Aligning Assurance of Learning Activities with the 2013 AACSB Standards

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ABSTRACT

The Association to Advance Collegiate Schools of Business International (AACSB) revised and adopted its business accreditation standards in 2013. This paper focuses on one of the major revised components in the new standards: assurance of learning (AoL). It presents an AoL model implemented at the business school of a middle-sized public university in New Jersey in compliance with the new AACSB standards and discusses a number of implementation issues and lessons learned.

Key words: Assurance of learning; 2013 AACSB accreditation standards; Assessment

INTRODUCTION

The Association to Advance Collegiate Schools of Business International (AACSB) revised and adopted its business accreditation standards in 2013 (the 2013 Standards). These new standards represent major revisions from the prior 2003 accreditation standards (the 2003 Standards). These changes necessitate that business schools, pursuing initial accreditation or re-accreditation, fully understand the differences between the two sets of standards so as to work more effectively towards compliance with the new standards, including the related documentation requirements.

This paper focuses on one of the major revised components in the 2013 Standards: assurance of learning (AoL). It presents a comprehensive three-stage AoL process implemented at the business school of a middle-sized public university in New Jersey to comply with the 2013 Standards for AACSB reaccreditation. It further discusses some implementation issues and lessons learned. AoL plays an important role in the AACSB accreditation process, and it may not be uncommon in the future that the reaccreditation of some business schools will be deferred for a "sixth year" for not assessing and documenting student learning achievements successfully (Spruell et al., 2009). The purpose of this paper is to share our experience in revising and implementing the AoL process and to help other concerned groups better appreciate the challenges and opportunities involved and enhance their ability to meet the AACSB AoL standards.

A COMPARISON BETWEEN THE 2013 AND 2003 AOL-RELATED STANDARDS

A number of articles related to the 2013 Standards have appeared in the literature. These articles took a close look at major changes in the 2013 Standards, as compared to the 2003 Standards (Abdelsamad, et al., 2015), surveyed AACSB member deans' perceptions towards the 2013 Standards (Miles, et al., 2015), and discussed the implications of the 2013 Standards for business faculty and deans (Miles, et al., 2014).

A general comparison between the 2013 and 2003 Standards is provided in Table 1 and a comparison of AoL-related standards is provided in Table 2 (AACSB, 2013a; AACSB 2003). As can be seen, the 2013 Standards consist of 4 sections with 15 standards. Section 3 of *Assurance of Learning* in the 2003 Standards with 7 standards (15-21) was mapped into Section 3 of *Learning and Teaching* in the 2013 Standards with 3 standards (8, 9, & 11). Thus, to align AoL activities with the 2013 accreditation standards, it is necessary to take a closer look at these 3 AoL-related standards.

The 2013 Standard 8 states that "The school uses well-documented, systematic processes for determining and revising degree program learning goals; designing, delivering, and improving degree program curricula to achieve learning goals; and demonstrating that degree program learning goals have been met" (AACSB, 2013a, p. 29). Three key components are program learning goals, curriculum management, and AoL systems. Program learning goals refer to the educational expectations for a degree program (e.g., undergraduate, master's), i.e., what knowledge and skills students should develop in a program. These program learning goals are different from learning goals for majors within a degree and detailed learning goals/objectives for a course. They need to be mapped into the business curricula for implementation. Curriculum management refers to the ongoing process of developing, revising, and improving curricula for degree programs based on feedback from internal and external

stakeholders, revision of mission, changes in practice of business and management, AoL assessment results, etc. *AoL systems* refer to processes of producing a portfolio of evidence demonstrating student performance against learning goals.

The 2013 Standard 9 states that "Curriculum content is appropriate to general expectations for the degree program type and learning goals" (AACSB, 2013a, p. 31). The 2013 Standard 11 states that "Degree program structure and design, including the normal time-to-degree, are appropriate to the level of the degree program and ensure achievement of high-quality learning outcomes. Programs resulting in the same degree credential are structured and designed to ensure equivalence" (AASCB, 2013a, p. 34). These standards are similar to the 2003 Standards. "However, emphasis should be placed to their engagement, innovation, and impact as they pertain to those standards" (Abdelsamad, et. al., 2015).

