Assurance of Learning Assessment Process

(AACSB Assurance of Learning Standards: An Interpretation, Accessed 12/01/2011, <http://www. http://www.aacsb.edu/accreditation/papers/AOLPaper-final-11-20-07.pdf>)

Step 1: Establish learning goals and objectives:

Each AACSB accredited business school and accounting program must develop a set of learning goals for each program that is consistent with the mission of the school or accounting program. "The mission and strategic objectives set out the intentions of the school, and the learning goals say how the degree programs demonstrate the mission" (AACSB 2007, p. 60). Each learning goal should describe the desired educational outcome that students should be able to accomplish when they graduate from the program, regardless of their major or concentration.

The expectation is that a school or accounting program will specify 4-8 learning goals for each degree program. Learning goals should be broad statements of accomplishment that cut across a curriculum. Assessment outcomes in this context address student achievement at a macro-level rather than in specific courses which is each faculty member's responsibility. A learning goal can be stated as, "Upon graduation our students will … " As stated earlier, the learning goals should express expectations that reflect the depth and breadth of student knowledge and skills that are the sustainable foundations for life-long learning in support of their professional and personal development.

Each learning goal must be translated into one or more learning objectives which describe a measurable attribute of the overall learning goal.

Some examples of learning goals and corresponding objectives are shown in Table 1. For each learning objective, an assessment device or process must be developed to allow an evaluation of student performance on that objective providing a reasonable basis for conclusions about student performance on the overall learning goal.

Table 1: Examples of Learning Goals and Corresponding Objectives

Learning Goal: Our graduates will understand the importance of behaving ethically in their professional lives (i.e., have an ethical perspective).
Corresponding Objectives:
◻ Our students will know the professional code of conduct within their discipline.
◻ Our students will identify the activities/issues in their chosen profession that may present ethical challenges, and will articulate the consequences associated with unethical behavior.
◻ Our students will identify an ethical dilemma in a scenario case and apply an ethics model or framework to propose and defend a resolution.

Learning Goal: Our graduates will demonstrate problem solving skills, supported by appropriate analytical and quantitative techniques.
Corresponding Objective:
◻ In a case setting, students will use appropriate analytical techniques to identify a business problem, generate and compare alternatives, and develop a solution.
◻ In a case setting, students will recognize and analyze ethical problems, choose, and defend a solution.

Learning Goal: Our graduates will be effective communicators.
Corresponding Objectives:
◻ Our students will produce professional quality business documents.
◻ Our students will deliver a professional quality presentation accompanied by appropriate technology.
◻ Our students will demonstrate effective interpersonal communication skills in a team setting.

> **Learning Goal:** Our graduates will have a global perspective.
> **Corresponding Objectives:**
> ⬚ Our students will define key components of countries' business environments and give examples of how environmental components differ across countries.
> ⬚ Our students will evaluate the foreign market potential for a product and develop and entry strategy.
> ⬚ Our students will adapt a domestic marketing (or human resource) strategy for a foreign operational setting.
> ⬚ Our students will diagnose cross-cultural communication issues in a case setting and propose appropriate solutions.

At the undergraduate level, additional learning goals for a major or concentration are not required by AACSB but are optional.

Learning goals, the operational learning objectives, and assessment processes should be subjected to period review and change as may be necessary, i.e., continuous improvement in assessment processes is expected.

Step 2: Alignment of curricula with adopted goals:

Since the learning goals are established within an "across the curriculum" context, the next step is to ensure that the curriculum addresses the learning goals. Ideally this occurs in a number of courses. That is, there should be clear evidence that the work students are doing in one or more classes directly supports student achievement of the learning goals. The more places in a curriculum that support one or more learning goals, the greater the probability of student success. For example, goals that address oral presentation skills, critical thinking skills, problem-solving skill, etc. can be addressed in a variety of courses regardless of the content area. The alignment of learning goals and curricula is critical. If learning goals are adopted but are not addressed in the curricula, the outcomes assessment process will be worthless.

