions through confidential interviews and comprehensive communication about OD strategic initiatives, goals, and expected effects. The second vital step was sharing unbiased and transparent results, building trusts and increasing awareness about OD needs and priorities. The tipping point in efforts to initiate OD projects was “what-if” question, addressing the negative consequences of not changing critical elements in organizational cultures, structure, and processes, based on the university vision and strategy.

Interviews identified topics that employees perceived as critical factors for organizational development. Effective communication was essential in trust building and clarifying organizational needs and goals. After

analyzing topics emphasized in 128 interviews, Pareto distribution approach (80/20) was used to identify the list of topics with the highest priority. Their improvements should resolve the most important problems and produce valuable and timely effects at various levels (individual, team, organizational units, the entire university). This approach defined the OD strategy and projects' targets, and it was agreed through the bottom-up process. The next step was focused on OD projects and expected results. The results-based management approach (United Nation Development Program, 2010) provided a tool to map expected results' logic, through the value chain: inputs, outputs, outcomes, and impact. Figure 7 presents the "results house" developed using expected results at various levels, from personal to the organizational unit, and based on the value chain from immediate OD outcomes to the long-term impact.

Figure 7: Organizational Development Project Results Logic



This figure shows the value chain, starting from OD project's inputs and the immediate / short-term outputs at personal, team, and organization unit's level. Leveraging those outputs, OD projects are providing three main outcomes: increased performance (effective work), stability through productivity, and organizational adaptability for changes and growth. This should, on a mid-term to long-term basis, impact organizational capability at university, enabling effective operations and desired organizational culture at university – increasing competitiveness and growth.

In conclusion, this study confirmed that universities can successfully adapt and use proven business methods in strategy-driven organizational development. Leadership support, internal change agent with related business, OD, and change management experience, and an effective communication are among the key success factors. The first results are increased awareness about OD needs at personal, team, and organizational unit levels. The next overarching results are steps towards organizational clarity. Those are priorities in OD and planning and implementing organizational interventions. The study's results are implying needs and benefits for further research, and initiating OD projects at other universities.

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BIOGRAPHY

Ljubomir (“LJ”) Medenica is an assistant professor at the School of Management, University of Alaska Southeast, in Juneau, United States. Prior several engagements in two universities, as a professor and an administrator, Mr. Medenica had 30+ year's international career as a management consultant and a business executive.

Mr. Medenica was also engaged by United Nation Development Program (UNDP) in multiple projects (2010-2013) as an expert for organizational development for governments, corporations, and university programs. As a management consultant, coach and trainer, Medenica was furthermore engaged in various European Union capacity building programs.

In addition, Mr. Medenica was conducting numerous corporate training, executive coaching, team building, and leadership development workshops in the USA and Europe, still continuing his engagement as a professor. He can be contacted by email at LJMedenica@yahoo.com.

BEST PRACTICES IN MARKETING EDUCATION: UNDERGRADUATE MARKETING PROGRAMS AT NATIONAL UNIVERSITY

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Mary Beth McCabe, National University
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ABSTRACT

This research analyzes and reviews undergraduate marketing courses and programs currently offered at National University (NU). We assess the results for the last three years of student achievement and satisfaction, and make recommendations for improvement. A review of achievement outcomes from student and faculty evaluations, interviews, outbound exam results, enrollment, assessment data, SWOT analysis and the administration's set goals were considered in a strategic context. The primary goal of this study was to improve undergraduate marketing education programs, to assist NU design more relevant academic programs and courses in the field of marketing that are attractive to NU's specific target market, to enhance existing programs, and to eliminate unnecessary courses. The study compared competitive marketing education programs, courses, specializations, and/or certificates offered both in the US and abroad. We analyzed the development of new programs, SWOT analysis, market needs, faculty development, content and course offerings, format offered, accreditations, differentiation factors, target market and promotional strategies. The two key outcomes are: 1) Consider which changes will improve student outcomes for undergraduate marketing courses at National University for the next 3-5 years, and 2) Discover what are best practices for undergraduate marketing programs at universities in the US and globally.

JEL: I2, M3, I200, I210, I230, I250

KEYWORDS: Marketing, Undergraduate Education, Adult Learners, Accelerated Studies

INTRODUCTION

National University (NU) is a private, not-for Profit University in California, founded in 1971. NU is accredited by the Western Association of Schools and Colleagues (WASC) and has additional accreditations in several programs, for example, AACTE in Education, IACBE in Business, and CCN in Nursing. NU is the second largest non-for profit university in California, and 12th largest in the United States. National University has been dedicated to making lifelong learning opportunities accessible, challenging and relevant to a diverse student population of adult learners and working adults. It uses a one-course per month format offering online, onsite evening and day classes. It has five schools and one college, including the School of Business and Management (SOBM), the School of Education. (SOE) School of Engineering, Technology and Media, School of Health and Human Services, School of Professional Studies and the College of Letters and Sciences. The School of Business and Management has four departments: Accounting, Finance, Leadership and Human Resource Management, and Management and Marketing. The Department of Management and Marketing offers the following degrees: Bachelors of Arts in Management, Bachelors and Masters degrees in Integrated Marketing Communications, Global MBA in Spanish, and Masters in Global Management.(www.nu.edu)

New admissions to SOBM have increased from 2548 in 2010 to 3045 in 2012, and almost 5,000 students in 2015 SOBM has 30-fulltime faculty and approximately 300 adjunct faculty in more than twelve programs and certificates (www.nu.edu). A total of 417 classes in Marketing were offered from 2009 to April of 2014 to 3,844 students, with an average of 17.13 students per class., There were 280 undergraduate classes, and 137 graduate courses, and 52 independent studies.. Full-time faculty taught 34% of the classes, and 66% were instructed by part time faculty. (www.nu.edu) The purpose of this study was to examine and analyze the performance of the undergraduate marketing classes and programs and determine what needs to be done to improve the courses and better prepare the students for their future employers. This will in turn attract higher performing students. We needed to learn more about the students' perceptions as to whether they found the courses meaningful, relevant, and if the instructors delivered the material in a motivating, useful way. The results will also assist the university to learn if the courses are "the right ones", if modifications are necessary in content, resources, instructors, and format etc. (i.e., on campus or online).

LITERATURE REVIEW

Bartel (1976) in his Landmark research in Marketing, stated, "The establishment of a market economy wrought marked changes in the social and economic structure. A new attitude toward business revolutionized the economy of the country and that revolutionary element was identified by the term 'marketing.' Historical accounts of trade lead one to conclude that marketing has always existed. Was the original use of the term marketing merely an application of a new name to an old practice? "Marketing must be regarded not merely as a business practice, but as a social institution. Marketing is essentially a means of meeting and satisfying certain needs of people. It is a highly developed and refined system of thought and practice characteristic of a period in the development of market economy. A latent presumption in the practice of marketing has been that marketing gives to society more than society gives to it. According to Ellis et al (2011) "those teaching the subject know what it is that they are studying and how this study should be undertaken. Marketing as a subject has proved almost impossible to pin down, and there is little consensus about what it means to study marketing. Most organizations now employ marketers. Marketing roles were traditionally found in commercial firms, but increasingly all kinds of organizations feel the need to employ marketers or to commission services from marketing consultants.

The popularity and pervasiveness of marketing is, however, a relatively recent phenomenon. Academics have only studied marketing as a discipline in its own right for just over a century, and during its short history the study of marketing has been influenced by many different academic movements, fads and priorities. This variability can be viewed as a positive state of affairs, because it means that the subject is always open to new ideas and new trends. On the other hand, it has the potential to undermine the value of marketing knowledge because there is no general consensus on what the study of marketing should be for, how these studies should be conducted, or what the outcomes should be. We need to understand something about this history and the debates and controversies that have shaped the field."

Lamont L.M. Friedman, K. (1997) in their article, Meeting the challenges to Undergraduate Marketing Education, state "Changing economics and new questions about how students learn have educators rethinking and restructuring higher education. Marketing education is undergoing a similar evaluation due to the decline of student interest and enrollments in business and marketing, concern over the rising costs of education and the criticism of employers and educators about the marketing curricula and teaching methods used to educate undergraduate students." They continue, "there are several forces are already reshaping the marketing education of the future: 1) The declining quality of American primary and secondary education, 2) Students changing learning patterns, 3) Emerging information technology, 4) The globalization of markets, 5) New marketing knowledge. " In 2012 Finch, Nadeau & Reilly published an article titled, "The Future of Marketing Education: A Practitioner's Perspective" in which they looked at the future of Marketing Education from a practitioners' perspective, and they reviewed the marketing

literature, as well as the views of both marketing educators and current marketers in Canada. A survey was conducted of marketing practitioners to determine their top priorities for improvement in marketing education, as well as the key challenges in need of attention. An importance-performance analysis was carried out on these data. Findings indicate that the top current priority knowledge related to areas associated with measuring return-on-investment and strategic marketing. Results also support that meta-skills are perceived as high priorities for improvement, including the ability to creatively identify, formulate, and solve problems; the ability to write in a business environment; and the ability to set priorities.” Leventhal, (2002) states, “Instruction for marketing education is a combination of hard skills and soft skills. Students learn occupational skills that include marketing skills, self-development/personality development, getting along with co-workers/supervisors/customers and leadership skills. In the field of education, all teachers are supposed to have students learn cognitive skills, psychomotor skills and affective skills.