Table 1: A General Comparison between the 2013 and 2003 Standards

	The 2013 Standards (4 sections with15 standards)	The	2003 Standards (3 sections with 21 standards)	
1.	Strategic management and innovation (Standards 1-3)			
2.	Participants-Students, faculty, & professional staff	1.	Strategic management (Standards 1-5)	
	(Standards 4-7)	2.	Participants (Standards 6-14)	
3.	Learning and teaching (Standards 8-12)	3.	Assurance of learning (Standards 15-21)	
4.	Academic and professional engagement			
	(Standards 13-15)			

Table 2: A Comparison of AOL-Related Standards between the 2013 and 2003 Standards

The 2013 Standards	The 2003 Standards		
Section 3: Learning and teaching	Section 3: Assurance of learning (Standards 15-21)		
(Standards $8 - 12$)		Mapped into 2013 standards	
	15: Management of curricula	8 & 9	
8: Curricula management & AOL	16: Undergraduate learning goals	8 & 9	
9: Curriculum content	17: Undergraduate educational level	11	
10: Student faculty interaction	18: Master's level general	8 & 9	
11: Degree program educational level, structure, & equivalence12: Teaching effectiveness	management learning goals 19: Specialized master's degree learning goals	8 & 9	
	20: Master's educational level	11	
	21: Doctoral learning goals	8 & 9	

AN AOL MODEL RESPONSIVE TO THE AACSB 2013 STANDARDS

Numerous articles related to AoL under the 2003 Standards can be found in the literature (Gibson, et al., 2013; Kelly, et al., 2010; Marshall, 2007; Miles, et al., 2004; Pringle & Michel, 2007; Stivers & Phillips, 2009; Zocco, 2011). Gilbreath et al. (2016) provided a comprehensive survey of helpful tools for managing the AoL process which include assessment plans, curriculum maps, schedule for assessment and artifact collection, faculty engagement maps, etc. Lightner and Lightner-Laws (2014) discussed how to develop a sustainable AoL framework using supply chain principles. Attaway et al. (2011) presented an approach to assess learning outcomes in an IS course (required business core) to comply with the AACSB AoL requirements.

This paper presents an AoL model implemented at the business school of a middle-sized public university in New Jersey in compliance with the 2013 Standards. The business school has 8 undergraduate degree programs with over 1300 students. It received the AACSB accreditation under the 2003 Standards and is currently in the process of applying for re-accreditation under the 2013 Standards. To comply with the new accreditation standards, the school revised its AoL process. The revised process is comprised of 3 major stages: (1) develop the AoL framework at the degree program level, (2) develop the assessment plan at the course level, and (3) implement the assessment plan and close the loop at both the course and degree program levels. This section discusses each of these stages in detail.

Stage 1: Develop the AoL framework at the degree program level

This stage outlines the AoL framework at the degree program level. It consists of 3 steps: (1) develop program learning goals, (2) define learning objective(s) for each program learning goal, and (3) map program learning goals and objectives into the business curricula.

Step 1: Develop program learning goals

Program learning goals state the general skills and knowledge expectations upon students' successful completion of the degree program. These learning goals should be based on the school's mission and their achievement must be demonstrated through the school's AoL activities.

The general skill areas listed in the 2013 Standards include: (1) communication (both written and oral), (2) ethical understanding and reasoning, (3) analytical thinking, (4) use of information technology, (5) interpersonal relations and teamwork, (6) diverse and multicultural working environments, (7) reflective thinking, and (8) application of knowledge. Among these, items 5 and 8 are new additions to the list, indicating the increasing importance of being *"able to work effectively with others and in team environments"* and being *"able to translate knowledge of business and management into practice."*

The general business and management knowledge areas listed in the 2013 Standards include: (1) economic, political, regulatory, legal, technological, and social context of organizations in a global society; (2) social responsibility, including sustainability, and ethical behavior and approaches to management; (3) financial theories, analysis, reporting, and markets; (4) systems and processes in organizations, including planning and design, production/operations, supply chains, marketing, and distribution; (5) group and individual behaviors in organizations and society; (6) information technology and statistics/quantitative methods impacts on business practices to include data creation, data sharing, data analytics, data mining, data reporting, and storage between and across organizations including related ethical issues; and (7) other specific areas related to majors, concentrations, or emphases. Many of these items are major revisions from those in the 2003 Standards. These revisions, along with the new addition of social responsibility (item 2), represent the currency of knowledge.