Step 3: Identification of assessment instruments and measures:
Business schools and accounting programs have significant flexibility in the selection of student outcomes that are subjected to assessment instruments or tools. Similarly, a variety of acceptable approaches are available for directly assessing student learning:
• Selection
• Course-embedded measures
• Demonstration through stand-alone testing or performance

"Selection" is an assessment tool whereby students are selected to participate in a program on the basis of their knowledge and skills developed from prior educational experiences. The learning goal can be validated through an appropriate process that provides evidence the goal (or goals) is already met prior to entering the program.

"Course-embedded" measures relate to specific course assignments in a class where the students' work on that assignment may also be used for outcomes assessment purposes. In the course embedded method, course assignments or other student demonstrations from a course are evaluated for the purposes of AoL through a separate, distinct process that is driven by criteria established by the faculty (plural). For example, if a case from a marketing class is used to assess students' writing skills for AoL purposes, it will be evaluated twice: once according to the professor's criteria for a case grade for the course, and a second time according to the faculty's (plural) criteria for effective written communications.

Table 3 provides some examples of "course-embedded" assessment processes.

"Demonstration through stand-alone testing or performance" relates to assessment of student achievement on one or more learning goals evaluated through a standardized assessment developed either externally for the school or internally by the school. These assessment activities take place outside of normal classroom activities. This form of assessment works well when students must demonstrate competencies in certain knowledge

and/or skill areas as requirements for graduation or other required level of achievement as part of their academic program. Examples of "demonstration" assessment processes are shown in Table 4.

Table 3: Examples of Assessment Measures-Course Embedded

Learning Objective: Our students will produce professional quality business documents.
⬜ **Assessment measure:** Students' work from a case analysis assigned in
a senior capstone course is assessed for writing effectiveness.

Learning Objective: Our students will demonstrate appropriate abilities to integrate knowledge across business disciplines in a case solution.
⬜ **Assessment measure:** A case analysis presentation in a business strategy class is assessed for developing a strategic recommendation that spans functional areas.

Learning Objective: Students will recognize and analyze ethical problems, choose, and defend a solution.
⬜ **Assessment measure:** A case analysis from the capstone MBA policy class is evaluated in regards to students' recognition of the ethical dilemma, generation and comparison of alternatives, and development of a solution.

Table 4: Examples of Assessment Measures-Demonstration Through Stand-alone Testing or Performance

Learning Objective: Students will demonstrate competence and understanding of basic business disciplines and concepts
⬜ **Assessment measure:** Students must successfully complete a standalone, standardized examination at the end of their degree program.

Learning Objective: Students will demonstrate appropriate writing skills to produce quality business documents.
⬜ **Assessment measure:** A written communications assignment at the end of the degree program is evaluated for writing competence.

Learning Objective: Students will demonstrate competence to integrate knowledge across business fields in solving a business problem.
⬜ **Assessment measure:** A senior thesis or project is required and evaluated for integration of business knowledge across fields.

Regardless of the assessment tool that is selected for each learning goal, an acceptable, **internal performance benchmark should be established to determine if student performance is acceptable or not**. Such a benchmark could be based on the judgment of faculty or a pre-determined standard could be established, e.g., 85% of graduating students will be evaluated as "acceptable".

Essentially, it is important to determine what level of student performance on a specific learning goal triggers curricula interventions to address deficiencies. Internal benchmarks should provide challenging, but attainable goals. It is likely that schools may not achieve all goals but this is the process of continuous improvement as articulated in Steps 4 and 5.

Step 4: Collection, analyzing, and dissemination of assessment information:
Once data are collected on student performance through the outcomes assessment process, it must be shared with and analyzed by the appropriate faculty committees and the leadership of the business school or accounting program. A standing faculty committee is the preferred mechanism for evaluating assessment results. If this part of the process fails, the entire assessment system fails.

The collection process should be systematic across AACSB review cycles. Normally, learning goals should be assessed at least twice within each review cycle.

Step 5: Using assessment information for continuous improvement including documentation that the process is being carried out on an ongoing, systematic basis:

Regardless of the assessment processes that are deployed, the school and/or accounting program must demonstrate assessment data are being used to inform the leadership and faculty about the effectiveness of their educational programs. Furthermore, for AACSB accreditation reviews, schools should present examples of student performance on assessment measures and document how and where assessment outcomes have been used for continuous improvement of curricula.