The affective area is based on emotions/attitudes/values that are essential in working in the field of marketing. Other teachers often avoid working with the affective area because of the sensitive and delicate nature of the subject matter. Career and technical educators have long been concerned about the value systems of students and how they fit into the workplace. Marketing education has always worked with all skill areas in preparing students for careers and for employment. Since other educators have not worked with the affective area very much, one of the newer areas is character education, which covers all the affective performances that have been concerns to marketing educators.” He continues “Providing related supervised work experience as part of the school's marketing education program is an established component. From the early 1900s, the on-the-job training was an important ingredient of the school program. The federal guidelines for distributive education specified half a day in school and half a day of related supervised work experience--paid, for at least 15 hours a week. Every state followed these guidelines and incorporated them in their state plans. Now that America is losing its industrial and manufacturing base, there is greater awareness of sales/marketing and service occupations. The occupations that are part of the marketing cycle are best served by programs in marketing education.

There is a greater need for more marketing education programs in the secondary schools. In our society, most people do not hold four-year college degrees (79 percent), and there is need for well-trained personnel. At the same time, there are students who plan to attend college and study marketing, and the local schools could use marketing education programs to accommodate these students and to better prepare them by giving them training and experience in marketing occupations. ”He continues “Many administrators with academic or liberal arts orientation are not aware of the value of having marketing education in their schools. As retirements result in personnel changes in the schools, there is a greater need to re-educate new administrators to the rich opportunities that are available to students through marketing education. The U.S. Office of Education, and some state education departments, no longer have program specialists in marketing education who encourage schools to develop and offer programs. Yet, a field with huge numbers of job openings and career opportunities, marketing education, is ready to be utilized. It is up to local educators to take the lead to offer programs that meet the needs of students and employers.”

According to Kumar (2015) “over the decades the marketing discipline has experienced changes in terms of its dominant focus, thought, and practice.” He continues, ”marketing must be an integral part of an organization’s decision-making framework. This calls for the complete integration of marketing activities with other business functions and creates unique opportunities for marketing scholars whereby research studies must now consider not only the marketing function, but also its interface with other business functions.” He continues “Like other disciplines, the marketing discipline in higher education is constantly adapting to changes and needs. Education of marketing principles needs to adapt as well. Emerging themes in the marketing discipline academic journals since 2013 are changes in media usage, focus on marketing efficiency and effectiveness and firm value by engaging stakeholders. So how does this relate to Marketing education and curricula? Both Leventhal (2002) and Kumar (2015) identified future directions in Marketing

Education and these are the directions that the authors took in this paper.

Students Changing Learning Patterns

Davis et al (2000) reported, “Learning styles of marketing students have changed over the years. They reported that in a study by Nulty and Barrett (1996) indicated that business students prefer pedagogies that are active and concrete. Stewart and Felicetti (1992) examined preferred pedagogies of marketing majors and non-marketing major business students and found a significant difference between the two groups. They found that marketing majors, relative to non-marketing majors, preferred a learning style that was either methodological or holistic. The former refers to the use of computer-aided instruction, direct application problems, hands-on opportunities, and programmed instruction, whereas the latter refers to short lectures with discussion, short assignments with reflection time, group discussion, television, and movies. Karns (1993) examined pedagogical preferences of marketing students for learning activities and found a positive relationship between level of stimulation, level of effort, and concrete or real-world applications. The major conclusions of the study were that marketing students prefer pedagogies that have more involving content and are oriented toward the application of marketing knowledge. Other studies have investigated specific pedagogies, such as team projects (Batra, Walvoord, and Krishnan 1997; Williams, Beard, and Rymer 1991), experiential learning (Wynd 1989), gaming and simulation (Laughlin and Hite 1993; Wellington and Faria (1996), and Web-based courses (Canzer 1997).

Emerging Information Technology

Technology is changing the definition of the marketplace and is the driving force changing marketing. Such as the Internet, mobile phones, social media, and customer relationship management systems greatly affect the way companies communicate with prospective customers. These new forms of communication are changing the media landscape and the type of messaging strategy organizations use (Boundless 2015).

The Globalization of Markets

Lundstrom et al (1996) declare “that with the US increasingly depending on international trade for economic growth it tends to be reactive to changing economic conditions. The world trade for the US has increased ten fold for the past 20 years. In 1994 AACSB required an increase in the International business content of the curriculum in accredited business schools. The question is to whether integrate this information into separate courses or add material to existing courses.”

New Marketing Knowledge

Lamont & Friedman (1997) identify, “new organizational designs, technology and globalization will force marketing educators to rethink managerial marketing. The interest in relationship marketing will continue. Services marketing will grow in importance as traditional marketing concepts are adjusted to accommodate the special characteristics of services and their importance in the global economy. Revision of the Marketing mix as expressed by the 4P’s will result as changes are made to improve the integration of promotion, relationship marketing and the marketing of services.” They conclude that “students will need more than a knowledge of marketing, they will also need additional skills in problem solving, communication, leadership and teamwork.” Kumar (2015) adds “over the decades the marketing discipline has experienced changes in terms of its dominant focus, thought, and practice.” He continues, “marketing must be an integral part of an organization’s decision-making framework. This calls for the complete integration of marketing activities with other business functions and creates unique opportunities for marketing scholars whereby research studies must now consider not only the marketing function, but also its interface with other business functions.” He continues “Like other disciplines, the marketing discipline in higher education is constantly adapting to changes and needs. Education of marketing principles needs

to adapt as well. Emerging themes in the marketing discipline academic journals since 2013 are changes in media usage, focus on marketing efficiency and effectiveness and firm value by engaging stakeholders.” Crittenden & Crittenden, (2015) “found that while students use contemporary digital tools for communication and entertainment, they did not think it necessary to use them for educational purposes. Thus, there appears to be a gap between digital and social media tools for personal use and for instructional purposes. Given that digital and social media marketing is a fast moving phenomenon and that marketing educators need to be at the forefront of marketing practice, it is imperative that educators continually innovate both with curriculum content and social media tool usage.” The authors want to use these themes in updating and developing new Marketing courses/programs at NU. On examination of published lists, we found which universities are currently ranked by independent sources. U.S. News Calculated the 2016 Best Colleges Ranking (<http://www.usnews.com/education>) The U.S. News ranking formula gives significant weight to the opinions of those in a position to judge a school's undergraduate academic excellence. The academic peer assessment survey allows top academics – presidents, provosts and deans of admissions – to account for intangibles at peer institutions, such as faculty dedication to teaching.

The U.S. News ranking system rests on two pillars. The formula uses quantitative measures that education experts have proposed as reliable indicators of academic quality, and it's based on our researched view of what matters in education. First, regionally accredited schools are categorized by their mission, which is derived from the breakdown of types of higher education institutions as refined by the Carnegie Foundation for the Advancement of Teaching in 2010. The Carnegie classification, which is used extensively by higher education researchers, has been the basis of the Best Colleges ranking category system since our first rankings were published in 1983. National University was not ranked using any of these criteria, nor could we find ranking for schools catering to working adults, the non-traditional students, who are National University's target population. (<http://colleges.usnews.rankingsandreviews.com>).

Recent searches did find NU ranks for one specific academic program. National University's Bachelor's in Integrated Marketing was ranked #20 by TheBestSchools.org. Rankings were based on several weighted factors, including academic excellence, course offerings, faculty strengths, and reputation, including reputation for online degree programs. TheBestSchools.org is a leading resource for prospective students seeking a college or university degree. Many schools in the United States reference this top 20 ranking, including Auburn University, Boston University, Texas A&M University, and Fordham University. In order to learn more about the distinctive qualities of some of these institutions and other prestigious ones, the authors asked several experienced professors and administrators at National University and other schools to share some of their thoughts on marketing courses and programs.