AACSB expects 4 to 10 learning goals for each degree program (AACSB, 2013b). These learning goals should address some or part of the general skill and knowledge areas listed above.

Step 2: Define learning objective(s) for each program learning goal

Program learning goals are broad and conceptual, thus are not suitable for assessment. Subsequently, one or more measureable learning objectives need to be developed for each program learning goal. For example, one of our learning goals states that our graduates will be able to "understand, analyze, and interpret quantitative data to make business decisions." We then translated it into several operational program learning objectives, including "students will understand and apply decision-making tools to solve business problems" and "students will be able to synthesize and evaluate information to offer solutions that support decision making." Notice that these learning objectives are stated at the program level and are different from detailed course learning objectives. A program learning objective maybe achieved and assessed at multiple business core courses. Together, Steps 1 and 2 produce the list of degree program learning goals, with the conceptual definitions from Step 1 and operational definitions from Step 2.

Step 3: Map program learning goals and objectives into the business curricula

This step creates a course rubric for assessment at the degree program level. It specifies where or in which business core course(s) the contents related to each learning objective will be introduced and reinforced; in which business core course(s) a program learning objective will be assessed; and when the assessment data will be collected. Along with the first two steps, it leads to the AoL framework at the degree program level, as shown in Table 3.

Degree program	Program Learning objectives	Course Rubric for Assessment		Learning-based course mapping	
learning goals		Where to assess	When & how often	Where contents associated with learning objectives are being	
	-		to assess	Introduced	Reinforced
Learning Goal 1	1a	Business core A	Every spring	А	В & С
	1b	Business core B	Every fall		В
Learning Goal 2	2a	Business core C	Every spring	С	А
		Business core D	Every fall		D
	2b	Business core E	Every fall		Е
••••					

Table 3: AoL Framework at the Degree Program Level

The table shows where and how often a program learning objective is being covered by the business curricula. For example, learning objective 1a is being introduced in core course A and being reinforced in core courses B and C. The table also shows the program assessment plan. For example, learning objective 1a will be assessed in core course A and the assessment data will be collected in every spring semester; the learning objective 2a will be assessed in the core courses C and D and the assessment data will be collected in the fall and spring semesters alternatively between these two courses. Notice that the assessment data do not need to be collected every semester, since it takes more than one semester to identify the weaknesses in learnings based on the assessment data, develop and implement action plans to close the loop, and then collect the assessment data in later cycle(s) to see the improvement.

A college-wide AoL committee will need to be established with faculty representation from each business core course. For the schools where most, if not all, of the business core courses are offered multiple sections each semester by multiple faculty members (full-time or part-time), the faculty representatives in the AoL committee may also serve as course coordinators for the subsequent implementation of the assessment plan at the course level.

All program learning goals need to be mapped into the business curricula. The AoL activities will be worthless if an adopted program learning goal is not addressed by at least one business core course (AACSB, 2013b). Further, it's not necessary that every single business core course needs to be listed in the program AoL course rubric; it depends on the adopted program learning goals and objectives.

Stage 2: Develop the assessment plan at the course level

Following the degree program AoL framework outlined in Table 3, each involved business core course needs to develop its own course-based assessment plan to facilitate the implementation of the program assessment plan. This stage creates a course-based assessment rubric that details the assessment plan at the course level. It consists of 3 steps: (1) develop course-based learning criteria, (2) select assessment instrument(s), and (3) define performance levels and expected performance.

Step 1: Develop course-based learning criteria

The concepts/topics related to a program learning objective need to be covered and assessed in at least one business core course. A program learning objective may be translated into several specific, measureable, and assessable course-based learning criteria. An example is provided in Table 4. The program learning objective 1a states that upon the completion of the program, student will be able to understand and apply decision making tools to solve business problems. This learning objective is mapped into 2 business core courses: Operations Management and Principle of Finance. Accordingly, the faculty members who teach Operations Management then worked as a team to develop several course-based learning criteria, including that students will be able to recognize which quantitative decision making tool(s) to use if presented a situation and that students will be able to derive solutions to decision making problems. The faculty members who teach Principle of Finance also worked together to developed their own course-based learning criteria.