INDIRECT MEASURES
Schools may wish to continue or initiate indirect assessment measures such as alumni surveys, graduating student surveys, and/or employer surveys. Information from these indirect measures can complement the direct assessment processes, but they are not acceptable substitutes for direct assessment of learning.

OUTCOMES ASSESSMENT, COURSE GRADES AND FACULTY PERFORMANCE EVALUATIONS

Course grades, by intentional design, measure student learning associated with content and activities specific to a course. In most instances, this falls short of providing evidence of student learning designed around broad knowledge and skill areas. Course grades fail to provide this evidence because:
▢ Course grades are aggregate measures (mean or total points) on examinations, research papers, other projects, homework, presentations, class participation, etc. and, therefore, can not measure students' performance or achievement of a specific skill or knowledge set.
▢ Lecturers set the criteria and standards for their courses which may not be completely aligned with program-level learning goals because of the need to facilitate student learning relative to a specific business discipline for which the faculty member is responsible. Of course, as noted elsewhere, a course product (e.g., paper, presentation, report, etc.) may be an excellent assessment tool for evaluation against a program learning goal. Thus, course products may have dual purposes, but course grades, by themselves, will not provide the information needed.

Another important concern is that outcomes assessment processes must be separated from the faculty performance evaluation system. Different processes should be in place to support the evaluation and development of faculty including assessment of teaching effectiveness along with individual faculty performance on other dimensions including research and service activities. The outcomes assessment process is focused on the collective success of the faculty as a whole on the specified, broad learning goals providing evidence of student learning for continuous improvement purposes relative to programs and not the individual performance of a faculty member.

References
AACSB. (2007). *Eligibility Procedures and Accreditation Standards for Business Accreditation.* Tampa, Fla. AACSB International.
AACSB (2007). *www.aacsb.edu/resource_centers/assessment/default.asp*).
Palomba, C.A., and T. W. Banta. (1999). *Assessment Essentials.* San Francisco, CA., Josey-Bass

Assurance of Learning Frequently Asked Questions

(AACSB International, Assessment Resource Center, Assessment Frequently Asked Questions, Accessed 12/01/2011, <http://www.aacsb.edu/resources/assessment/faq.asp>)

Overview and Frequently Asked Questions Regarding AACSB Expectations

The Assurance of Learning Standards (Standards 15–21) clearly acknowledge assessment of student learning as part of the curriculum management process. The standards call for schools to define learning goals, assess student achievement for these goals, and utilize what is learned through assessment to continually improve their curricular programs. AACSB expectations regarding Assurance of Learning Standards include:

- Learning goals should link to the mission; thus, learning goals will differ from school to school. Learning goals translate the more general statement of the school's mission into the specific educational accomplishments expected of its graduates.
- Learning goals must be defined for each program. Departmental goals and/or course goals (which are not required by AACSB) are not a substitute for program goals.
- Learning goals must include both general and management-specific knowledge and skills.
- Four to ten goals should be developed for each program. Schools are not required (or even encouraged) to develop and assess learning goals for all of the knowledge and skills areas listed in Standards 15–21.
- Student performance on learning goals must be assessed systematically and routinely. No one approach to assurance of learning is prescribed. Assessment programs should include direct measures of learning. Course grades are not program assessment measures.
- Program assessment does not require that every student be assessed. Sampling is acceptable as long as an appropriate and representative sampling methodology is utilized.
- Assessment results must be analyzed, disseminated, and utilized by the faculty toward curriculum planning.
- For initial accreditation and accreditation maintenance purposes, schools will be expected to define their learning goals conceptually and operationally, discuss how they are addressed in the curriculum, and demonstrate levels of student achievement for each goal. Schools also will be expected to show how assessment results subsequently impacted their curriculum planning.
- Faculty involvement in, and ownership of, the assurance of learning process is critical. Faculty are expected to be actively involved in all stages of the assessment process including defining goals, curriculum alignment, developing appropriate measures, implementing course-embedded measures, and, improving the school's curriculum.

Assurance of learning is a dynamic process. Schools that have made good progress indicate a continuous stream of refinement and enhancement of both curricular programs and assessment processes.