Interviews

A series of interviews were conducted to various professors of universities to find out their input as to what makes the best marketing courses and programs. Prof. David Reibstein, currently the William Stewart Woodside Professor of Marketing at University of Pennsylvania, identifies a strong faculty, select students, and job placements as key factors in building a reputable program. He has been a professor at three of the most recognized business schools in the US, Wharton, Harvard and Stanford, and has served on the American Marketing Association as an officer. In relationship to Wharton attracting top faculty, he said: “Brands are built over a long period of time, and some of our success is just the longevity,” He attributes the branding results to the quality of faculty. “If you attract really good faculty, it starts to become a self-fulfilling prophecy. There really are network effects, using today's terminology.” Branding, one of the goals in Marketing, is very important for a university and their faculty, and it takes time to build a good reputation. He continues, “If you concentrate on who is in the classroom that will be the best way to create better classrooms, and not just accept anyone with the resources to attend. It's about the caliber of the students themselves. Your students want job advancement. If I go there, I have a higher likelihood of advancing in their careers. If I was working there and wanted to take some classes, and pursue a degree, I would look to

see if it was worth the money and worth the time. Did the people who went there get job increases? Do we have distinguished alumni? What are the opportunities after you leave?" Therefore, job placement is also an important consideration since most students expect to have a good department in the university to help them in finding a job. Strong connections with alumni is also critical in building reputation and attracting good students to a program, therefore, it is necessary to organize events and other venues to keep alumni engaged with the university's activities". He also mentioned other important universities to explore globally, such as INSEAD in France, ITESM in Mexico, Fundacion Gertulio Vargas in Brazil, Hong Kong University, CEIBS in China, and Indian Institute of Management in India. He also emphasized the importance of offering Executive education and certificates, to better position the university in any particular region. We asked Reibstein about academic trends, including Massive Open Online classrooms, (MOOCs). MOOCs are relevant because of the large number of online students that they serve worldwide with college level coursework. He thinks they will increase significantly. It is not a fad, he said emphatically. He also added that they might have an important role in the future.

Abigail Sherwood the Director of Development from a traditional Midwestern university, the University of Dayton, and Irene Dickey, marketing faculty, identified bringing professionals to students and students to professionals as the successful goal of improving marketing academic programs. They described their school the University of Dayton as similar in tax-exempt status, to NU. It is a private non-profit, with 7800 undergrad students, 2000 MBA, and 4000 graduate students. Dickey spoke about bringing professionals to content and vice versa, and mentioned the P&G (Proctor and Gamble) Marketing Challenge, where students get face time with brand managers and return measurable analytics. She also discussed client projects (capstone projects) with the Cleveland Indians and Cincinnati Bengals and other firms, as well as finding practical applications to marketing research for a specific local business. Emphasis on metrics and analytics is crucial, according to Sherwood and Dickey, and they mentioned Teradata Corporation as a good source for business analytics. They have 150 members of the Marketing Club and a virtual internship. They have a Center for Project Excellence where students work in teams for a project with a company, and business plan competition that receives 100 entries each year to compete for seed money.

They do a lot of surveys with graduates and find a 95% response rate. Dayton emphasizes "experiential learning' as an important component of new business models everywhere, with a strong connection to real business solutions. Another connecting idea was a new student run organization called "Women in Business" with over 120 students to deal with specific issues, such as finding resources to land a job that they are passionate about. They also have a combined Marketing and MIS program that is very attractive for employers. Finally, they also organize some events for community outreach like the "Christmas at Dayton", a "magical evening" for underprivileged people in the community. Professor Angie Johnson's 2014 phone interview gave her perspective of two universities, National University and Franklin University, an online not-for profit university serving also working adults. She teaches at both schools. She talked about connecting students to industry, building a network of contacts, and making sure that students receive the experience they need in the degree in which they are enrolled. She mentioned conference opportunities, and hands on engagement as two very important criteria for students to be involved. She is holds live debates with her students online. Johnson uses simulations, case studies and practicum activities. "The ones we remember are the real world examples." said Johnson. She also uses guest speakers and provides opportunities for critical thinking within the content of the class by students evaluating each other.

We met with long-time Marketing NU adjunct faculty Richard Hopkins, an area manager for the Safeway Company, to ask if we are matching the needs of employers. He suggested that we add more electives and database marketing courses. He also said that better writing skills are needed by students. He does see a gap between what students learn and what employers seek as job skills .He believes that you need to use what you learn, and make it very practical. At Safeway/Vons, his employer, 'Just For U' is their Customer Relationship Tool (CRM). This provides valuable customer information. In class, Hopkins shares with the class the importance in his business an example, Hopkins continues, "Content is not useful unless the

context is created.” Bruce Buchowicz, a former Dean of a business school and an experienced business and strategy professor states, “Faculty make the difference. Consulting practices by faculty, supported by graduate students will produce more engagement. The trends that I see today include Ted Talks, and the 18-minute lecture is a relevant manner to present information today”. Louise Kelly, a faculty member from Alliant International University points to her advisory board that helps her focus on content and curriculum that is relevant, and action-oriented projects. For example, about 80% of the conversation is about digital elements of marketing today. Topics include: e- portfolios, working with the non-profit community (such as internships), innovation, global projects, Neuromarketing, data analytics, gamification.

Alliant is working toward more interdisciplinary content ideas, for example in Management and Psychology. Kelly states, “Problems in society don’t present themselves like marketing or management decisions.” Critical thinking in the classroom is missing and needs to be stressed more. New project developments foster creativity, innovation and technology. Linking CRM and Social media may become very important in the next few years for all retailers. She also underlined that the delivery and customization of courses need to be based on how students learn, so universities need to be always open to make changes and adaptations. Dr. Kelly mentioned newer universities, for example HULT-The world’s most international business school, with a good reputation and several global campuses, as well as the Minerva project, designed for the brightest, most motivated students. In addition to qualifications, teaching skills are very important for a successful and competitive marketing program, with good, well-designed and prepared lectures. Trans-disciplinary programs may also be considered to integrate other relevant areas in today’s complex landscape, like Health Management. Faculty needs to become facilitators for problem solving. According to Dr. Kelly,” students expect the school to have good business connections and offer real-life experience, like a teaching hospital”

In addition to the interviews, we reviewed and evaluated signature assignments, from our students the textbooks and learning platforms for Marketing at NU. All in the introductory marketing course develop and write a Marketing Plan which also acts as a Direct Assessment measure of Student Learning. Our Marketing Faculty constantly examine our textbooks to evaluate whether they are the most effective teaching tools. Case studies are used whenever possible, so students can apply what they learn. The University has currently switched to a new Learning Management System (LMS) Blackboard, which we anticipate will advance us to a new level of learning.

DATA AND METHODOLOGY

All students graduating from the SOBM Bachelor of Business Administration (BBA) program are required to take an external examination administered by a 3rd party organization, Peregrine Academic Services (<http://www.peregrineacademics.com>) in the Capstone course BUS 480, as a Direct Assessment measure. “Peregrine academic services provide nationally normed, summative assessment exams in Business Administration used for internal and external academic program evaluation and benchmarking. The online exam assesses retained student knowledge related to the degree program’s learning outcomes. The online exam service is designed to satisfy the AACSB, ACBSP, and IACBE accreditation requirements related to learning outcomes assessment, quality assurance, and external academic benchmarking. The Outbound Exam is administered to the students at the end of the academic program, is provided online, without an exam proctor, using a secure web service that includes safeguards to ensure exam integrity. It allows academic officials to benchmark student performance against specific aggregate pools and determine the value-added by the institution based upon the student’s academic experience. The exam contains 10 questions for each CPC topic and each exam is unique as questions are selected at random from the test bank of over 200-400 questions per topic. This document provides information on the following: The Topics and Sub-Topics are:

Accounting
 Business Ethics
 Business Finance
 Business Integration and Strategic Management
 Business Leadership
 Economics
 Macroeconomics
 Microeconomics
 Global Dimensions of Business
 Information Management Systems
 Legal Environment of Business
 Management
 Human Resource Management
 Operations Management
 Organizational Behavior
 Marketing
 Quantitative Techniques/Statistics”

The results can be found in Figure 1 below. 146 students took this exam between July 1, 2013-June 14, 2014. The focus is on the discipline of Marketing.

Figure 1: Outbound Exam Results

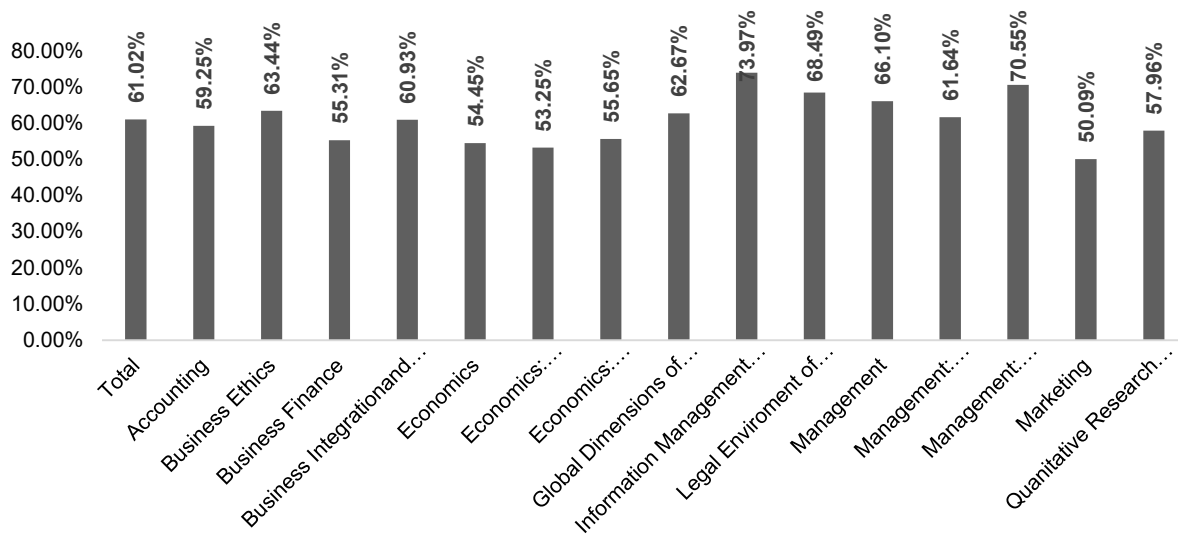


Figure 1 shows the results of the outbound exam for the different areas and classes taken in the BBA Program at National University, reported by the Peregrine Company, and this data is published with their explicit authorization. The vertical axis shows the percentage of what student's competency for the various disciplines learned in the program, in the horizontal axis. IMS was the highest with 73.9%, followed by Organizational Behavior with 70.5%. Marketing was the lowest of the disciplines for student's performance with only 50.9%.

