



Aligning Assessments for COSMA Accreditation

Curt Laird, Dennis A. Johnson & Heather Alderman

To cite this article: Curt Laird, Dennis A. Johnson & Heather Alderman (2015) Aligning Assessments for COSMA Accreditation, *Journal of Physical Education, Recreation & Dance*, 86:8, 27-33, DOI: [10.1080/07303084.2015.1075925](https://doi.org/10.1080/07303084.2015.1075925)

To link to this article: <http://dx.doi.org/10.1080/07303084.2015.1075925>



Published online: 30 Sep 2015.



Submit your article to this journal [↗](#)



Article views: 14



View related articles [↗](#)



View Crossmark data [↗](#)

Aligning Assessments for **COSMA** Accreditation



Downloaded by Columbus State Community College] at 07:46 26 October 2015

Many institutions of higher education that host a sport management program in their curriculum offerings are engaged in the evaluation process to obtain accreditation from the Commission on Sport Management Accreditation (COSMA). Program accreditation ensures that students will gain the knowledge and skills needed to flourish in a career that is based on the best practices of the industry (COSMA, 2010). Accredited sport management programs must deliver content related to the common professional components (i.e., psychosocial/international foundations, sport management principles, sport marketing, sport ethics, sport finance, sport

CURT LAIRD
DENNIS A. JOHNSON
HEATHER ALDERMAN

Curt Laird (claird@csc.edu) is chair of the Justice and Safety Department at Columbus State Community College in Columbus, OH. Dennis A. Johnson is program coordinator for Sport Management at Jamestown Community College in Jamestown, NY. Heather Alderman is executive director of the Commission on Sport Management Accreditation in Reston, VA.

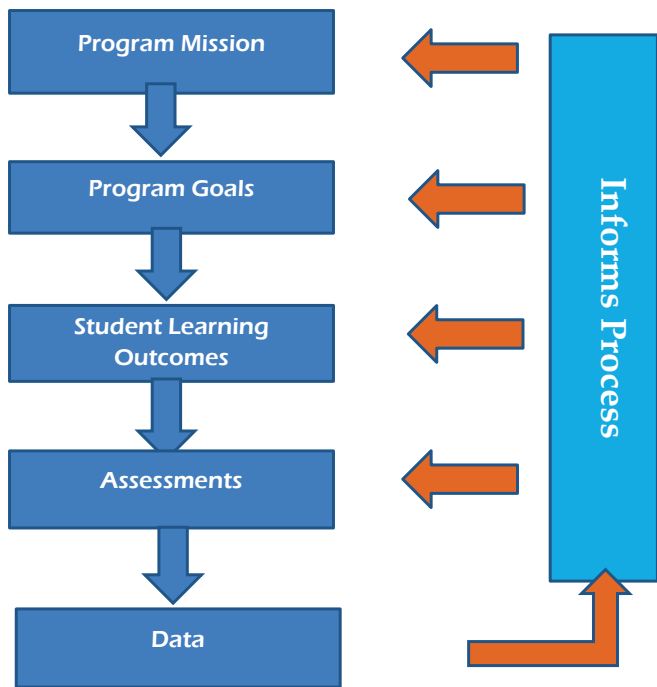


Figure 1.
COSMA assessment process: Closing the loop

law, and integrative experience) in a manner that strives toward excellence in sport management education.

The COSMA requires that higher education programs seeking national accreditation develop an outcomes assessment plan. As program reviewers for the COSMA, the authors observed instances of misconception regarding the proper alignment of student learning outcomes with program goals and the evaluation, collection, storage and reporting of this evidence. Thus this article contains a step-by-step description for best practices in setting program goals based on the mission of a sport management program. The article also discusses how to create student learning outcomes and assessment instruments in order to measure the success or failure of the stated program goals.

Ideally, sport management program directors will use the data collected in the accreditation process to “close the loop” in terms of their program evaluation. “Closing the loop” has received much attention in the literature and, if done correctly, can positively affect an entire program (Banta & Blaich, 2010; Nygaard & Belluigi, 2011; Soundarajan, 2004; Wehlburg, 2006). The assessment cycle (see Figure 1) involves employing appropriate measures of student learning and operational effectiveness and evaluating the results against the intended outcomes. “Closing the loop” comes as a result of identifying improvements and changes that are needed, developing action plans for the future, and integrating those action plans into the strategic planning process for program improvement.

