Meeting the Challenge of Assurance of Learning:
Perspectives from Four Business Schools

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Six professors from four different universities discuss the strategies their business schools are currently using to capture and utilize assurance of learning data. The schools represent public and private as well as not-for-profit and for-profit and uniformly document the rigor and deliberateness with which assessment of learning is now being conducted. General recommendations are extrapolated to help other business schools who might be at an earlier stage of developing their assurance of learning protocols.

INTRODUCTION

Assessment can be seen as the process of establishing and/or understanding the learning outcomes that meet the learners' needs, assessing students to determine whether or not they have achieved the learning outcomes through factual evidence, documenting those results, with the purpose of continually improving the process of teaching, learning and learner assessment.

It is a well-documented challenge that accrediting bodies such as AACSB and the regional accrediting organizations have been increasing their requirements to document assessment of learning. Conferences, research, and workshops continue to be dedicated to this subject. Given the currency of this subject, it seems a good time to look at what four business schools in various parts of the country (South

and central Florida, Michigan and Minnesota) are doing to ensure that students are achieving their learning goals and that this achievement can be documented and used for quality improvement purposes.

The authors, all senior business faculty members, describe through personal experience the approaches their schools are using in designing and implementing their assurance of learning programs. Their schools represent graduate and undergraduate business education at both public and private universities in the not-for-profit as well as for-profit segments of higher education. After sharing specifics of their respective schools' assurance of learning (AOL) efforts, the authors propose recommendations for business schools that may be at an earlier point of AOL planning and development. We begin by taking a closer look at what constitutes assurance of learning.

WHAT IS ASSURANCE OF LEARNING?

According to The Association to Advance Collegiate Schools of Business (AACSB), Assurance of Learning (AOL) "includes the interpretation and intent of the business assurance of learning standards." (http://www.aacsb.edu/accreditation/business/standards/aol, para. 1) AOL programs help institutions answer the questions: "Do students achieve learning appropriate to the programs in which they participate? Do they have the knowledge and skills appropriate to their earned degrees?" (http://www.aacsb.edu/accreditation/business/standards/aol/defining_aol.asp, para. 8) Palomba and Banta (1999) more specifically define outcomes assessment as a systematic process of collecting, reviewing and using program information in order to improve student outcomes.

AACSB first suggested a focus on outcomes assessment in 1991. At that time, the outcomes assessment movement was immature and a number of indirect assessments, including outside evaluations such as employer reports and alumni surveys, were considered appropriate. By 2003, however, the importance of outcomes assessments and the maturity of assessment processes had developed so that direct, specific measurement systems within an institution were necessary. AACSB now requires direct assessment, as do most robust AOL programs, in order to determine specific learning goals and collect relevant assessments of learning. Such systems allow institutions also to improve curriculum by providing fact-based information about how well students are learning or are not learning (AACSB, 2007).

AOL has become increasingly important to institutions since it became the third category of accreditation standards required for business accreditation by the AACSB. AOL now shares equal importance with Strategic Management standards and Participant standards as a three pronged mechanism to determine the accreditation-worthiness of institutions providing business programs. The AOL standards rest on two principles: accountability and continuous improvement. Through the AOL process, both principles can be and should be operationalized.

Trends in AOL today include an emphasis on how to assess functional areas of curricula, that is, examining what should be required in different disciplines. Different areas of study, such as economics or human resource management, are suggesting measures appropriate for their disciplines. Also, efforts to refine the measurements used within AOL programs are gaining momentum. A typical AOL process should include (AACSB *Eligibility*, 2012):
1. A listing of student learning goals and objectives
2. Aligning the goals with the curricula
3. Establishing measures and means for assessing learning
4. Collecting, analyzing and distribution of the information
5. Using the information in a program of continuous improvement.

AACSB endorses three different approaches to AOL. Assessment can be based on student selection (called selection assurance), course embedded measurements (tied to the program's learning goals), or stand-alone testing or performance (AACSB, *Eligibility,* 2012). No one system is mandated but assuring learning is mandatory. Most often, assurance of learning is a broad-based, systematic effort which requires the school to look at overall program outcomes and how various courses relate to and measure

those outcomes. Therefore, we can talk about AOL initiatives at the macro (program level) or micro (course level). We start by looking at how Baker College Online approaches the design of overall program wide AOL.

DESIGNING PROGRAM WIDE ASSURANCE OF LEARNING

Baker College Online offers more than 40 certificate, associate, bachelors, masters, and doctoral programs in business, health, human services, and computers and is part of Baker College, the largest private college in Michigan with more than 40,000 students worldwide. Accredited by the North Central Association of Colleges and Schools, Baker College Online was selected in 2013 as a Military-Friendly College by Military Advanced Education.