Frequently Asked Questions (FAQs) Regarding Assurance of Learning/Assessment

What are the main differences between the "old" and "new" standards related to assessment?

The current standards require that learning goals are articulated for each degree program and that the assessment of student learning related to those goals includes direct measures of student learning.

In the past, many schools relied primarily on indirect measures, including internal and external surveys, to assess student learning. This is no longer sufficient.

Why can't course grades be used to indicate student learning?

Course grades measure the students' mastery of a course topic taught by a specific professor. The course grade is an aggregate measure comprised of the students' performances on multiple exams, assignments, projects, homework, extra credit, etc. Even if professors teach from a common syllabus, a course grade is too aggregate a measure to provide an assessment of specific skills or knowledge. For example, a course may include an oral presentation assignment that is worth 20% of the course grade. It is possible for one student to get an exceptional grade on that assignment, and another student to fail that assignment, with both students receiving a "C" for the final course grade. The course grade provides no measure of students' demonstrated oral presentation skills or of the capacity of the curriculum to produce the desired oral communication traits in its students.

On the other hand, the grades on the oral assignment are an indicator of students' oral skills. If the faculty agrees on how the assignment is to be evaluated (including articulating its minimum performance standards), an oral presentation assigned within a course may be an appropriate program assessment measure. Thus, course products (cases, papers, presentations, exercises) may be used to meet assurance of learning standards, but course grades, by themselves, cannot.

Do surveys have a place in assessment programs?

Surveys (which are an indirect assessment method) may be an appropriate method to gather data on certain learning goals (e.g., life-long learning). For the most part, however, the role of survey data will be to corroborate data gathered through more direct measures or to yield students' perceptions of how a curriculum is functioning. To meet AACSB expectations regarding assurance of student learning, the bulk of a school's learning assessment plan should rely on direct measures of student learning. Beyond accreditation, surveys and other indirect measures may assist school management.

Must all of the general skills and management-specific topics listed in Standard 15 be assessed?

Standard 15 articulates expectations regarding general and management-specific knowledge and skills that normally should be included in undergraduate and masters-level business curricula. Learning goals do not need to be developed and assessed for each topic or skill listed. An undergraduate program's learning goals must encompass both management-specific and general knowledge and skills, however.

Learning goals must be established at the program level. What is a program?

The school must specify learning goals for each separate degree program. Generally, such goals are anticipated for each degree, not for separate majors or concentrations within a degree. For example, a school may offer a Bachelor of Science in Business Administration (BSBA) degree with defined majors in finance, marketing, human resource management, operations management, and general management. A set of learning goals for the BSBA degree must be provided and assessed; goals for each major (while they may be developed for the school's use) would not be required for accreditation review purposes. However, if the school also offers degrees at the undergraduate level called Bachelor of Science in Management Information Systems (BSMIS) and Bachelor of Arts in International Management (BAIM), each of those degrees would require a specification of its learning goals.

The only exception to this is if the school is seeking separate AACSB accreditation for accounting. Even if accounting is not offered as a separate degree program, the major must have its own assessment system for accounting-accreditation purposes.

Must individual majors (or departments) have their own learning goals?

No. For accreditation purposes, individual majors within a degree program do not need articulated learning goals. While the school may find this useful for other purposes, major-level learning goals are not required.

Can there be any overlap in a school's degree programs' learning goals?

Four to ten learning goals must be articulated for each degree program. In most schools, some goals will be similar (or even the same), across various degree programs, while other goals will be unique to specific programs. Thus, while some learning goals may be common to all programs, it is expected that there will be some differentiation among the various programs' learning goals. This allows the school to establish its identity through common goals, while delivering programs to prepare students for different careers through differentiated goals.

Must all students be assessed?

No. For the purposes of meeting standards related to assurance of learning (16, 18 and 20), sampling may be utilized, as long as it is representative.

Can some assessment take place in courses outside of the business school (e.g., General Education courses?)

The standards do not specify when or where assessment activities take place. Learning goals articulate the competencies that business graduates students are expected by the faculty to achieve. AACSB would expect most assessment activities to address learning goals specified by business and management curricula.