Outcomes-based Assessment

Outcomes-based assessment practices were introduced at the university level in the 1990s (Douglass, Thompson, & Zhao, 2012), and that emphasis has only increased and is based on the

adoption of a student-engaged or learner-centered paradigm (Allen, 2004). Numerous discipline-based accreditations, as well as state, regional and national accreditation agencies, use outcomes assessments as part of their evaluation process.

The COSMA requires that a program seeking national accreditation develop and implement an outcomes-based assessment plan. The outcomes within the plan are measured to determine whether the program is meeting its goals and, ultimately, its mission. Principle 1 of the *COSMA Accreditation Principles and Self-study Preparation* document clearly states that such an outcomes assessment plan must be in place (COSMA, 2010). According to Jacobi, Astin and Ayala (1987), “legitimacy of educational activities is established” to outside agencies through assessment practices (p. 3). Therefore, assessment is crucial to meeting not only the COSMA standards but those of most other accrediting agencies as well.

The Process of Alignment

As sport management program directors begin formulating an assessment model, it is critical to understand the principle of alignment. The program’s mission, goals, student learning outcomes, and assessment measures should be aligned and summarized as steps (see Figure 2). Each step of the assessment process should be based on the previous one, and if alignment exists, the assessments that a sport management program creates should measure progress toward fulfilling the program’s mission.

Mission Statement. One of the more daunting aspects of the assessment process is the alignment of assessment activities with the program’s overall mission. Allen (2004) indicated that alignment “clarifies the relationship between what students do in their courses and what faculty expect” (p. 39). A common mistake made by program directors is the creation of assessments without considering the program’s mission and goals. In doing so, programs have no real basis for creating student assessments. In this instance the assessments form a confused list of random assignments without any relationship to the purpose of fulfilling the program’s mission. Assessments must be created by first analyzing the program’s overall mission and goals.

A sport management mission statement should reflect a particular program’s ideology. Mission statements are generally broad in nature and should be based on both the institutional and college, school or department mission statements. Faculty should review these missions before constructing a sport management program-specific mission (Yiamouyiannis, Bower, Williams, Gentile, & Alderman, 2013). A program’s philosophy should be communicated in the mission statement and serves as the foundation for the outcomes assessment plan. The mission statement also provides a starting point for the creation of program goals (Figure 1). For the purpose of this article, the focus on program goals and assessments will be the “effective communication of ideas.”

Program Goals. Program goals should articulate the mission statement in a more linear fashion and, like the mission, should use qualitative language. Goals should read as a list of statements without being overly specific. For example, some sport management program directors mistakenly look at COSMA Principle 3.2 “Common Professional Component” (CPC) content areas that must be covered through sport management coursework (COSMA, 2010) when writing program goals. While the CPC areas are the content that must be addressed in the curriculum, the program goals should be based on the program’s mission and not on the CPC areas. Instruction in the CPC areas should be used to achieve

Figure 2.
Sample sport management program mission, goal and outcome

University Sport Management Mission Statement	
<i>It is the mission of the University Sport Management Program to prepare graduates to be leaders in the sport industry through the practice of reasoned decision-making, ethical judgment and the effective communication of ideas.</i>	
Sport Management Program Goal	
<i>Enable graduates to communicate successfully to a variety of audiences.</i>	
Student Learning Outcome	
<i>Students will demonstrate effective communication through the oral presentation of concepts and supported opinions.</i>	
Possible Assessments for this Student Learning Outcome	
Indirect Measures	Direct Measures
<ol style="list-style-type: none"> 1. <i>Disposition forms completed by instructors for the students' acceptance into the sport management program (end of sophomore year)</i> 2. <i>Exit survey</i> 3. <i>Internship supervisor evaluation</i> 4. <i>Student reflection</i> 	<ol style="list-style-type: none"> 1. <i>Oral presentation in introductory sport management class</i> 2. <i>Group presentation in junior-level class</i> 3. <i>Senior portfolio</i> 4. <i>Exit exam</i>

the goals of the program, but the goals must be derived from the program's *mission*.