Degree Program	Program	
Learning Goal	Learning Objective	Course-based Learning Criteria
		(to be assessed in Operations Management)
1. Students will	1a. Students will understand and	Criterion 1: Students will be able to
understand, analyze,	apply decision making tools to	recognize which quantitative decision
and interpret	solve business problems.	making tool(s) to use if presented a situation.
quantitative data to		Criterion 2: Students will be able to derive
make business		solutions to decision making problems.
decisions		
		(to be assessed in Principle of Finance)
		Criterion 1:
		Criterion 2:
	1b	

Table 4: An Example of Course-based Learning Criteria

Step 2: Select assessment instrument(s)

After defining course-based learning criteria, the corresponding assessment instrument(s) need to be selected by the faculty members who teach the same course. The literature has extensive studies about assessment tools and methods (Bamford et al., 2012; Gibson, 2011; Jayashree & Mitra, 2012; McConnell et al., 2008; Payne et al., 2008; Phelps & Spangler, 2013; Price & Randall, 2008; Weldy & Turnipseed, 2010; Zhu & McFarland, 2005). The discussion can also be found as how to utilize the assessment information for institutional decision making (Elford, 1996) and for curriculum development (Cherry & Dave, 1997; Drexler & Kleinsorge, 2000). Michlitsch and Sidle (2002) studied the frequency and effectiveness of using course-embedded assessment methods via a survey of business schools in the U.S. and found that tests were the most preferable assessment method.

AACSB accepts a variety of direct assessment approaches including course-embedded measures (e.g., tests, case study, course assignments, team projects, presentations, etc.) and stand-alone testing outside of normal classroom activities (e.g., a standardized test developed either externally for the school or internally by the school). Some indirect measures (e.g., alumni survey, graduating student surveys, employer surveys, etc.) may also be used as complement measures, but they are not acceptable substitutes for direct assessment of learning (AACSB, 2013b).

In the case that a course-embedded measure is selected as an assessment instrument, then this measure will need to be evaluated twice, once based on the instructor's criteria for the course grade and once based on the course-based learning criterion for assessment. Garfolo et al. (2016) discussed how to tie course embedded signature (or key) assignments with a dual purpose rubric (assessment and grading).

We continue to experiment with the use of various assessment measures and instruments in the interest of evaluating their effectiveness as assessment tools and enhancing the effectiveness and efficiency of our assessment program.

Step 3: Define performance levels and expected performance

The performance levels for course-based learning criteria need to be defined before implementing the assessment. Three or more levels may be needed, e.g., "excellent", "satisfactory", and "unsatisfactory". The definition of these levels are up to the faculty. For example, a score of 90 or above maybe defined as "excellent" and a score below 70 maybe defined as "unsatisfactory". These performance levels will be utilized to organize the assessment results.

The expected student performance is a target learning accomplishment, or internal performance benchmark, decided by the involved faculty members. For example, it may be stated that at least 90% of the students will perform at or above the "satisfactory level". The gap between actual and expected student performance indicates the weakness in leaning accomplishment and provides an opportunity for teaching and learning improvement.

The three steps at this stage lead to a detailed assessment plan at the course level. Table 5 shows an example of the assessment plan at the course level.

Table 5: An Example of the Assessment Plan at the Course Level – AOL in Operations Management

Program learning goal addressed Understand, analyze, and interpret quantitative data for decision making				
Program learning objective addressed Understand and apply decision making tools to solve business problems				
Assessment administration Every spring semester in all sections				
Data aggregation By a designated course coordinator				
Course-based	Assessment		Expected	
Learning Criteria	Instruments	Performance Levels	Performance	
Students will be	Course	1. <i>Exemplary</i> (\geq 90% correct answers)	\geq 80% of the students	
able to derive	embedded test	2. <i>Satisfactory</i> (70%-89% correct answers)	will perform at or	
solution to decision	(multiple choice	3. Unsatisfactory (< 70% correct answers)	above Satisfactory	
making problems.	questions)			

While the performance target may vary by course-based learning criteria, it's important that the same definitions of the performance levels be utilized cross course sections.