Preliminary results were shared with the Program Lead for the BBA program who made the following comments, Altamirano (2014) "At National University, quantitative courses performed well" on these tests. Overall, NU performed as expected. National University will have additional data to share from results at the end of Feb 2015, and ongoing every few months. Out of all the courses the lowest scores were in Marketing, which is not a quantitative course." He continued "It may be that students perform poorly on questions pertaining to marketing because marketing courses are taken early in the program, so many

students may not remember the concepts a few years later. A refresher course could possibly help them to study for this exam

Table 1 shows the relative interpretation of student’s competency compared with the exam scores obtained. 80-100% is the highest and correspond to a very high student competency, and the table shows all the intervals down to 0-19% corresponding to “very low” competency. Please note that above average is 60-69%, which is much lower than one would consider as a course grade, in fact a failing classroom grade. Benchmarking helps to clarify the average scores. We noted that we were similar to other schools in our rankings, on the high side of the curve of this discipline. Figure 2 shows similar data than Figure 1, but also separates the online mode of delivery to students. It is interesting to note that student’s competency for the BA program taken online is lower for all disciplines, compared with the students who opted for the traditional campus based delivery format.

Table 1: Peregrine Academic Services learner comparison levels

CPC-Base Comp Exam Score (%)	Relative Interpretation of Student Competency
80-100	Very High
70-79	High
60-69	Above Average
40-59	Average
30-39	Below Average
20-29	Low
0-19	Very Low

Table 1 shows the relative interpretation of student’s competency compared with the exam scores obtained. 80-100% is the highest and correspond to a very high student competency.

Figure 2: Overview: Outbound Exam Results Compared to the Aggregate Pool for Traditional/Campus-Based Delivered Programs

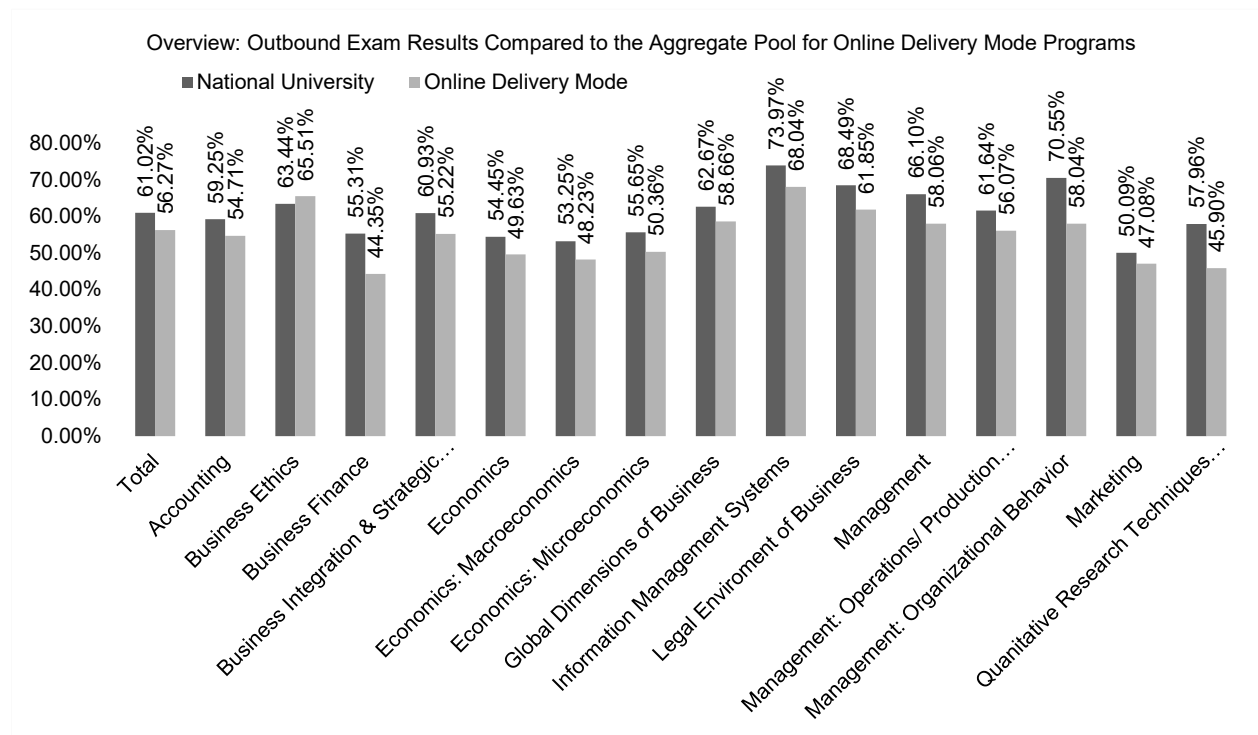


Figure 2 shows similar data to figure 1, However, Figure 2 separates the online mode of delivery to students.

In Figure 3 above shows the same parameters as figure 2 but it refers to online programs offered by National University, and the aggregate data for online delivery from all BBA programs offered online by all universities in this study. Based on these results and comparing National University versus the aggregate of online programs, In the Marketing discipline, National University has a slight advantage vs. other online delivered Marketing Programs (50.09 vs. 47.54). It is better than other universities, but still the lowest of all disciplines.

Figure 3: Overview: Outbound Exam Results Compared to the Aggregate Pool for Online Delivery Mode Programs

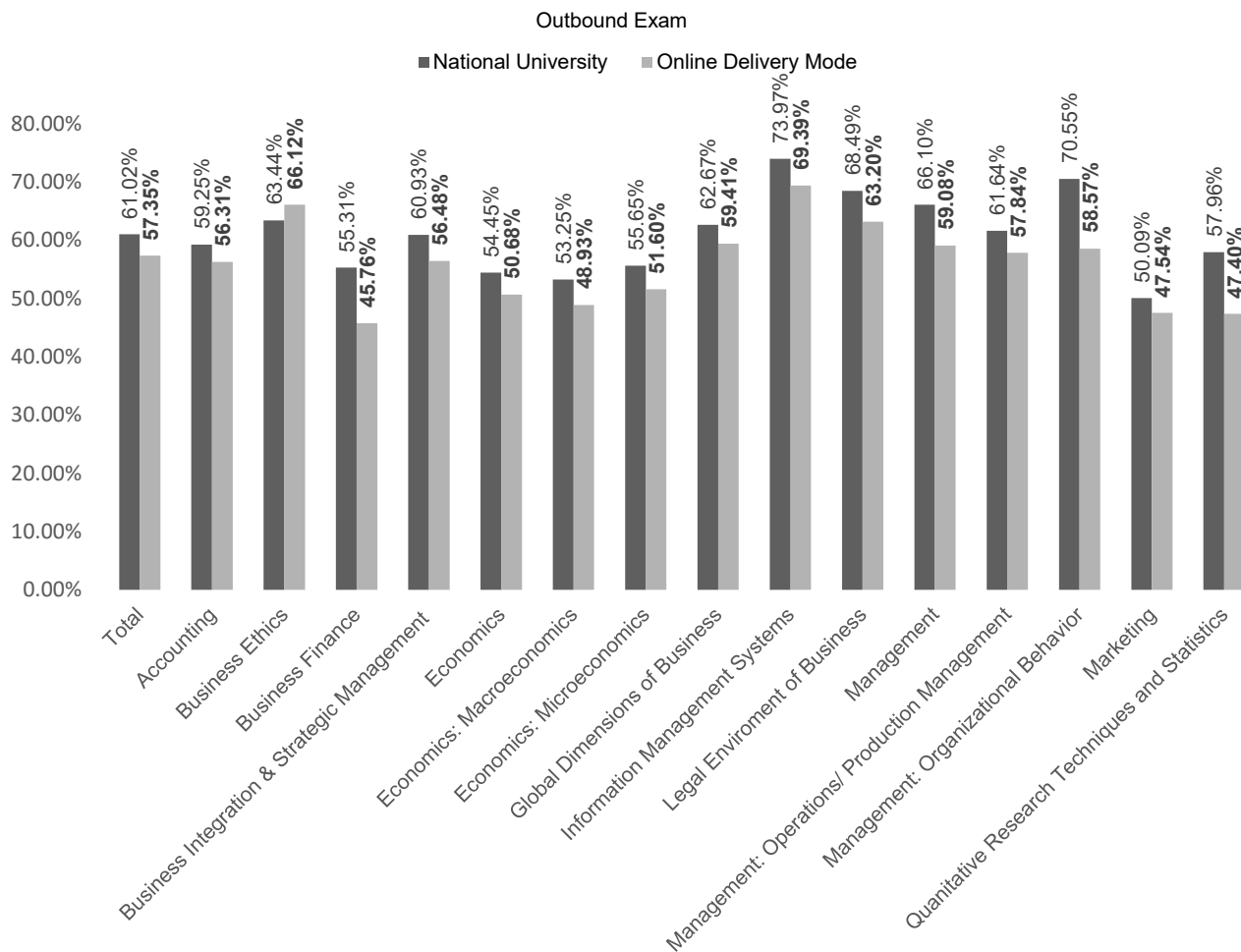


Figure 3 shows the same parameters as Figure 2 but refers to online programs offered by National University, and the aggregate data for online delivery from all BBA programs offered online by all universities in this study.