One of the authors serves as President of Baker College Online and advises that proper assessment begins at the program development level to ensure program learning outcomes are tied to desired graduate achievement as well as the institutional mission and purposes. Educational institutions must be committed to assessment and evaluation at all levels in the organization. They must be able to answer the following two questions regarding graduates: What are our students able to do when they graduate? How do we know that they are able to do what we say they can do?

Program design is critical in developing an assessment plan. There are four stages of program level design to assure learning outcome achievement at the program level, across all program delivery methods. The stages (see Figure 1) include: Pre-design work, identification of desired results, determination of acceptable evidence, and planning learning experiences.

Pre-Design Work

Program level design at Baker College is aligned with the Mission, Purposes, and Institutional Student Learning Outcomes through the Understanding by Design (UbD) framework (Wiggins & McTighe, 2005). The program design process at Baker College begins with the collection of current and pertinent data regarding the program, whether new or existing. Information included consists of items such as career data, data to support the need for the program, linkage to mission and purposes, intended audience for the program, and the level of the program (certificate, associate, bachelor, masters, or doctorate). The goal of this phase of development is to determine the overall goal of the program. A committee of faculty, deans, instructional designers, career services advisors, advisory board members, professionals from the field, and assessment experts meet to define the goal of the program. The committee meets to brainstorm a giant list of topics to include in the program. Committee members are asked to think out of the box to create their "dream program." Notes from the meetings in this stage are kept to be used in later phases of program development.

Identification of Desired Results

The next phase of program development defines the key learning outcome requirements necessary for developing an appropriate knowledge base regarding the subject area being studied. Baker College uses Understanding by Design (UbD) principles in the development of programs and courses (Wiggins & McTighe, 2005). The process begins by asking committee members to complete the Baker College UbD Design Template. The template contains a list of questions to lead the committee to define the goals and "Big Ideas" of the program. Wiggins and McTighe (2005) define "Big Ideas" as; "Broad and abstract, represented by one or two words, universal in application, timeless – carry through the ages, and represented by different examples that share common attributes" (p. 69). Specifically, committee members are asked to answer the following questions:

FIGURE 1
PROGRAM LEVEL DESIGN PROCESS
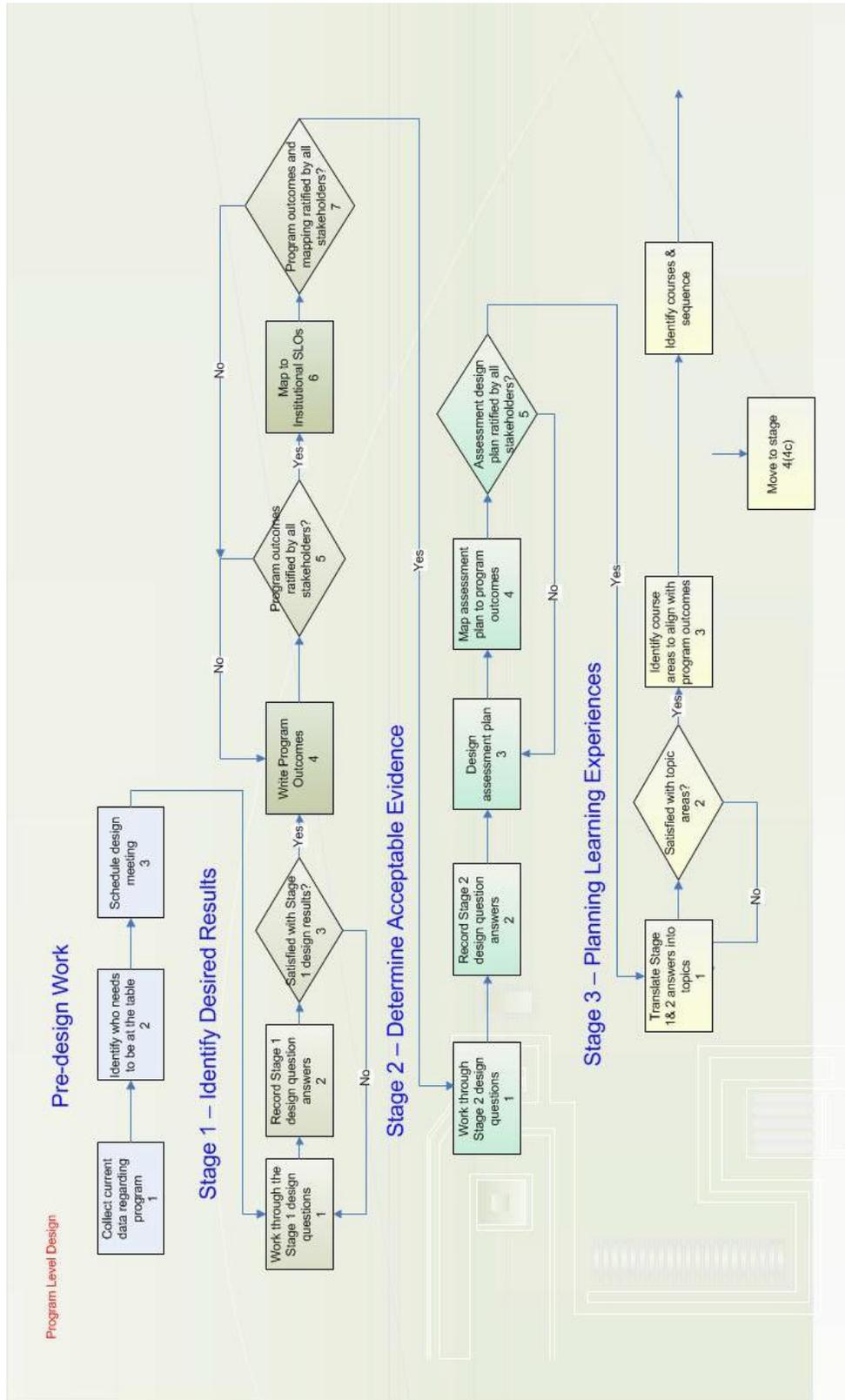
1. What key knowledge and skills will students acquire in the program? What should students know?
2. What will students be able to do at the end of the program?