It is also advisable to have a limited number of goals (Weinberg & Gould, 2011), since each goal must be measured through student learning outcomes. If 20 goals were identified, every goal would need to be evaluated by student learning outcomes — which, needless to say, would be a daunting task. It is only after goals are developed that student learning outcomes should be written. An example of a goal for communication would be: “Enabling graduates to communicate successfully to a variety of audiences.” Stated in this fashion, the goal provides direction but is not overly prescriptive.

Student Learning Outcomes. Student learning outcomes should reflect and be based on the sport management program's mission and goals. Unlike the goals, the outcomes will read as “objective” statements and should be measurable. It is through the data collected on these outcomes that the sport management program director will be able to link the assessment back to the program's mission and goals.

As with goals, it is recommended to limit the number of student learning outcomes requiring measurement. Some program directors prefer to write one outcome per goal, while others may create a list of outcomes that encapsulate the program's mission and goals. Since each of the outcomes must be measured and evaluated, and the results data stored for future use in the assessment process, it may be smart to start small and build or modify them as assessment processes go through a full cycle. Simply stated, accreditation can be obtained by assessing fewer student learning outcomes in a more comprehensive, interrelated manner.

Student learning outcomes identify the key skills that students should know or demonstrate upon graduating from the program, as identified by program faculty and administrators. As stated previously, the focus should be on broad skill categories and not on the CPC subject areas. Skill area examples might include critical thinking, communication, ethical reasoning, creativity, problem solving, team orientation, professional behavior, and quantitative analysis. A student learning outcome related to the application of content knowledge is also appropriate.

These broad learning domains can be evaluated over a variety of subject areas across the curriculum, including the CPC areas. A program director may choose to have the communication learning outcome demonstrated through the use of assessments in one or more CPC areas, such as psychosocial/international foundations, sport management principles, sport marketing, sport ethics, sport finance, sport law, or in an integrative experience.

Assessment. Assessment involves both measurement and evaluation (Shimon, 2011). Unlike traditional grading, by using assessments to measure student learning, data is accumulated to assist in making curricular and program decisions. These decisions could impact the program's mission, goals, student learning outcomes, assessments or instructional design in different classes. Figure 1 illustrates the assessment process using the COSMA terminology. The data collected is used to inform each step in the assessment process. The importance of continuous improvement is demonstrated in using such a process.

After the student learning outcomes are created, the assessments needed to measure those outcomes are crafted. In many cases faculty already have projects and/or class assignments that would also

serve as appropriate assessments of the student learning outcomes. Each assessment must have a specific tool or rubric associated with it. For example, a sport marketing plan — a common assignment in a sport marketing class — could be used to determine students' writing ability, oral presentation skills, or their capacity to apply content knowledge. Depending on the student learning outcomes, this tool can measure more than one of them. When first developing an outcomes assessment plan, the authors recommend assessing one outcome per assessment. The key is to tailor the assessment tool specific to the student learning outcome. Again using the communication example, the sport-marketing grading rubric must be tailored to evaluate the student learning outcome to which it is matched. In other words, a grading rubric designed to evaluate the application of content knowledge would not be used to evaluate oral presentation skills. A presentation rubric would be used to evaluate oral communication (see Table 1 for a sample rubric).

What is different about outcomes assessment is that it relies on students' *demonstration* of skills. Outcomes assessment asks students to "apply knowledge in ways that are relevant" (Hopple, 2005, p. 4) and to do something beyond reciting information. Unlike traditional quizzes and examinations that rely solely on the mastery of course content, outcomes assessments focus on the demonstration of tangible skills. Course content can still be used to measure the attainment of student learning outcomes, but rather than focusing on the memorization of content, outcomes assessment focuses on using the content to exhibit behaviors. For example, instead of using a writing assignment that evaluates only the student's grasp of subject matter, create a rubric that assesses "written communication." The subject matter can be evaluated as part of the actual assignment grade, but more importantly, the student's ability to communicate in a written form can be assessed. The student learning outcome can be measured as part of their fulfillment of the course objectives.