What percentage of students must meet (or exceed) our performance standards?

One emphasis in the Assurance of Learning Standards is to gather data on student learning to be used for the purposes of improving business curricula. For each learning goal, the school's faculty will determine their minimum expectation or standard. There is no prescribed percentage of students that must meet the standards articulated by the faculty. What the review team will be looking for, instead, is how these data are used. Thus, a poor showing on student mastery of a learning goal (e.g., analytical reasoning) would only be a concern if the curriculum was not subsequently modified to improve student skills in this area. A second purpose for the learning goals is to communicate the competencies of graduates to students and employers. Thus, the goals should represent learning goals achieved by nearly all graduates, not just a portion. The review team will also examine whether the school's performance standards are appropriate given the student body demographics and the school's mission.

Must we require that all students meet the expected standards on all of our learning goals in order to graduate?

No. This need not be a requirement at an individual level, but the goal should represent the intention of the faculty for every graduate. (See above: What percentage of students must meet our performance standard?)

Can group work be used to assess student outcomes?

While every student does not need to be assessed for program assessment purposes (see: Must every student be assessed?), assessment data must be gathered at the individual level. Group products can be used for assessment only if they yield data on individual student performance. For example, a group presentation could be used to assess individual students' oral communication skills. On the other hand, a team-written paper would not yield individual-level assessments of written communication skills, therefore this would not be acceptable.

Must we use multiple measures to assess each goal?

The standards do not prescribe a specific number or type of measurement techniques, as long as some direct measures are used. While the most effective assessment programs do assess learning goals using multiple measures over time, the standards do not require this. It is expected, however, that schools will make an effort to continually improve their assessment programs, which may include adopting multiple and/or more sophisticated measures.

Can the professor be responsible for the assessment of a program learning objective within his or her class?

If the classroom-based assessment method is being used, products from a class will be used for program assessment purposes. (For example, students' critical thinking abilities might be assessed through a written case assignment in a capstone strategy course). Classroom assignments or exercises can provide useful valid data for program assessment if they are rated or graded using criteria and standards established by the faculty (using a rubric, for example). While the professor of the course in which the assignment is made may rate it for both program and course purposes, this is not required. The professor's minimum obligation is to make the assignment part of the course requirements, collect it, and make it available for program assessment. Some schools using classroom-based assessment have the rating done by the course professor, others by an outside rater, and still others by a faculty committee. What is important is that the assignment is rated according to the criteria and standards agreed upon by the faculty, and that the rater(s) is/are qualified.

Must each learning goal be assessed separately?

Each learning goal will have its own performance standards (for example, in a rubric), but a common method can be used to gather data on more than one goal. For example, a written case analysis could be used to assess both students' analytical thinking and writing skills. Another example could be a capstone project involving a presentation that could form the basis for evaluating oral skills and disciplinary competence. When using a common method for two or more learning goals, make sure to evaluate each goal separately (rubrics can help with this).

What documentation must we keep?

Keep copies of the instruments (for example, assignments plus scoring grid or rubric, surveys), summary data and analysis for each year, sample student products used for program assessment, minutes from meetings disseminating the assessment results and proposing curriculum action items, and progress on action items. Review teams will be looking for evidence that the assessment results were gathered systematically, and used to strengthen the curriculum and improve student learning.

What are the AACSB expectations regarding the timing of the implementation of program assessment system? Do these expectations differ for those schools going for initial accreditation and those going for maintenance?

The expectations regarding the implementation of the Assurance of Learning Standards are the same for all schools applying for accreditation or maintenance under the new standards. The development of systematic, meaningful assurance of learning, with fully developed learning goals and assessments, is normally a multi-year project.

Is benchmarking required?

No, the standards do not require benchmarking to comply with Assurance of Learning Standards.

Must we assess students at multiple points in the curriculum?

While some schools may adopt a value-added approach to assessment, the standards do not require this.

What are AACSB expectations regarding the implementation of an AOL program?

The current AACSB standards were adopted in April 2003 and a transition period was outlined allowing schools time to design and implement an AOL program. In 2007, the standards stated that schools should have a complete AOL process in place, including feedback of assessment data into the curricula review process. In 2007, the original transition timeline was removed from the standards document and new language inserted to state that schools should be demonstrating a high degree of maturity for AOL processes. For peer review visits in 2007-08 and beyond, the impact of assessment outcomes on curricula should be evident (AACSB 2007, pg 69).