Information from the answers to these two questions are used to write program outcomes. Once the committee has agreed to all responses on the template, instructional designers work on converting the information into a rough draft of the program learning outcomes. The program outcomes must align with the Baker College Mission, Purposes, and Institutional Student Learning Outcomes. The program learning outcomes draft is reviewed by the committee. Adjustments are made as appropriate and then finalized by the committee.

Determination of Acceptable Evidence

The next stage of the program development process is key to the assessment strategy. This phase is critical because it defines how learning outcome achievement will be measured at the program level. This process answers the question, "How are you going to know that students are successful at achieving the program outcomes?" Assessment experts are highly involved in this phase of development to define a capstone assessment. Answers to the above question include items such as: Ability for students to find a job related to the program, ability to be promoted at their current job, or the ability to move into the career or to a graduate level program. The assessment plan developed at the program level provides general ideas of assessment types that will provide evidence of successful completion of the program. The tools are designed and developed later based on the information gathered in this phase. Assessments include longitudinal assessments for transfer and assessments that measure student success at the end of the program. Assessments are formative at strategic points during the program to assess student learning and progress toward program outcomes. Once the plan is approved by the program development committee, instructional designers map the assessments to each of the program outcomes. The final assessment design plan is then approved by the committee.

Planning Learning Experiences

The last stage in the program development process defines topic areas that need to be addressed in the program. The information gathered leads to the identification of courses, course student learning outcomes and enabling objectives. This stage is a bit messy at first as the committee works to categorize the Big Ideas listed in the first stage of the process. Topics are grouped together into a rough outline and eventually worked into a sequence of courses. The committee identifies new and existing courses to be used and sequences the courses in the order they will be taken in the program. This includes the identification of prerequisite courses. The program plan is then reviewed and approved by the development committee. Once approved, individual courses are scheduled for development.

As with our program development, the course development process also uses Understanding by Design (UbD). In addition, Quality Matters is used as a core standard for course development. "Quality Matters (QM) is a faculty-centered, peer review process that is designed to certify the quality of online and blended courses. QM is a leader in quality assurance for online education and has received national recognition for its peer-based approach and continuous improvement in online education and learning (Quality Matters, 2013, para. 2)"

Once courses are designed, approved, and launched, data must be collected, analyzed and used in a consistent way to assure continuous improvement.