Potentially, this can lead to another common mistake in evaluating students' knowledge of the subject matter in place of or in addition to the student learning outcome. The evaluation of the student learning outcome should be separated from any other course-level objectives used in the assessment. In order to combat the issue, it is helpful to use only a certain number and type of criteria in a grading rubric for measuring a student learning outcome (Table 1).

Summative assessment (i.e., at the end of a study/program) is a useful assessment method in sport management programming (Table 2). Utilizing components such as exit interviews, exit exams, focus group interviews, internship projects (typically a senior year experience), and portfolios is useful in determining if student learning outcomes have been achieved. The result of a summative assessment is beneficial in providing direction for curriculum design and assessment for future students.

However, summative assessments cannot be used to aid the instruction of current students or for meeting the programs' learning outcomes of current students. Another common mistake made by sport management program directors is the utilization of only summative assessment practices for program assessment, which limits their ability to make immediate modifications that would help current students. In addition, when using purely summative assessment, adjustments to teaching methods cannot be made until



© Stockphoto/scanrail

the end of a course. Thus program directors should consider also using formative assessments throughout the program in order to ensure that important concepts are learned along the way in a predetermined progression.

The variety of assessments embedded throughout the sport management curriculum are known as formative assessments (Maki, 2004). Formative assessments measure student learning throughout the student's learning experience. An assessment method is "formative" if the information gained from performing the assessment can be used to help current students (Ainsworth & Viegut, 2006). Therefore, the assessment can be used to inform teaching and learning practices as they are completed.

By utilizing formative assessments, faculty have the opportunity to maintain or modify their teaching. The data collected from the assessments communicates to the instructor whether students are achieving the desired learning outcome(s). Instructors commonly use formative assessments and may not realize their implications. Instructors should use assessment scores as a means of determining how well their students learn as the course progresses and should implement modifications in their pedagogy as needed. Table 2 provides examples of formative assessments typical for a sport management program. Program directors, like faculty, can use formative data to determine whether student learning outcomes are being met as the students progress through the sport management curriculum.

Designing and Evaluating Assessments

Student learning can be demonstrated to an outside agency (e.g., COSMA) more definitively when an outcome is measured multiple times throughout a student's academic career through the process of triangulation (when multiple assessments all lead to the same conclusion). The current COSMA Principle 1: Outcomes Assessment requires a *total* of two direct and two indirect measures of student learning for *all* student learning outcomes (COSMA, 2010). In other words, measuring a student learning outcome more than once or by more than one type of measure is not required. However, if this minimum standard is followed using only a total of four measurements, it may be difficult to determine the degree to

Table 1.
Sample Communication Rubric

Criteria	3 = Target	2 = Proficient	1 = Developing
Appearance	Appearance is appropriate for the audience; presenter demonstrates professionalism through selection of attire.	Appearance reflects some level of care in selecting attire for the audience; slight errors demonstrate incomplete level of professionalism.	Appearance is inappropriate for the audience; mistakes in attire selection demonstrate a lack of professional expectations.
Visual Aids	Visual aids contain no errors; content is properly inserted and readable to the audience; colors and slide format are well conceived.	Visual aids contain minimal errors; content is adequate; content is mostly readable to the audience; colors and slide format do not detract from the presentation.	Visual aids contain numerous errors; content amount or choice is inappropriate; audience has trouble reading the content; color scheme/format diminish the legibility.
Organization and Delivery	The presentation is a planned conversation; it is rehearsed and is appropriately paced; the subject matter and visual aids follow a logical sequence and proper transitions are used; the presentation conforms to the allotted time.	The presentation contains periods where rehearsal is needed; the pace is too fast or slow at times; the sequence of subject matter and visual aids are adequate but have weaknesses in transitions; the presentation runs slightly over/under time.	The presentation is a disconnected group of ideas; the majority is substantially too fast or slow; the sequencing of subject matter seems broken and transitions are not evident; the speaker had no regard for time constraints.
Style and Elocution	Speaker uses precise pronunciation; word choices are meaningful; pauses are used appropriately in place of filler words.	Pronunciation is accurate in most respects; word choices are ordinary, but suitable; uses filler words intermittently (um, uh, etc.).	Speaker has errors in pronunciation and mumbles words; word choices are vague and mundane; filler words are distracting (um, uh, etc.).
Interaction with Audience	The presenter faces the whole audience; a strong level of eye contact is present; the presenter moves away from the podium in order to engage the audience; the presentation is memorable based on the level of engagement.	The presenter faces the audience on occasion, but directs eye contact toward the instructor only; the presenter stands beside the podium; the presentation lacks engagement and is dull at times.	The presenter faces the screen or down for nearly all of the presentation; eye contact is limited to a few instances with the instructor; the presenter stands behind the podium for the duration; engagement is absent from the presentation.
Content Knowledge	Speaker's body language portrays a command of the subject matter; vocabulary reflects competence with the topic; posture and use of hand gestures in explanations are suitable and exhibit the speaker's depth of understanding of the topic; note cards are used only as cues.	Speaker's body language portrays a lack of confidence with the subject matter; speaker struggles with more advanced vocabulary but uses words that reflect some understanding of the topic; nervous behaviors are present but not distracting; some level of reliance on note cards.	The speaker's body language does not demonstrate competence in the subject matter; vocabulary reflects minimal knowledge of the topic; nervous behaviors detract from the presentation and the speaker's comfort with the subject matter; reads directly from note cards.
Pitch and Tone	The presenter speaks in an audible voice; voice projection is suitable for the audience size and the dimensions of the room.	The presentation has instances where the speaker's voice trails off, but voice projection is usually fitting for the setting.	The presenter speaks too loud or too softly for the duration; voice projection does not match the context of the audience/room dimensions.