Figure 4 shows the results of the competency of National University students compared to other universities of the International Assembly of Collegiate Business Education (IACBE) in the same Bachelor of Business Administration program (BBA). The results show that NU has the same advantage from the previous figure compared to other participating universities offering marketing programs (50.09v 47.54).

In Figure 5, the Marketing subject matter is broken out by six categories and compares NU to other online programs. To arrive at this comparison, questions are pre-coded to the specific subject matter. For example, one question could be specific to Marketing Research, and that would be included in the first column. NU

has an advantage in the first four categories, Marketing research, Planning and Strategy, People, Place, Price. For Product and Promotion, NU scores are lower.

Figure 4: Overview Outbound Exam Results Compared to the Aggregate Pool for IACBE Region 8 (Western) Programs Online Delivery Mode

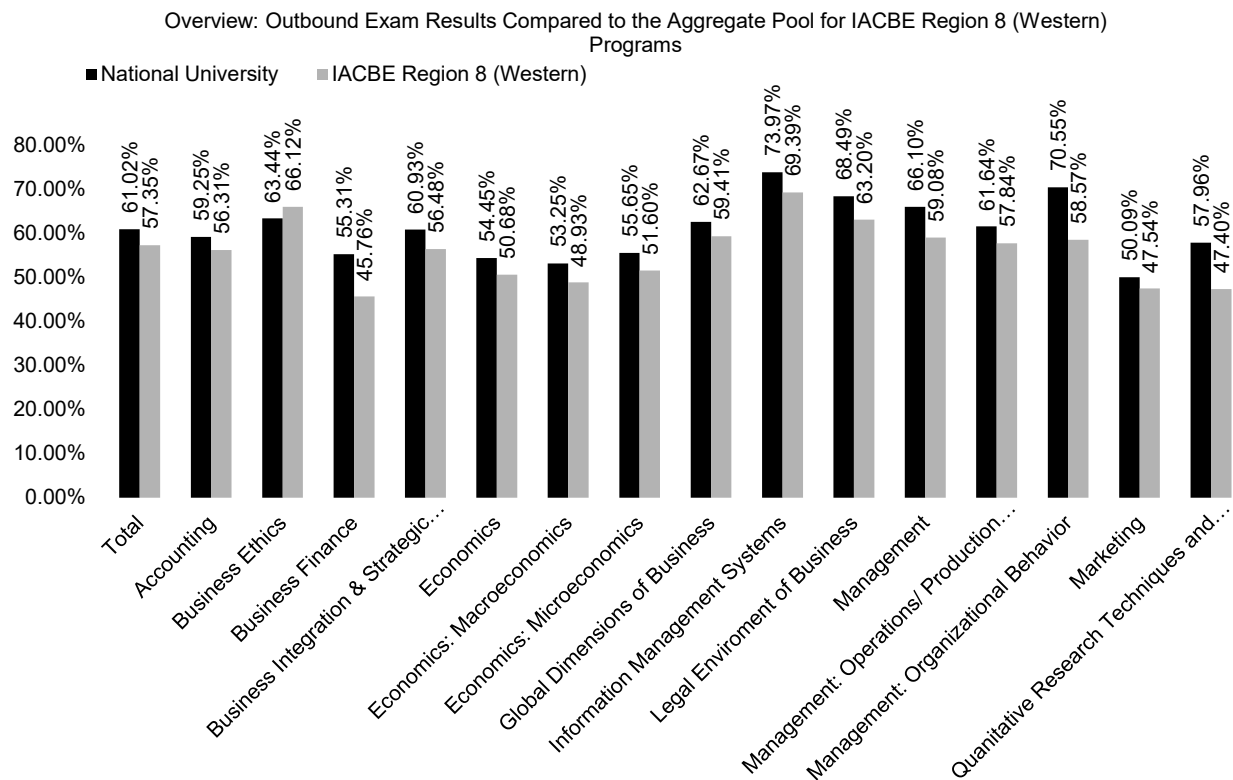
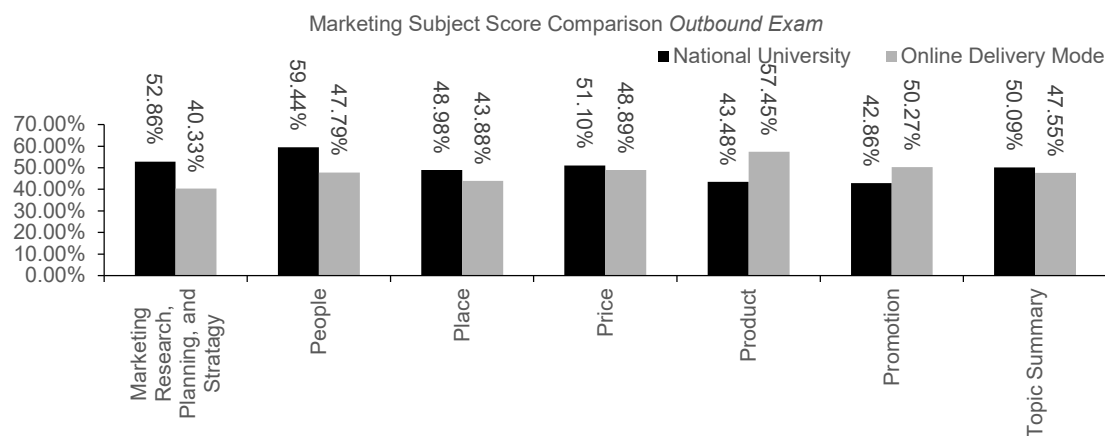


Figure 4 shows the results of the competency of National University students compared to other universities of the International Assembly of Collegiate Business Education (IACBE) in the same Bachelor of Business Administration program (BBA).

Figure 5: Marketing Subject Score Comparisons for National University vs. all Online Delivered Programs.



In Figure 5, the Marketing subject matter is broken out by six categories and compares NU to other online programs. To arrive at this comparison, questions are pre-coded to the specific subject matter.

In Table 2, the number of questions per topic and in summary is listed. This information has never before been available to help us fine tune our courses. Based upon the dataset of 1160 total questions, the frequency

correct was 50.09%. There were 280 questions on Marketing Research, Planning and Strategy. Price had 272 questions. People had only 143 questions, and the highest frequency correct, 59.44%. Our weakest area was in Product, where we scored low on the 207 questions, getting 43.48% correct. Overall, our score was higher than the average for the selected aggregate pool 50.09% to 47.55%. correct. This data shows us that our strongest topics on the outbound exam were in the areas mentioned above, Research, Planning and Strategy, plus People and also Price. This data drives us to consider whether we are teaching the best concepts. It is important to review the scores and over the course of two to three years, determine if we are trending in a direction that indicates students are improving their outcomes. Higher scores on Peregrine assessments are one measure of improvement.