Collecting and Using AOL Data

Baker College recognizes that the use of effective assessment in evaluating and improving teaching and learning is critical. "In fully online environments, multiple measures, formative and summative assessments over the course timeline, and electronic interaction with the learner are sound assessment practices" (Milam, Voorhees, & Bedard-Voorhees, 2004, p. 77). As such, Baker College Online employs a variety of assessments which include: Standardized finals and research projects, standardized grading

rubrics, course and program portfolios, student and faculty interaction/written communication, pre- and post-tests, certification exams, and employer surveys (90 days after student placement). "A major advantage of e-learning environments is that assessment activities can be embedded unobtrusively into the interactive structure of the program themselves" (Reeves, 2002, 26-27). Many of the standardized assessment tools at Baker College are also used as student evaluation to determine student grades.

Additional assessment activities may include course and program content reviews, learning outcome assessment for courses and programs, textbook evaluation, satisfaction surveys for both courses and services, and course and program reviews conducted by both faculty and students. Retention statistics, successful completion statistics, graduation rates, and career placement rates are also evaluated to determine the effectiveness of the College's academic programs.

Waypoint Outcomes (http://waypointoutcomes.com) is one data collection tool the College uses to improve the quality of feedback to students on assessment activities as well as improving the quality of data analysis used by faculty and administration. Waypoint Outcomes can be used to create rubrics and surveys that provide documentation on student learning. (http://www.waypointoutcomes.com). Significant improvements in the quality of assessment reports have been achieved through this system.

The data is summarized and given to faculty committees for their review. Assessment reports are also shared with the program development committee to analyze to determine whether changes are necessary to the program. The various faculty committees use the assessment reports to evaluate programs and courses. All curriculum change requests require documentation derived directly from assessment data and reports.

Continuing our focus on individual courses, we next look at how one school has designed an AOL strategy to assess every course on a continuing basis.

COURSE LEVEL ASSURANCE OF LEARNING

The Wayne Huizenga School of Business & Entrepreneurship at Nova Southeastern University in Fort Lauderdale, FL serves more than 6600 students in undergraduate, masters and doctoral programs. At the undergraduate and master's levels, a given course can be offered in four different formats: weekend, day, evening, and online (Gibson, 2011). Further, weekend courses are offered at distant locations including five different service centers in the State of Florida plus international locations. Individual undergraduate courses are taught almost exclusively by single instructors whereas master's courses, until recently, were often taught in the Lead Professor Model. In the case of individually taught courses, there was an appointed "Key Faculty" which has recently been replaced by a Course Academic Leader (CAL).

All undergraduate courses are assigned to individual instructors in a traditional model. These instructors include full-time faculty and adjuncts who serve on a course-by-course basis. In each case, a Course Academic Leader has been appointed to coordinate the gathering of Assurance of Learning (AOL) data.

Until the summer of 2012, Masters courses were either taught individually with the use of a Key Faculty member OR as a team-taught Lead Professor course where the Lead Professor (LP) had been commissioned to establish a fully standardized course which is taught by a team of Instructional Specialists. The LP interacted with the students, provided lesson plans for the Instructional Specialist team and was responsible for a complementary video package and fully standardized deliverables and assessments complete with grading rubrics, the latter which were designed to provide consistency in grading (Donathan & Tynann, 2010). The use of rubrics has been well established including a survey of AACSB deans, 92% of whom said that using rubrics to grade written assignments was a part of their assessment protocol (Kelly, Tong & Chois, 2010). At present, the format for masters' classes has transitioned back to a less standardized course delivery system using mostly single instructors while maintaining the standardized measurement of course competencies. Each course is assigned a Course Academic Leader whose responsibilities include coordination of AOL activities. It should be noted that the standardized Lead Professor format was very instrumental in creating the standardized measures, including rubrics, which are still used in course-level AOL today.

Regardless of whether courses are individually or team taught, traditionally formatted or standardized, the assessment of learning (AOL) in the Huizenga School takes place at the course level on an every section, every term basis.

Course Level Assessment

As with most schools, the various programs at the Huizenga School have clearly established Program Goals such as "Examine the importance of leading and influencing others, maintaining collaborative business relationships, exercising appropriate interpersonal skills, and performing effectively individually and in high-performance teams." These Program Goals are then mapped to individual Course Competencies.

A three-step AOL process is used to assure that assessment of learning is carried on in a comprehensive, continuous fashion. (1) Utilize standard measures of course competencies, using rubrics when appropriate, (2) Collect data across class sections each term, and (3) Analyze and document results with an eye toward continuous improvement.