which student learning outcomes are being reached. In using multiple measures for each outcome, programs have a greater degree of certainty that student learning is occurring. Therefore, using several direct and indirect measures is recommended in building an assessment model (Maki, 2004).

As in the previous example, take a program with a student learning outcome related to communication (see Figure 2). A sport management program using multiple assessments has more data to guide programmatic decision-making. The program also has a greater degree of certainty as to whether the outcome is being met.

Table 2.
Examples of Formative and Summative Assessments

Formative Assessments	Summative Assessments
<p>Assessments that attempt to measure a student's progress throughout the course of study</p> <ul style="list-style-type: none"> • <i>Disposition forms completed by instructors for the students' acceptance into a sport management program (end of sophomore year)</i> • <i>Oral presentation in introductory sport management class</i> • <i>Group presentation in a junior-level class</i> 	<p>Assessments that attempt to measure a student's achievement by the end of study</p> <ul style="list-style-type: none"> • <i>Exit survey</i> • <i>Internship reflection</i> • <i>Senior portfolio</i> • <i>Exit exam</i>

Perhaps as important, an accrediting agency can more readily affirm that the stated outcome is reached.

Communication may be assessed across a program in a variety of ways: during the freshman year through an in-class activity in an introductory sport management course, during the sophomore year using a presentation in a sport governance class, and during the senior year through the internship supervisor's evaluation. In this case two direct measures and one indirect measure of student learning occur over the course of a student's learning experience. A sport management program using this example will have adequate data in guiding decisions for their program. The program will also have a better idea of the degree to which the outcome is being met.

A variety of assessment tools can be used when developing an outcomes-based model. Internship evaluation forms, exit exams, pre- and posttest content exams, and alumni surveys can all be used in addition to rubric-based assessments. In determining which assessments to use, sport management faculty should return to the student learning outcomes and the course objectives. These factors should guide the assessment development process in the sport management curriculum (Gentile, 2010).

Direct Measures. Direct measures require demonstration of achievement (Allen, 2004). For example, if one of the student learning outcomes in the sport management program relates to oral communication, a presentation assignment with an accompanying tool (most likely a rubric) can be used to directly measure the skill of public speaking. The rubric could have categories based on expression of ideas, organization of the presentation, articulation of words, or any other number of oral presentation categories. These categories collectively or individually make up a score. The score is recorded and reviewed, and it can be used to aid decision making. Table 1 provides a sample rubric for oral communication.

Indirect Measures. Indirect measures of learning are useful in supplementing direct measures. Indirect measures rely on the opinion of others (or student reflection) as to whether a particular outcome is met (Allen, 2004). Commonly used indirect measures in sport management include internship supervisor evaluations, professional behavior disposition forms, student reflection papers, and student focus groups. Indirect measures provide a supplemental data collection point.