Must all students be assessed?

Assessment data collected from valid statistical samples of student work is acceptable to support conclusions about learning outcomes and identification of areas for improvement. Sample characteristics should be established to provide a high degree of confidence that the data are representative, valid, and reliable.

Can assessment take place outside of the business school?

Yes, but the learning goals that are being assessed should be relevant for business and accounting students and established (agreed upon) by the faculty.

What is the minimum performance standard?

AACSB has no such absolute standard. The goal or benchmark for overall student performance on any given learning goal should be determined by each school consistent with its mission, degree programs, and student profile. This performance level provides a basis to determine if the collective student performance on any given learning goal is acceptable or unacceptable. If performance is unacceptable, curricula change should follow to address the problem.

Must all graduates meet the expected standard on all learning goals?

No, but the learning goals do represent the intentions of the faculty for every student. If students are not achieving the learning goals at acceptable levels, action must be taken to strengthen the curriculum for future students.

Can a faculty member be responsible for the assessment of a learning goal within his/her class?

While in practice many schools choose to incorporate outside assessors in their course-embedded assessments, it is possible to have the class professor perform this function. For this to occur, however, the learning goal, operational objective, and supporting rubrics for evaluating performance must be used consistently and follow the collective decisions of the faculty as a whole regarding what constitutes acceptable student performance.

Must learning goals be measured separately?

Each learning goal should have its own performance standard, but a common method or activity can be used to gather data on more than one learning goal. For example, a case analysis may be useful for assessing analytical thinking as well as writing skills or a presentation may be used for evaluating oral communication skills and business disciplinary competence.

Is benchmarking against other institutions required?

AACSB standards do not require inter-institutional benchmarking for student outcomes. Learning goals are unique to each institution though many institutions may have some common goals (e.g. communication skills).

Should student learning be assessed at multiple points in the curriculum?

The standards do not require multiple assessments at different points in a curriculum. Pre-test and post-test observations may be valuable and can be used, but AACSB standards do not require this.

If specific students do not perform well on assessments, is remediation

required?

Outcomes assessment processes are designed to identify areas for program improvement. Remediation is not required for individual students; however, if assessment data indicate a serious deficiency across a large number of students, an intervention may be desirable, but it is not required. These results, however, should be factored into the assessment process, and action is expected for future students.

Can the collective work of student teams be used for assessment?

Collective work from a student team does not provide a basis to assess individual student performance and outcomes except where teamwork is a learning goal. In that case the collective work of the team may provide a basis for assessing performance as a team member.

How many learning goals are needed?

AACSB expects schools to specify 4-8 learning goals for each degree program. There is no limit, but this is the guidance in order to keep the assessment program manageable.

Must all learning goals be assessed each year?

AACSB standards specify "a systematic process" only. Each goal does not have to be assessed every year, but a systematic process is needed to insure all goals are assessed to support meaningful curricula change and development. Normally, each goal should be evaluated at least twice over a five-year AACSB review cycle.

What documentation must be maintained?

Schools should maintain copies of instruments, course-embedded assignments, scoring grids or rubrics, summary of data and analyses, samples of student products used, documentation that the data was used, and documentation of the curricula actions that were taken based on assessment results.

What other factors can affect curricula development/improvements?

The implementation of an AOL process for evaluating student learning is a key component of the curricula development process in any business school or accounting program. At the same time, there are other factors that may also dictate curricula change including external, environmental factors that could affect major curricula change, the development of new programs, etc. Such factors should not be ignored and when curricula change is affected by external factors, such events should be documented.

What are the most popular learning goals adopted by AACSB accredited business schools?

Based on surveys conducted by Dr. Kathryn Martel of Montclair State University, the most popular business-related learning goals are: effective communication skills, ethics, knowledge of all business disciplines, critical thinking, effective decision making, problem solving ability, ability to integrate across business disciplines, global perspective, team skills, and competency in the major.

Assurance of Learning Flow Chart