In Step One, common measures of course competencies are applied in each and every section of the course. These common measures are designed by the Course Academic Leader with help and agreement from other full time faculty who may regularly teach a particular course. The department chair gives the stamp-of-approval at the end of this process and the AOL Director or Assistant Director assures that the course competencies, as developed, successfully map back to the overall Program Goals. Once finalized, these measures are then required to be used by all faculty teaching the course. Beyond these measurement constraints, the individual faculty member has academic freedom to conduct the class however he or she desires

Step Two occurs at the end of the course. The Course Academic Leader is responsible to collect from individual professors teaching the course the data related to the measurement of the course competencies. It is then the responsibility of the Course Academic Leader to consolidate these statistics and share the results with the team of instructors in preparation for holding an end-of-term meeting. Figure 2 shows an example of a consolidated report for one class with a total of four sections for a specific term. The far right column shows the average achievement score across the four sections.

FIGURE 2
AOL TERM SUMMARY CHART
(AOL MEASURES FOR A TERM FOR ONE COURSE, 4 SECTIONS)

CC#	Measure	5W1	5W2	1EE	1DY	AVE
CC#1 Measure One	Final, Q 1-4	.73	.73	.88	.82	.79
CC#1 Measure Two	Ref. Pap. 1, Q1 OR Wk. 1 DQ	.69	.86	.84	.87	.82
CC#2 Measure One	Midterm, Q 1-4	.83	.77	.79	.75	.79
CC#2 Measure Two	Ref. Pap. 1, Q 2 OR Wk. 2 DQ	.85	.89	.87	.87	.87
CC#3: Measure One	Midterm, Q 5-8	.68	.72	.70	.79	.72
CC#3: Measure Two	Ref. Pap. 2, Q 2 OR Wk. 5 DQ	.73	.90	.69	.83	.78
CC#4: Measure One	Midterm, Q 9-12	.73	.68	.80	.62	.71
CC#4: Measure Two	Ref. Pap. 2, Q 3 OR Wk. 8 DQ	.98	.86	.73	.75	.83
CC#5: Measure One	Midterm, Q 13-15	.71	.71	.91	.75	.77
CC#5: Measure Two	Ref. Pap. 1, Q 3 OR Wk.4 DQ	.96	.89	.83	.87	.89
CC#6: Measure One	Final, Q 5-6	.89	.90	.83	.82	.86
CC#6: Measure Two	Assignment 1	.98	.90	.87	.89	.88
CC#7: Measure One	Assignment 2	.84	.85	.82	.84	.84
CC#8: Measure One	Final, Q 7-10	.84	.70	.82	.71	.77
CC#8: Measure Two	Ref. Pap. 2, Q 1 OR Wk. 7 DQ	.93	.90	.79	.89	.88

Step three requires that the data gathered from individual course sections is analyzed by the faculty who taught the course with an eye toward identifying best practices and assuring continuous quality improvement. These end-of term meetings are held every term for every course and hosted by the Course Academic Leader who then finalizes this process by preparing a standardized End-of-Term Report which is then filed on the Assurance of Learning website.
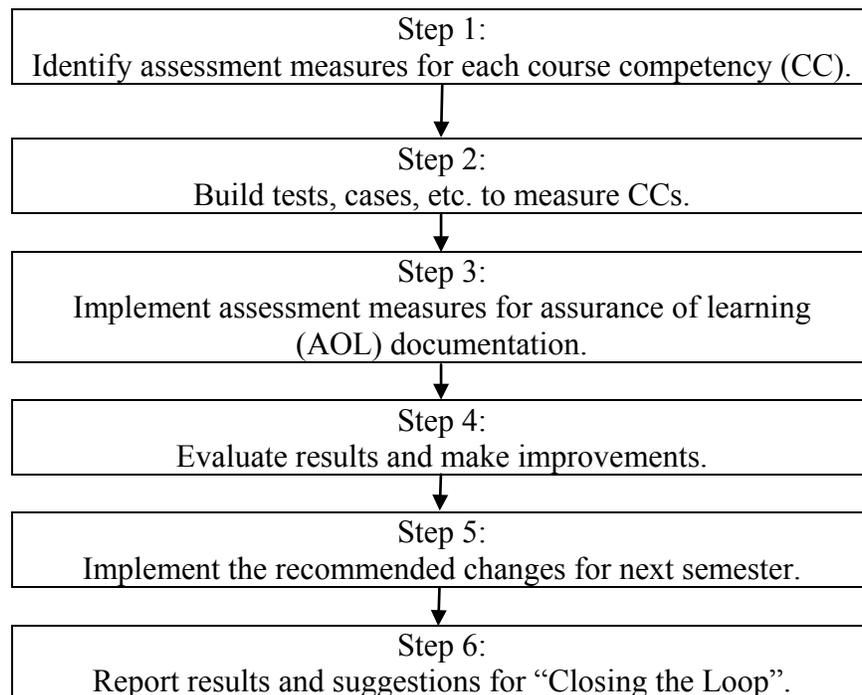
It should be noted that the comprehensiveness of this "every section, every course, every term" system of assessment of learning assures that all faculty, whether full-time or adjunct, are participating in the assurance of learning process. The benefits of this shared responsibility for AOL are more frequently achieved from the end-of-term meetings designed to close the loop.