When used together, direct and indirect measures provide a well-rounded picture of the degree to which a student learning outcome is being met. If the outcome is being met by only one direct measure, the solidity of that data may be questioned. If the outcome is being met by two direct measures and an additional indirect measure, the results are much clearer because of the variety of measurements used.

Rubrics. One of the more common assessment tools for direct measurement is the rubric. In developing rubrics, faculty members decide on the key aspects of the assignment. What do faculty want students to know upon completing the assignment? Each of these aspects becomes a separate criterion within the rubric. Rubrics that use criteria for the basis of determining an overall score are called "analytic" (Hopple, 2005).

The rubric criteria should be the factors that enable the measurement of course objectives and, more importantly, program-level student learning outcomes. The desired student learning outcome should be stated at the top of the rubric. The rubric categories allow the evaluator to quantify specific criteria and confirm whether the outcome is achieved. Faculty members decide on the level of desired achievement in each assessment; however, each level of achievement must also be defined on the rubric (Brookhart, 2013).

An important aspect of creating levels of achievement is to use measurable language — each category of achievement should be distinguishable from the next and clearly defined (Brookhart, 2013). The terminology chosen depends on the degree of student learning that the assessment is intended to measure, best exemplified by Bloom's taxonomy. Bloom's work in the area of student learning was published in 1956 (Anderson & Krathwohl, 2001) and states that, at the time, nearly all learning was being assessed only on the surface. Bloom organized student learning into a hierarchy that utilized specific terminology for each level. For example, terms such as *identify*, *define* and *describe* all correspond with a lower degree of learning, while *analyze*, *synthesize*, *create* or *design* all correspond with higher-order thinking. The language in the rubric must match the intended level of learning that the assessment measures. For example, a sophomore student who demonstrates attainment of ethical reasoning may only have to *describe* on a rubric, yet a senior may have to *appraise* or *contrast*.

Data Collection. Data collected from an outcomes assessment does no good unless it is collected and stored in a useable fashion. One reason to engage in outcomes assessment that is commonly overlooked is that it supports future planning. Data obtained through consistent measurement of student learning can be employed to make decisions regarding program mission, program goals, student learning outcomes, course objectives, teaching methodology, and the assessments themselves. It is imperative to have a system of data collection in place before beginning an outcomes-based assessment plan. There are a variety of methods available for data collection and storage.

One method used commonly is the recording of raw scores of assessments into spreadsheets so that faculty members can examine

and analyze the data. Most institutions of higher education have easy access to such programs, and the data can be stored on a computer or jump drive. In order to facilitate a coordinated effort among a program's faculty, access to the data should be made easy, and, to that end, spreadsheets can be uploaded to a protected web site. Protecting student confidentiality is also a concern, so using part of a student's identification number (e.g., last four or five digits) is a proactive method in the event of a data breach.

A more advanced method of data collection is the use of a web-based data program. Web-based data management programs offer benefits beyond simple spreadsheets. Such programs make entering scores and data analysis easy. Entering scores is often all that is required, though the programs may be more costly and require initial training to operate effectively. No matter what method of data collection is chosen, the data must be accessible and in a useable format in order to aid in decision-making and "closing the loop" (Wehlburg, 2006, p. 120). The assessment process relies on interpreting the data and making decisions based on the results achieved.

Assessment and Accreditation: Avoiding the Pitfalls

Accreditation is not just an exercise in "connecting the dots" to achieve a stamp of approval. Selecting goals and student learning outcomes that are easily measured and look good in a report does not take into consideration the importance of long-term program improvement and closing the loop of assessment. Sport management program directors responsible for obtaining COSMA program accreditation must link their outcomes assessment to the college or university's strategic plan and use the collected data to improve many aspects of programming within the sport management unit (COSMA, 2010).

As stated previously, this starts with avoiding the pitfall of having too many program goals. Program directors are reminded that for every program goal, there must be a corresponding student learning outcome that will be measured. The student learning outcome is measured via direct and indirect assessments and rubrics, and the resulting data is collected, stored and analyzed. In addition, program directors are reminded to design assessments geared toward measuring the stated student learning outcomes, not students' knowledge of the CPC content. Avoiding these pitfalls and taking a "big picture" approach to outcomes assessment will take a program a long way toward accreditation — and toward program improvement.