All three steps at this stage require collaborative teamwork. Faculty members who teach the same business core course need to work together to develop the assessment plan and implement it accordingly and consistently cross course sections and instructors. A course coordinator plays an instrumental role at this stage.

The development of course-based learning criteria and selection of assessment instruments should be top-down, driven by program learning goals and objectives, not the other way around. After several assessment cycles, these course-based learning criteria may be changed, if their target performances have been well achieved through the implementation of the action plans.

Stage 3: Implement the Assessment Plan and Close the Loop

This stage concludes the AoL process. It consists of 2 steps: (1) implement the assessment plan at the course level, (2) close the loop at both the course and degree program levels.

Step1: Implement the assessment plan at the course level

All the faculty members who teach the same business core course need to use the same pre-selected assessment instrument to implement the program assessment plan (e.g., Spring or Fall semester). At the end of each assigned assessment semester, a designated course coordinator will collect the assessment data from all the sections, if more than one section is offered, combine the assessment results, identify the gaps between expected and actual student performances, and feedback the results to the faculty involved. It may be necessary that the course coordinator send an assessment reminder at the early semester to the faculty involved.

Step 2: Close the loop at both the course and degree program levels

All faculty members who teach the same course will need to meet to analyze the assessment data. The weak area will be identified (e.g., which areas students performed poorly or below the expectations), and the action plans for reducing / eliminating these discrepancies and for teaching improvement will be developed accordingly. The actions are to be taken in the subsequent semester(s) to close the loop at the course level.

The summarized course-based assessment results, along with the action plan, will be submitted to the college-wide AoL committee. The committee will then aggregate the assessment results from all the business core courses involved, evaluate if the program learning goals and objectives are met, analyze what and where the main issues and concerns are, and develop, if necessary, an action plan for continuous curricula and program improvement. This last step of closing the loop at the degree program level is critical for AACSB accreditation/re-accreditation. It addresses the issue of what the school will do if its students have not learned what they are expected to learn. If this step fails, the entire AoL process and assessment system fails (AACSB, 2013b).

DISCUSSION

While the importance of assurance of learning, formerly called learning outcome assessment, has been a longstanding expectation of AACSB, the 2013 Standards clearly and persuasively emphasize the obligation that business schools have to their various stakeholders, including business school graduates and the organizations for which they will be employed, to ensure that their graduates have the requisite knowledge and skills to successfully

join and contribute to contemporary business organizations. While curriculum development and instruction are obvious ways through which a business school prepares to meet and, ideally, exceed these stakeholder expectations regarding the preparation of business school graduates, it is only through assessment of learning that our effectiveness can be ascertained and areas in need of improvement can be identified and corresponding improvement plans can be developed and implemented.

The AoL model discussed in this paper presents a systematic approach to continuous improvement in student learning. In accordance with the expectations articulated in the 2013 Standards, it is mission-driven and program-focused. After articulating an appropriate mission, a business school is expected to develop and successfully deliver a curriculum based on program learning goals and objectives. The identified program learning goals and program learning objectives serve as a basis for assessment and provide the necessary understanding of teaching and learning effectiveness, as well as identifying gaps that need to be addressed through "closing the loop".

The successful implementation of an AoL program requires a commitment from all organizational levels within a college or university. This begins with the top-down support from the college or university administration for the business school's assessment program. The dean of the business school has an instrumental role in a successful assurance of learning program. An effective assessment system must be based on the overall program learning goals and objectives established collectively by the business school faculty, supported through the various academic departments and all of the faculty assigned to teach business core courses. An effective and efficient process involves a college committee to setup the AoL program framework, a departmental committee (composed of all faculty members teaching a given course) to develop a detailed and operational assessment plan at the course-level, and individual faculty members to participate and implement the assessment process and to close the loop.

The assurance of learning process discussed in this paper has been implemented and has further revealed the importance of this crucial area of responsibility and stewardship for contemporary business schools and their faculties. It should be noted that while the current process was certainly developed in response to the new AACSB standards and the interest of the business school and its various stakeholders in maintaining the prestigious AACSB accreditation, the model developed and implemented is responsive to the longstanding mission of this business school to teaching and learning and the passion of its faculty to prepare its graduates for successful business careers.

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