CLOSING THE LOOP THROUGH A TEAM APPROACH

It takes a group of dedicated team members to effectively, efficiently and continuously assess learning outcomes and make improvements, thereby starting the assessment process, analyzing the data as well as the results, and ending the process through actual improvements.

Figure 3 presents an overview of the Closing the Loop model practiced at NSU's business school where the majority of courses include six to eight major course competencies which are assessed using one or two different assessment methods each. For example, a specific competency might be tested using an individual exercise or quiz as well as through the midterm exam or a case analysis to determine the extent to which students actually achieved the specific outcome.

FIGURE 3
CLOSING THE LOOP MODEL AT THE HUIZENGA SCHOOL

Step 1:
Identify assessment measures for each course competency (CC).

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Step 2:
Build tests, cases, etc. to measure CCs.

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Step 3:
Implement assessment measures for assurance of learning
(AOL) documentation.

↓

Step 4:
Evaluate results and make improvements.

↓

Step 5:
Implement the recommended changes for next semester.

↓

Step 6:
Report results and suggestions for "Closing the Loop".

The individual student and each section's results are aggregated to determine student achievement of program goals. (See Figure 2) Therefore, the focus is on what students will take with them as they complete the course. The faculty is required to ensure that the measures they develop and implement are

"portable" which means that anyone teaching the course in any available modality should be able to use these measures with the same validity and reliability.

Within one to two weeks of ending the term, the teaching faculty members all meet face-to-face, through conference calls or synchronized discussions, and/or regular email communication to discuss the results as well as lectures and presentations that worked well and those that need to be reevaluated, and to make changes based on their experiences and factual data. These meetings provide opportunities to the teaching faculty team to present their experiences and hear best practices from other colleagues. Together they review AOL measures and recommend changes if needed.

The team approach to closing the loop not only has led to consistency of outcomes achievement between various faculty members teaching the course in various modalities across campuses, but it has also resulted in better communication and full engagement of all adjunct faculty members in improving the course and overall curriculum. The team approach has been especially effective in online or blended classes where online classrooms facilitate sharing of video, lectures, podcasts, cases, online links and resources, etc. In general, online classes seem to be particularly conducive to collecting online data.

STATE SCHOOLS, ONLINE COURSES, AND AOL

The motivation to engage in academic assurance initiatives is evident for progressive private institutions in that their reputations are contingent upon the quality of graduates' performance in professional roles. This has not always been an emphasis for publicly funded universities. These institutions were historically protected by state Boards of Regents (BOR) and operated with mentalities of immunity from third party scrutiny. However, this scenario began changing in the 80s and 90s in the states of Texas and Florida (Ashworth, 1994) where one of the authors is a professor for a business school program in hospitality management.

The Florida state BOR was disbanded by the legislature at the end of June of 2001 to be replaced by a new, politically-appointed, Board of Governors (BOG). In 2002, the newly established state BOG announced the intention to require comprehensive standardized testing for all state school baccalaureate students. The articulated model was similar to the Florida Comprehensive Aptitude Test (FCAT) exams required of public secondary school students for grade advancement and graduation. The collective group of college presidents proposed centralized academic learning assessment initiatives for every undergraduate degree program as a strategy to avert the imposition of the testing mandate. The BOG agreed to require Academic Learning Compacts (ALCs) for each undergraduate degree program. The end result was the requirement for each program to file annual academic learning plans and to report prior year results to a centralized University Assessment Committee (UAC) for review and approval. The ALC standard requires each program to report a minimum of 8 learning outcomes with at least two measures per outcome. Outcomes and measures for critical thinking and communication must be included in addition to discipline specific areas within each ALC set.

The UAC is comprised of faculty members who are professionally trained specialists in the field of academic assessment/testing. Graduate degree programs are also required to submit to this process in anticipation of future state board requirements. The assessment process continues to evolve and will eventually require reporting compliance for each individual course contained within a degree program. Hence, a sense of urgency will soon exist to train all faculty members to report learning outcomes/ measures on a course-by-course basis.