Table 2: Frequency of Questions Offered on Outbound Exam

Marketing	Results for This Report's Dataset		Averages for the Selected Aggregate Pool		% Rank for This Report's Dataset	Required Scores for Identified Percentiles Based on the Selected Aggregate Pool			
	Number of Questions Offered	Frequency Correct	Number of Questions Offered	Frequency Correct		80th	85th	90th	95th
Marketing Research, Planning, and Strategy	280	52.86%	5,482	40.33%	*96	46.59%	47.49%	48.53%	50.00%
People	143	59.44%	1,678	47.79%	*89	56.58%	57.93%	59.08%	63.30%
Place	147	48.98%	1,169	43.88%	*69	51.50%	53.25%	54.29%	58.45%
Price	272	51.10%	6,643	48.89%	*64	54.52%	55.60%	57.59%	59.08%
Product	207	43.48%	3,328	57.45%	*3	63.53%	64.58%	66.00%	68.77%
Promotion	119	42.86%	563	50.27%	*22	56.67%	60.00%	60.00%	66.67%
Topic Summary	1168	50.09%	18,932	47.55%	71	50.25%	52.38%	53.55%	55.48%

In Table 2, the number of questions per topic and in summary is listed. Note that either the aggregate pool sample and/or school sample for this data set is relatively low for the Percentile Rank calculation

Figure 6 shows that the number of courses and students was relatively flat for four years, and then took a 31% increase in students in 2013. This reflects an increase of 24.4% growth in the number of courses offered. NU internal sources indicate that Marketing is the most popular concentration for students outside of the School of Business and Management. Why is it the most popular concentration for students who are not in the business school? That is a question we are looking at for the future. We will need to review this information in 2014 to see if this is a trend. More students enrolled is one measure of improvement. School

Table 3 shows a breakdown of the demographics of the National University student in marketing courses. We see a total of 3,844 students were enrolled in our marketing courses, and the largest percentage of them was aged 25-29 (28.9%). The second largest demographic was 30- 34 at 25.6%. Ten students were aged 61-65, and 6 were older than 65 years of age. As far as the ethnicity, the largest percentage was white, at 37.6% and next Hispanic at 17.0%. Close behind at 16.9% was Nonresident alien. Knowing the age and the gender of the students may not be significant towards improvement in what we teach. However, we want to be sure that we know who is our student, and this may provide assistance in how we reach our students best, and what behaviors they may exhibit. For example, students under the age of 20 are considered “native” to digital media, versus those over 60 may not be comfortable with some newer technologies.

Table 4 indicates that there were 8 locations where undergraduates took marketing courses at National University. Most of them were online, 57% and the remaining 43% were onsite. 26% of the total were onsite at San Diego, the top location. If we combine NCNTY, that number grows to 665 or 28%. If we combine those two locations, remove the online students, we find that 67% of the marketing students are taking classes onsite in San Diego. Most of the military locations are in San Diego, so that percentage would grow if we added them. Table 5 indicates which classes were most popular (i.e. and required) for students

in the business school at National University. The most enrolled course is MKT 302a, with 2045 students and the next most popular was MKT 420, Consumer Behavior. Larger enrollments are one measure of improvement of programs.

Figure 6: National University Marketing Course Enrollment 2009-2013

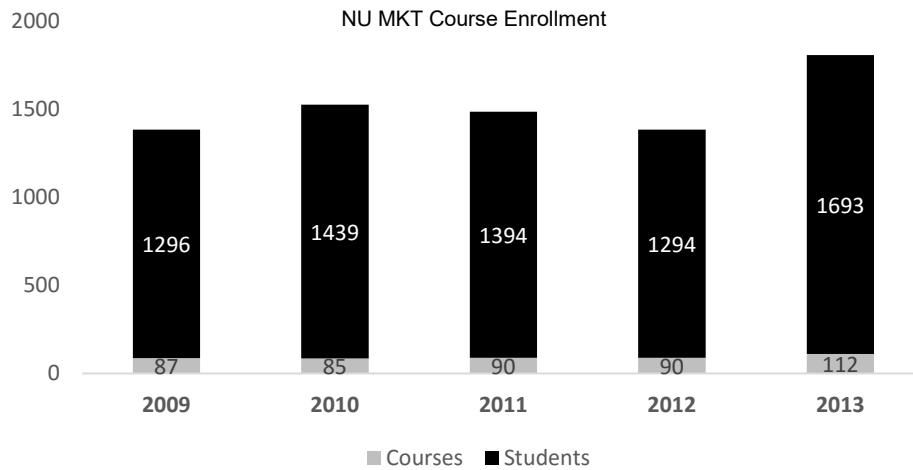


Figure 6 shows that the number of courses and students. Report of Assessment Run Date: 2014-08-20-11.17.15.000000 Run By: K JERRED Institutional Research, 2014.

Table 3: Marketing Students’ Demographics at National University

Ethnicity	N	%
American Indian/Alaskan Native	22	0.6%
Asian	346	9.0%
Black or African American	358	9.3%
Elected not to respond	186	4.8%
Hispanic	655	17.0%
Native Hawaiian/Pacific Island	59	1.5%
Nonresident Alien	649	16.9%
Two or more races	123	3.2%
White	1446	37.6%
Grand Total	3844	100.0%
Gender	N	%
Female	1802	46.9%
Male	2042	53.1%
Grand Total	3844	100.0%
Age Group	N	%
19-24	375	9.8%
25-29	1111	28.9%
30-34	985	25.6%
35-39	515	13.4%
40-44	342	8.9%
45-49	243	6.3%
50-54	175	4.6%
55-60	81	2.1%
61-65	10	0.3%
66-70	4	0.1%
75+	2	0.1%
Unknown	1	0.0%
Grand Total	3844	100.0%

Table 3 shows a breakdown of the demographics of the National University student in marketing courses.

Table 4: Number of Students Enrolled in Marketing Courses Between 2011 and 2014 at National University, Including Number of Students in Each Location for Undergraduate and Graduate Students

FY11-FY14 MKT Enrollment of Unique (Unduplicated) Student Count by Career and Course Location (Campus)					
Subject	Career	Campus	Student Enrollment Total		
MKT	GRAD	CMESA	9		
		INGWD	167		
		MILIT	97		
		NCNTY	31		
		OLINE	815		
		SDIEG	386		
		GRAD Total		1505	
		UGRD	BAKER	16	
	FRSNO		12		
	INGWD		58		
	MILIT		213		
	NCNTY		57		
	OLINE		1371		
	SDIEG		608		
	SOAKS		4		
	UGRD Total		2339		
	MKT Total		3844		

Table 4 indicates that there were 8 locations where undergraduates took marketing courses at National University. Most of them were online. School Report of Assessment Run Date: 2014-08-20-11.17.15.000000Run By: K JERRED Institutional Research, 2014

Table 5: Course Enrollment 2011-2014 of Unique (Unduplicated) Student Count by Specific MKT Catalog Number and Career

Subject	Catalog#	GRAD	UGRD	Student Enrollment Total
MKT	200		16	16
	302A	2	2043	2045
	420		43	43
	430		40	40
	434		22	22
	440A		16	16
	441		11	11
	442A		58	58
	443		42	42
	445		17	17
	446		13	13
	448		4	4
	480		1	1
	602	1430	13	1443
	620	32		32
	631	11		11
	634	20		20
651	4		4	
660	6		6	
MKT Total		1505	2339	3844

This Table 5 indicates which classes were most popular (i.e. and required) for students in the business school at National University. The most enrolled course is MKT 302a, with 2045 students and the next most popular was MKT 420, Consumer Behavior. Larger enrollments are one measure of improvement of programs. . School Report of Assessment Run Date: 2014-08-20-11.17.15.000000Run By: K JERRED Institutional Research, 2014.

Table 6 above indicates the student’s evaluation of their teaching assessment. Every one of these courses had scores that were higher than 4.0, and some were as high as 4.72/5. This assessment is only one indication of student satisfaction, but it sends a clear message that students feel they are being taught the material they believe they are learning. Every student is asked to complete the end of course anonymous survey, and they are made available to professors a few weeks after the class completes. The dean, chair and lead faculty also review these surveys, which are delivered monthly. Student comments also help push us toward better teaching overall.

Table 7 is a summary of the current SWOT analysis of NU Marketing programs and courses, based upon the interviews, data, and personal assessment by the authors. This is a current state of affairs. The strengths and opportunities are where NU can be confident are winning hearts and minds of students. However, the strategic perspective also considers that there are other factors to consider, and the weaknesses and threats are very important to evaluate.

Table 6: Average Student Evaluation of Teaching for Each of the Marketing Courses at National University, for Both Undergraduate and Graduate Courses from 2011 to 2014, Using a Likert Scale of 1 to 5, the Latter Being the Highest

FY11-14 Evaluated Teaching Assessment Data	
MKT302A	4.42
MKT420	4.60
MKT430	4.28
MKT434	4.24
MKT440A	4.46
MKT441	4.06
MKT442A	4.44
MKT443	4.33
MKT445	4.41
MKT446	4.37
MKT448	4.16
MKT480	4.36
MKT602	4.49
MKT620	4.34
MKT631	4.25
MKT634	4.12
MKT651	4.72

Table 6 above indicates the student’s evaluation of their teaching assessment. School Report of Assessment Run Date: 2014-08-20-11.17.15.000000 Run By: K JERRED Institutional Research, 2014

Table 7: SWOT Analysis of NU Marketing Programs

Strengths	Weaknesses
WASC & IACBE Accreditation	Low retention/engagement outside of class
Top 20 ranking of Integrated Marketing Programs	Product and Promotion are weak subject areas in outbound BBA exams (exhibit 7)
Practicing Marketers as Faculty	High attrition rates in some courses
National/Regional Memberships in Marketing	Not AACSB accredited (yet)
Rigor in academics	Not connected to the internship community
Nationally known for advancing working adults	No student mentorship program
Scores better than competition	Out of date textbooks
EXTERNAL	
Opportunities	Threats
Lack of marketing classes at community colleges	Rising cost of higher education
Flexible enrollment scheduling; open enrollment	Competition from new Bachelor’s degrees at Community Colleges in California
Private non-profit status	Financial aid restrictions

Table 7 is a summary of the current SWOT analysis of NU Marketing programs and courses, based upon the interviews, data, and personal assessment by the authors.