Summary: Closing the Loop

The COSMA has developed accreditation principles based on best practices in sport management education. The principles are "helpful in determining why the sport management program is or is not achieving its mission and broad-based goals, and in interpreting the results of the outcomes assessment process" (COSMA, 2010, p. 1). Program directors can mirror the classroom assessment processes used to improve teaching by taking those concepts and applying them to outcomes assessment and accreditation. Using the data collected through outcomes assessment can improve a program's outcomes, just as in-class teaching assessments can be used to improve faculty members' teaching.

Closing the loop consists of bringing the end point back to the beginning: Program goals are developed and student learning outcomes are created to help operationalize those goals. Data is

gathered from rubrics and other assessment tools in various combinations to determine whether the student learning outcomes are being met. The data is examined and analyzed in conjunction with the student learning outcomes to understand fully what students know and can do as a result of the sport management program's curriculum. Students' achievement levels show to what extent the program is meeting its own mission and goals. Adjustments are made, and thus the loop is closed in the assessment process (Soundarajan, 2004; Wehlburg, 2006).

All these elements form an alignment (Figure 1) between the behaviors and skills students demonstrate and what faculty expect of them (Allen, 2004). Through this process, faculty and program directors can identify what was learned and to what extent during (formative assessment) and at the conclusion (summative assessment) of the students' experience in the sport management program. All assessment data should be considered in relation to the program's mission, goals and student learning outcomes. It is this continuous observation of data and effort to improve on the results that defines the COSMA outcomes assessment process.

References

- Ainsworth, L., & Viegut, D. (2006). *Common formative assessments: How to connect standards-based instruction and assessment*. Thousand Oaks, CA: Corwin.
- Allen, M. J. (2004). *Assessing academic programs in higher education*. Bolton, MA: Ankler.
- Anderson, L. W., & Krathwohl, P. W. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's Taxonomy for educational objectives* (2nd ed.). New York, NY: Longman.
- Banta, T. W., & Blaich, C. (2010). Closing the assessment loop. *Change: The Magazine of Higher Learning*, 43(1), 22–27.
- Brookhart, S. M. (2013). *How to create and use rubrics for formative assessment and grading*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Commission on Sport Management Accreditation. (2010). *COSMA accreditation principles and self-study preparation, June 2010*. Retrieved from <http://www.cosmaweb.org/accreditation-manuals.html>
- Douglass, J. A., Thompson, G., & Zhao, C. (2012). The learning outcomes race: The value of self-reported gains in large research universities. *Higher Education*, 64, 317–335.
- Gentile, D. (2010). *Teaching sport management*. Sudbury, MA: Jones & Bartlett.
- Hopple, C. J. (2005). *Elementary physical education teaching & assessment: A practical guide* (2nd ed.). Champaign, IL: Human Kinetics.
- Jacobi, M., Astin, A., & Ayala, F. (1987). *College student outcomes assessment: A talent development perspective*. College Station, TX: Association for the Study of Higher Education.
- Maki, P. L. (2004). *Assessing for learning*. Sterling, VA: Stylus.
- Nygaard, C., & Belluigi, D. Z. (2011). A proposed methodology for contextualized evaluation in higher education. *Assessment and Evaluation in Higher Education*, 36, 657–671.
- Shimon, J. M. (2011). *Introduction to teaching physical education: Principles and strategies*. Champaign, IL: Human Kinetics.
- Soundarajan, N. (2004). Program assessment and program improvement: Closing the loop. *Evaluation in Higher Education*, 29, 597–610.
- Wehlburg, C. (2006). *Meaningful course revision: Enhancing academic engagement using student learning data*. Bolton, MA: Anker.
- Weinberg, R. S., & Gould, D. (2011). *Foundations of sport and exercise psychology* (6th ed.). Champaign, IL: Human Kinetics.
- Yiamouyiannis, A., Bower, G. G., Williams, J., Gentile, D., & Alderman, H. (2013). Sport management education: Accreditation, accountability, and direct learning outcome assessments. *Sport Management Education Journal*, 7, 51–59. 