Currently, the responsibility for assessment plans and results falls directly upon department chairs and assessment coordinators. A small number of faculty members occasionally provide survey data for results reporting purposes within most colleges. Theoretically, the program assessment learning outcomes and measures drive each course with the intent to enhance discipline specific knowledge as well as critical thinking and communication skills. This equates to developed knowledge, skills, abilities and attitudes for professional training programs such as business and hospitality management, in other words— competencies required for the effective practice of professional management. Management practice consists of diagnostics and interventions concerning production systems. This suggests that on short

notice, instructors will be asked to report evidence of actual performance for all learning activities contained within a course syllabus for every course that has been taught within a degree program.

Documenting Online Course Activities

In essence a completed online course is a database. The backed-up course contains a repository of learning activity information from which queries may extract specific data for reporting purposes. Course designers are aware that the course content or home page provides a road map of structured information. As is the case with any course, the syllabus, texts, power point slides and lecture materials are readily available with the exception that a web course may contain or at least provide links for electronic versions of these documents.

For the purpose of articulating teaching effectiveness, an instructor may provide a summary report of a self-audit or permit an external auditor to explore the activities linked to the content bar in the classroom. In this case the auditor will be able to review posted periodic announcements along with timelines to determine the effectiveness of the instructor's communication of course expectations.

In most cases assessment learning outcome measures will focus on metrics associated with class testing and written assignments. Exam questions reside within an 'assessment' database for most online courses. Each test is extracted from the database in the form of question sets from which randomized test questions and answers (in the case of multiple choice versions) appear to each student. An auditor may view the entire database, question sets, as well as preview exam samples and grade distribution reports for every completed test. Written assignments are retained in an 'assignment' database and may also be viewed by an auditor.

Any experienced online course instructor is aware that the essence of a course occurs in the form of discussion board group interaction. The discussion board tool provides an archived transcript of every interaction that occurred throughout a course which may be easily tracked during an audit. The auditor may track the discussion view by week and by participant. Summary tracking statistics are readily available to the auditing viewer to determine overall levels of interactivity and grading distributions.

Most current online courses include streaming video lectures that may reside on a separate university server or be posted to a public access forum. The content page of the course will enable the auditor to view each video lecture. Finally, most courses contain an embedded 'grade book'. Auditors may view statistics related to the grade distribution for each assigned activity, as well as identify the distribution of total course grades with a click of a mouse.

While providing AOL data to faculty, administration and accreditors is an obvious requirement in today's business schools, a less common mandate is to provide such information to the public in a way that they can digest and use AOL data to assess the relative effectiveness of various academic programs. Capella University is one school which has distinguished itself in providing this type of public information.

COMMUNICATING AOL TO THE PUBLIC

Capella University, founded in 1993, became the first online and first for-profit university to receive the CHEA (Council for Higher Education Accreditation) Award for Outstanding Institutional Practice in Student Learning Outcomes in 2010 (Pearce and Offerman, 2010), Capella was driven to become an outcomes-based University for a variety of reasons. Initially, the idea was sparked by Capella's participation as a charter member of the Academic Quality Improvement Program (AQUIP). As a institution which primarily serves adult learners, who are extremely outcomes-oriented, an outcomes-based approach made sense. Learning outcomes for programs are identified based on skills and knowledge needed to be successful in the workplace, as well as the standards of any professional organizations in the field (Pearce and Offerman, 2010).

Eventually, Capella focused its efforts not only on developing a unique outcomes-based model for the institution, but also focused on communicating the results to accrediting organizations, students, potential

students, and the general public through its website Capella Results (http://www.capellaresults.org). Capella has been able to do this effectively in part because of its nature as a fully online institution with access to large amounts of data about the learning process and the ability to mine this data and develop continuous improvement processes informed by that data.

The Advantages of an Online Data-Rich Environment

Because Capella University is solely an online university, the institution is able to capture every interaction which is observable and reportable, and uses data to "understand program health, learning effectiveness, and student success in ways we did not fully imagine 10 years ago." (Pearce and Offerman, 2010). This enables Capella to assess student and faculty performance at a high level of detail. Curriculum and courses are designed around meeting overall program outcomes, and these outcomes are then assessed at the undergraduate and masters' levels through performance in the capstone course in their field

Capella uses the concept of Action Analytics continually in the process of data mining and improvement of processes and courses through data analysis. However, it is not sufficient to merely mine the data and report to the public. It is the institutional commitment to making changes based on the data, and to continual improvement of the curriculum, courses, teaching, and achievement of student outcomes which is key. The school is able to quickly make changes because they are academically centralized, with standardized course content and assessments. The fundamental design of programs and very specific rubrics are what enable them to measure outcomes, publish them, and use the data to improve and ultimately assure that learning occurs, as well as continually improving the achievement of those outcomes.