Table 8 consists of a list of actions and best practices to follow as a result of the goals of the study, the SWOT Analysis and interviews, in an effort to improve existing results in the marketing discipline at National University.

Table 8: Best Practices and Action Steps

Marketing career development	Grow student internship programs
Student business involvement	Add hands on projects to curriculum
	Review content and applicability annually
Grow enrollment	Hire best faculty/branding
Improve outbound scores	Offer refresher courses
Student Involvement growth	Create more student-run organizations
Use relevant textbooks/resources	Embed in course at reduced fees/lease
Case Studies	Students create/adapt cases

Table 8 consists of a list of actions and best practices to follow as a result of the goals of the study.

CONCLUDING COMMENTS

Our goal of this research was to give an objective snapshot of the Marketing Programs at National University and see how we could improve them. We learned that our student population is growing, mostly satisfied, and learning at above our peer institutions based upon outgoing third party data. There is a lot of competition for college students as demographics show fewer students entering college ages. NU is a non-traditional school, due to its approach towards working adults and more mature population. One of our important values in our mission is open access, which causes the acceptance of many students not fully prepared to start a rigorous academic program, and thus creating some issues and disadvantages versus other business schools. NU will need to adapt to future changes in the demographics of students. This study concentrated on secondary data that was available, including student satisfaction, enrollment and scores from standardized tests. We believe that by looking at student employment after graduation, salaries, employer satisfaction and other factors, we could further quantify and measure improvement. When we presented these initial findings at a poster session in September 2014 at our NU Annual Research Conference, our colleagues suggested we should also gather data from other courses in other disciplines, such as Management. We can explore these data in the future. We can also consider eliminating courses that students don't feel are as valued in today's changing discipline. The number one concern from interviews seemed to be helping students with job opportunities. One idea that resulted from this process was to have a portfolio for students to post their work, so future employers could see the output and quality of student work. More data needs to be collected from these outbound tests from Peregrine and other organizations to better understand student's perceptions in the field of Marketing. Employers need to be contacted to find out how successful our graduates are in their positions. Student satisfaction after receiving the degree could be gathered too. This study suggests that more research is required on these issues in order to determine the possible actions to improve our marketing programs and courses at National University.

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SOCIAL ENVIRONMENT AND DECISIONS, FACTORS IN ORGANIZATIONAL BEHAVIOR OF A BUSINESS SCHOOL IN MEXICO

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ABSTRACT

The study addresses some of the organizational climate taking into account only with two factors that makes it up: Social Environment and Decision Making. The objective of this research is to identify and document the relationship of these factors on the subjects of the Unidad Académica de Contaduría y Administración de la Universidad Autónoma de Zacatecas in Mexico. This is a follow-up study to the prior research that address the organizational behavior, yet taking into account other factors that constitute it. This study is important because it is known that the organizational behavior provides information to administrators about the conditions in which they may change the strategy of working group, so they should guide the actions leading to direct the course of the subjects towards the goals of the organization, so that this situation, allows for the continuous improvement of relations in an organization. The organizational behavior has been studied since the late sixties of last century, but now we integrate various factors that identify areas of opportunity for companies and institutions to achieve the full potential of which they are capable to do collective work. It is a study based mainly on qualitative analysis to perform descriptive statistics, correlation analysis and finalizes with factorial analysis. The results with which we conclude identify the best conditions of the factors in the measuring organizational work behavior; work with appropriate recommendations for each factor is concluded.

JEL: M140

KEYWORDS: Organizational Behavior, University, Social Environment, Decisions

INTRODUCTION

At the Unidad Académica de Contaduría y Administración (UACA) de la Universidad Autónoma de Zacatecas a study has been made of the organizational environment through various factors that allow approaching the perception of organizational members regarding this situation. It has redefined the study of the organizational climate considering new authors that write about these issues, the author of this work has added some conditions that expand the perception of this organizational condition. This work aims to seek some conditions of the social environment and decisions that arise in the organization, so that if it is desired they can improve those aspects which are appropriate to modify in any organization and particularly by the authorities of this object study.

When the organization is studied it is normally supposed that social relationships are generated among people and may occur automatically in conditions that are as favorable as possible. However, the reality is that these conditions vary from person to person and sometimes are not desirable, so social contacts may be regulated by the administration, generating an impact on our subject.

Persons living in the organization perceive its direction, taking into account the daily decisions taken from strategic positions to the actions given by members of the organization of the lowest positions. When

appropriate decisions are taken in the right direction the members may perceive that everything is fine, but when decisions are perceived not to be the best, or that are affecting the direction of the organization, members could create a non-desirable climate. This paper is organized in a way that leads us from the theory to the results, and a final discussion. Considering these situations we state the following research question: How do the integrands of the UACA perceive the social environment and decision making as part of the organizational climate? This question generates the following objective: To determine the perception of members of the UACA about the social environment and decision making as part of the organizational climate. This objective has the following hypothesis: The perception of members of the UACA about the social environment and decision making as part of the organizational climate is most favorable.

LITERATURE REVIEW

Although most of the research and public pressure concerning sustainability has been focused on the effects of business and organizational activity on the physical environment, companies and their management practices profoundly affect the human and social environment as well. Pfeffer considers some possible explanations for why social sustainability has received relatively short shrift in management writing, and outlines a research agenda for investigating the links between social sustainability and organizational effectiveness as well as the role of ideology in understanding the relative neglect of the human factor in sustainability research (Pfeffer 2010).

Becker, in his 2007 research, about the information age in which employees are workers of knowledge, and the amount of information expands exponentially, managing knowledge in all its forms has become a major organizational challenge: studied data, information, and knowledge. Data was defined as a set of discrete, objective facts about events. Information transforms data by adding meaning or value to give it relevant purpose. And information as data has been sorted, analyzed, and displayed, and is communicated through spoken language, graphic displays, or numeric tables. Knowledge draws on both data and information as a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework in evaluating and incorporating new experiences and information (Becker 2007).

Davis says that physical settings in offices have largely been ignored by managers and scholars; however, they may influence behavior in numerous ways. In his paper he pulls together relevant research and examines it in terms of the physical structure, physical stimuli, and symbolic artifacts that comprise office settings (Davis 1984).

There are ethnographic studies about the findings of research that examined the impact of workplace design features on newly acquired communication skills when reintegrated on the job. However, the qualitative nature of this study, limited quantitative measurement of the design features and learned skills. Kupritz studied supervisor perceptions about the relative importance of organizational factors affecting transfer, he measured relationships between learned skills and workplace design features, and prioritized the importance of the design features to support learned communication skills. Participants in this case study held nonacademic supervisory positions at a major land-grant university. The supervisors had attended a communication skills training workshop and had been applying their learned skills for about 6 months. The findings indicate that the workplace design appears to play a vital role in facilitating as well as impeding communication skills transferred in face-to-face interaction with employees (Kupritz 2011).

There were differences reported in health behaviors and socio/organizational environment by gender, race, age, income, and worksite size. For example, agreement with the statement of the company values was highest among Whites, older employees, and higher income workers. As worksite size increased, the reporting frequency of seeing coworkers doing several types of healthy behaviors (eating fruits and vegetables, doing physical activities, and doing them during breaks at work) increased. In adjusted

analyses, employees agree the company values in health were more likely to engage in higher physical activity levels and less likely to be obese. Seeing co-workers eating fruits and vegetables was associated with increased reporting of eating at least one vegetable per day and seeing co-workers being active was associated with higher physical activity levels. This research suggests that social/organizational characteristics of the workplace environment, particularly feeling that the company values of the workers' health and seeing co-workers engaging in healthy behaviors, may be related to nutrition and physical activities and obesity (Tabak et al 2015).

By studying what the research says about decisions we find theorists who addressed the issue from different angles. Uncertainty has been thought to challenge the cognitive capabilities of managers and thereby undermine their decision-making abilities. However, managers who experience uncertainty in that they are unsure of the adequacy of their own position may open-mindedly consult with their colleagues in the organization before they make the decision. A sample of 122 Chinese mainland managers described and rated a critical incident when they tried to make a decision. To the extent that managers initially felt uncertain about the solution they engaged in constructive controversy, i.e. the open-minded discussion for mutual benefit, which, in turn, led to effective decision-making. Cooperative goals further moderated the association of uncertainty with cooperative goals such that the positive association was stronger with less cooperative goals. These results underline the positive role of uncertainty in solving difficult problems, especially under competitive goals (Tjosvold, 2013).