Transparency of Outcomes and Results

Capella University is a Charter member of the President's Forum Transparency by Design Initiative, which selected the Western Interstate Commission for Higher Education (WICHE) Cooperative for Education Technologies (WCET) in 2008 to provide quality assurance on reporting standards. The website, College Choices for Adults (http://www.collegechoicesforadults.org/), was founded in 2009. Concurrent to these collaborative efforts with other institutions, Capella also developed its own website, Capella Results (http://www.capellaresults.org), to report both Learning Outcomes by degree program, career outcomes, and students' satisfaction with the program.

Capella is committed to making its results available to the public, as a demonstration of transparency, and in order to help establish and maintain credibility in adult online degree programs. The results related to learning outcomes are displayed on the website by program and degree level. Here is an example of the MS in Human Resources Management program. For these outcomes (aligned with the Society for Human Resources Management curriculum guidebook), measurements include non-performance as well as Basic, Proficient and Distinguished Performance. The program level outcomes with the percentage of students exhibiting each performance level (Basic, Proficient, Distinguished) are:

Analyze business theories, markets, and reporting practices in human resource management. (73%, 10%, 17%)
Assess culture and change management in organizations. (17%, 27%, 57%)
Evaluate strategic management and critical thinking in human resource management. (10%, 33%, 57%)
Apply information technology solutions within an organization. (3%, 28%, 69%)
Apply systems design and process management in human resource management. (10%, 23%, 67%)
Communicate effectively. (7%, 28%, 66%)
Analyze ethical and legal responsibilities in organizations and society. (56%, 12%, 32%)

Program chairs use this data to make adjustments in curriculum and courses. In particular, the HR program was designed to educate HR professionals not only in HRM, but in how HRM supported the

business of the organization. The data set in the example shown suggested a much needed change in two of the courses in order to improve outcome 1, and to the ethics course to improve outcome 5.

Having looked at some AOL initiatives in both public and private institutions, the authors would like to suggest some best practices for consideration by those who may be relatively newer to AOL design and implementation.

SUGGESTED BEST PRACTICES

Based on their experience and observations, the authors believe that a successful AOL program has to be system-wide and all inclusive. AOL needs to be a part of the culture and everyone from administration to advisors to faculty should have knowledge of and buy-in to the process. More specifically, we make the following recommendations.
1. An effective AOL program should start from the top and work its way down through the unit. First, program goals should emanate from the mission and vision of the school and program. Program goals may be determined by high level administration in conjunction with faculty or they may be developed by faculty but it is important to have buy-in and support from all levels.
2. There should be one or more assessment professionals guiding the process, but the process must be seen to belong to everyone. AOL is sometimes seen as an onerous chore and individual faculty are likely to look the other way if they think that the professionals are handling this chore. Assessment and assurance of learning must belong to the faculty and be seen as a key responsibility.
3. Once program goals are designed, communicated and embraced, courses should be designed, if new, or reviewed, if already existing, in order to map them to program goals.
4. After the curriculum of courses is approved, faculty need to determine course competencies or learning objectives, some of which should be mapped directly to project goals. Specific measures of these course competencies must be determined. Note that not all courses necessarily have to map directly to program goals.
5. Faculty and administration alike should have their role in AOL as a specific duty and one that they are assessed on. AOL cannot be an afterthought or a function which is undervalued or neglected. It is key to the learning process and the cycle of continuous improvement.
6. As AOL efforts mature, a consistent method of communicating results to a broader audience of constituents needs to be established. Recruiters, for example, can use this information to interest potential students; advisors can use it to help students decide what courses will bring them the most value; the public can use this information to reflect on the overall effectiveness and reputation of the program or school.

CONCLUSION

The authors have provided an experiential perspective from the AOL trenches. They caution that AOL is not for the faint of heart. It is long-term, labor-intensive work which has the potential to validate the educational experiences we provide for our students. It is imperative that all business school stakeholders have an understanding and some type of involvement in this process whether it is the primary and formative involvement of the faculty, the user perspective of the student, or the evaluative function of the accrediting agencies.

The perspectives given here are from four different business schools in both the private and public sectors and from both nonprofit and for-profit institutions. Assurance of Learning is here to stay. The methods used will get more rigorous and the metrics more exacting as the AOL process matures. It is time to get involved in purposeful AOL activities in order to improve our educational outcomes.

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