Non-profit organizations and leaders may benefit from the utilization of behaviors attributed to emotional intelligence. The consideration of emotional intelligence skills becomes a strategy for the development of the non-profit organizational leader's ability to assess the impact and consequences of decisions, while simultaneously improving the quality and effectiveness of the decision-making process. Four essential elements of emotional intelligence and their associated 20 behavioral competencies were utilized to develop a methodology for the practical application of emotional intelligence skills to leadership decision-making within the non-profit organization (Hess and Bacigalupo 2013).

Studies of organizational communication around decision-making and decision communication have largely been a concern as to how decisions should be made and promoted. Fewer efforts have focused on how decisions should be communicated inside organizations and how they influence organizational effectiveness and performance. A study made by Mykkänen and Tampere examined decision communication in an engineer-based organization, 2008–2009, the result demonstrates that effective decision communication can be considered as the backbone of organizational communication, which can benefit the whole organization from top management to lower levels. Organizations need to make decision-making processes visible. From an organizational communication perspective this means holding decision meetings, certain rites and documents. Organizations as systems need a rational type of order to follow the decision-making process. The public relations or communication management workers role (specifically internal relations management) in organizations has traditionally been to communicate the goals and objectives of current decisions at hand (Mykkänen and Tampere, 2014).

Marques Miragaia and her team studied situations to identify and prioritize the stakeholders involved in making decisions in a sports organization. An analysis was used to assess the influence of the attributes of power, legitimacy and urgency on the salience of the various stakeholders. They showed a convergence of external and internal decision maker perceptions, concerning the three main stakeholder groups: top management, sponsors and member association. A generalized differentiation was also found in stakeholder classification, regarding evaluation of attributes, between external and internal decision makers. In addition, it's shown that the success of management organizations will depend on correct identification of stakeholders and consequent assessment of their relevance, in order to highlight who should get priority, and how, in strategic decision making (Marques Miragaia et al 2014).

Decision-making about innovative change in high-risk networks is exceptionally difficult because system failure may result in a catastrophe. Bierly and his colleagues adopt a historical method to compare the US and Soviet choices in their nuclear submarine attack programs between 1970 and 1996 came to surface their complex political, technological, and operational relations. One program achieved high reliability in the face of innovation while the other did not. Actor network theory helps illuminate the interactions and resulting innovation paths and dependencies. They study how open communication and power dispersion across high-risk networks influence system reliability, individuals spanning multiple groups within the network generate dominant coalitions, and strong safety advocates impact the network (Bierly et al, 2014).

DATA AND METHODOLOGY

The research presented is exploratory, therefore quantitative analysis is applied. A questionnaire was designed and implemented to obtain data that would meet the proposed objectives. We sought to determine a representative sample of all the subjects of the UACA to prove this hypothesis and to do it extensively to the entire population involved.

A correlation analysis of the variables that integrated the organizational climate called "factors" with the three most representatives of the general data used. Spearman correlation analysis was used because we have no parametric data; not all coefficients were written. The three main correlations of each variable are presented and indicate if there are any that are more related to the others. It indicates how a variable is correlated with the others. A high correlation will be used if there is significance at five percent and a very high correlation if the significance is one percent.

The formula used to calculate the sample is suggested by Berenson & Levine. For the type of study conducted, based on the value that others have done in similar work studies the level of confidence we assume is 95 percent and we are willing to commit an error of 5 percent. With this information the formula used is:

$$n = Z^2 p * q / (e^2) \tag{1}$$

Where: n= sample size; Z: desired confidence level 95% = 1.965; e: error, and p: represents success.

Being that there is a finite population we use a formula that allows us to reduce some surveys applied to the total sample. The elements of this formula are specified according to the following: n_0 is the result just obtained recently by considering an infinite population, N is the total population, and n is the total survey. Applying the correction factor for finite population:

$$n = Nn_0 / (N + n_0 - 1) \tag{2}$$

The collected data was obtained directly, through the application of a survey of 372 subjects of the UACA through a questionnaire of 24 multiple-choice questions and using the Likert scale. The questionnaire was administered in June 2013 in a way that corresponds to the different segments that can be grouped in a stratified sample.

RESULTS AND DISCUSSION

Analyzing the results of the social environment factor we realize that the variables with greater results have to do with the questions listed below. The question that the level of support between colleagues frequently has as much help or more with 39%, this situation is repeated across sectors, programs and gender, varying only the percentages in each questioned case. In Table 1 we observe the questions

administered in the survey that relate to the factor “social Environment” and its corresponding frequencies as to the possible options in a Likert scale. We find the major frequencies in the right column of the table that correspond to the most favorable situations of the factor and that contribute to a better Organizational Climate. We emphasize that the highest frequency is the question “Fellowship factor influencing daily activities” with a 45% under the “More” option. The lowest response with major frequency is in the question “Are known media available to the UACA” with 25%. This indicates that the responses are dispersed within the various options.

Table 1: Frequencies in Social Environment Factor

Variable	None	Some	Median	Sufficient	More
The level of peer support is	6%	6%	17%	32%	39%
The level of peer support response is	3%	6%	19%	27%	44%
Fellowship factor influencing daily activities	5%	6%	15%	29%	45%
I let others take responsibility and initiative to solve problems	24%	18%	27%	21%	11%
Before addressing the points on which there is disagreement those in agreement are highlighted	8%	9%	35%	33%	16%
Seeking solutions are convenient for the parties	5%	8%	24%	32%	31%
Provision shall be made to avoid unnecessary friction.	6%	8%	34%	28%	23%
Conflict situations that are unpleasant are avoided.	5%	11%	24%	31%	30%
Known media is available to the UACA	14%	17%	25%	24%	19%
Information usually flows by institutional means	13%	14%	32%	25%	16%
Organizational matters are solved by group work	11%	14%	29%	26%	21%
It is comfortable working as a team	5%	4%	19%	31%	41%
Decisions taken in which all agree	4%	6%	16%	31%	43%

Table 1. We observe that the questions administered in the survey correspond to the “Social Environment” factor, emphasizing that the highest frequencies are in the column to the right of the table with the most favorable results for the organizational climate. In analyzing the results obtained with respect to decision factor we find that the results are as follows.

In analyzing the results obtained with respect to decision factor we find that the results are as follows. Table 2 represents the results obtained from the applied questionnaire corresponding to the factor, “making decisions.” The questions that conform to the factor are to the left and the percentages obtained for each option are to the right. The highest frequency is held by the question, “Making favorable decisions -effect on the Institution” with a 38% under the “Sufficient” option and the lowest majority of the frequencies are in the question “Decisions are evaluated periodically” with a 27% under the option “Sufficient”, signifying the great dispersion of results for this response.

Table 2: Frequencies in Decisions Factor

Variable	None	Some	Median	Sufficient	More
The decision aims to meet organizational goals	5%	5%	22%	35%	34%
Making favorable decisions effect on the institution	3%	6%	21%	38%	32%
The decisions made in the UACA, benefit the community	3%	7%	28%	35%	27%
UACA takes into account your opinions and suggestions	9%	15%	30%	27%	20%
We meet to participate in making UACA decisions	6%	8%	24%	28%	34%
The results of team decisions matter to you	3%	6%	28%	34%	29%
The personal decision-making was successful	3%	7%	22%	35%	33%
In UACA the decisions are	7%	9%	24%	30%	31%
Decisions are made collectively	8%	9%	26%	32%	24%
Decisions are evaluated periodically	9%	13%	25%	27%	26%

Table 2. we can observe that the questions generated by the factor, “Making decisions”, emphasizes that the highest frequency is the question that relates to the decisions that are taken in the school and its affects within it. Although, it is not in the major option, this demonstrates cohesion to the image of the UACA.

Correlations between the variables were as follows: with respect to the factor called social environment all variables have correlations with a significant higher level than 99% to each other. The same situation applies to the decision factor.

In the first factor we find variables “Having the right means” and “the institutional means” have the highest correlation between them, 0.734, variables “Avoid conflicts” and “avoid friction” have the value of 0.725, “aid” and “response to help” variables correlate to 0.678.

With respect to the variables that make up the decision factor the highest correlations in variables are in “decision making is evaluated”, and “this is done on a regular basis” with 0.740, the following highest correlation degree generate variables measuring “compliance with the targets” and “favorable decisions” with 0.677 and the third highest correlation variables “benefits” and “school improvement” with 0.629

CONCLUDING COMMENTS

In general, we see that the first factor is mostly favorable responses that support the organizational climate. Similarly, the data found in the second factor Decision making most of the data are favorable organizational climate for most. Most favorable response data for the social environment is perceived fellowship members. The answer less favorable of any variable is the flow of information that is not by favorable channels. In the decision-making factor variable with the most favorable data is the fulfillment of institutional goals. In this variable factor with less favorable data is the fact that decisions are taken collectively. All variables have correlations with significance under 1%, except the variable responsibility that is left to others for decision-making. We can mention that we do not have statistical evidence to reject the hypothesis that the social environment and decision-making factors positively contribute to an organizational climate.

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