Architecting Assessment. Meeting and Exceeding ACBSP Standards with a Design-based Approach.

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Architecting Assessment

Meeting and Exceeding ACBSP
Standards with a Design-based Approach

Summary

Why is architecting assessment important?

A systematic assessment program is one the most critical issues facing business schools and programs seeking accreditation or reaffirmation. A design-based framework contains the elements to fully address ACBSP Standards and Criteria and also allows for a common language of assessment. Developing a shared understanding of the elements of a systematic assessment architecture is also essential to efforts to deliver teaching excellence and creating new knowledge informing better ways to teach.

What will you learn from this white paper?

Assessment of student learning is a critical part of ACBSP accreditation. Assessment efforts are often undertaken in business programs without the benefit of a complete and systematic approach. The use of a design-based assessment architecture ensures that assessment efforts are deployed in a systematic manner by focusing attention on critical elements. The key aspects include the structure of assessment elements, defining processes, developing organizational competency in assessment, and the use of appropriate technology.

This white paper will introduce the use of a design-based approach as an assessment approach that reflects ACBSP requirements at the program and course level as well as evaluation of the performance of the business unit. Complete systems of methods rooted in design thinking ensure that all pieces of the assessment puzzle are put in place in a complete and systematic manner.

Keywords:

Assessment of learning, student learning outcomes, program evaluation, ACBSP Standards, Baldrige Criteria, performance management, formative assessment, summative assessment, direct assessment, indirect assessment, external assessment, internal assessment, balanced scorecard, program learning outcomes, course learning outcomes.

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Demonstrating a systematic approach with solid deployment is one of the most critical aspects of ACBSP accreditation both at initial accreditation and reaffirmation.

The focus on assessment has many drivers in the rapidly changing higher education landscape. The ACBSP Standards and Criteria provide significant guidance on the needed elements of a robust assessment approach. Many schools, however, find that their approach is lacking because a focus on a singular assessment approach such as end-of-program testing, incomplete useor deployment across all programs, or a lack of integration into the fabric of teaching and learning.

The following discussion suggests a design-based approach as a means to develop and deploy an effective and systematic approach that is fully responsive to ACBSP requirements as well as best practice suggested by the Baldrige Excellence Framework. By use of design concepts, gaps in the structure of programs of assessment, incomplete processes of data collection and analysis, ineffective technology, and unclear responsibilities can be avoided.

The use of system design concepts also avoids the frequent problem of a myopic focus on instrumentation at the expense of the broader issues of ensuring that business programs produce results for students, customers, and other stakeholders.

The Assessment Challenge

A key—if not the key—value proposition of ACBSP accreditation is the focus on teaching excellence. Unlike many school ranking processes or other business accreditation approaches, ACBSP places excellence in and continuous improvement of teaching in a penultimate position. ACBSP's primary focus on teaching excellence presents two clear challenges. The first is how to define the value proposition of excellence in teaching and the second is how to communicate that value to a broad array of stakeholders. These two challenges can be met by answering four key questions:

1) Do we know what graduates need to know and be able to do?
2) Does the curriculum provide what graduates need to know and be able to do?
3) Are students on a learning path for relevant knowledge, skills, and abilities?
4) Do graduates have the competencies demanded by employers?

Understanding the value proposition of teaching—the essence of question one—begins building a clear grasp of the value of an academic program or degree to graduates and other stakeholders. Although critical, such an analysis is beyond the scope of this paper. There are, however, excellent resources to assist in this analysis such as Value Proposition Design, The Four Steps to the Epiphany, and Lean Customer Development.[1]

Providing an answer to question two—the efficacy of the curriculum content—is the first key element of designing an assessment system. Typically questions on curricular fit can be answered by certain structural elements such as the program description, program student learning outcomes (PLOs), course titles / descriptions, and course-level student learning outcomes (CLOs). Those elements need to align with the student and stakeholder value propositions(s).

Knowing whether students are on the path to learning and have mastered the needed knowledge, skills, and abilities—the third and fourth key questions—and central to effective evaluation and assessment processes. Those processes range from planning aspects of an assessment program through administration to reporting and finally a review of the program. Processes should be designed to determine if students are on a path to achieve learning of the knowledge, skills, and abilities and report to what level students have succeeded in achievement.

The following sections of this paper will develop a systematic approach to answering the key questions. The discussion of developing a

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[1] Cindy Alvarez, *Lean Customer Development: Building Products Your Customers Will Buy* ("O'Reilly Media, Inc.", 2014); Steve Blank, *The Four Steps to the Epiphany, 2nd ed.* (Pescadero, CA: K&S Ranch, 2013); Alexander Osterwalder et al., *Value Proposition Design: How to Create Products and Services Customers Want* (John Wiley & Sons, 2015).

complete and systematic approach will include a review of the key ACBSP requirements relating to assessment.

The proposed approach will be based on the use of a design thinking model to develop a holistic structure to the assessment process in the complete approach required by ACBSP Standards and Criteria. Finally, the paper will provide an overview of approaches to instrumentation and illustrative examples.

ACBSP Assessment Requirements

ACBSP Standards and Criteria are rooted in the Baldrige Excellence Framework[2], a collection of practices developed over the past quarter century based on a bi-annual best practice benchmarking process that develops improvement criteria based on practices in and recognizes role-model organizations. These types of practices of an ACBSP accredited program embodyinclude several components in what would be traditionally viewed as assessment—measuring cognitive student learning outcomes—but also include the requirement of process elements to address student and program performance.

Standard 4 and in particular Criteria 4.1, 4.2, 4.3, and 4.4, define the requirements for a program of student learning outcomes assessment.[3] The Standard 4 criteria are a mixture of process and results-based requirements. Table 1 shows the relevant criteria key requirements and whether the item is process or results based.

ACBSP Standards and Criteria are by and large performance and process based and are drafted in a fashion to be mostly non-prescriptive. Due to the non-prescriptive nature of the Criteria, the exact types of outcome measures that a business program may use are not specified. Standards of practice among ACBSP schools will dictate that certain types of measures are more or less desirable. For example, course and subject grades are not seen as appropriate assessment measures because of their aggregate nature and lack of focus on specific student learning outcomes. Other accediation sources, such as regional

Criterion	Summary of requirements	Process	Results
4.1a	Program learning objectives (PLOs)	X	
4.1b	Overall assessment process	X	
4.1c	Internal assessment approaches	X	
4.1d	External assessment approaches	X	
4.1e	Formative and summative approaches	X	
4.2	Reporting of assessment trends		X
4.3	Comparative time series data	X	X
4.4	Use of assessment data to improve education processes and student results	X	

TABLE 1. Summary of ACBSP Assessment Requirements[4]

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[2] Baldrige Performance Excellence Program [BPEP], *Educational Criteria for Performance Excellence* (Gaithersburg, MD: National Institute of Standards and Technology, 2015).

[3] The ACBSP results category is similar to the EQUIS Standards and Criteria in Student Assessment criteria in Chapter 2(f)—student assessment—and Chapter 2(g) program evaluation (citation). https://www.efmd.org/images/stories/efmd/ EQUIS/2015/ EQUIS_Standards_and_Criteria.pdf

[4] Accreditation Council for Business Schools and Programs [ACBSP], *ACBSP Standards and Criteria for Demonstrating Excellence in Baccalaureate/Graduate Degree Schools and Programs. Revision J*. (Overland Park, KS: ACBSP, 2014).

accreditation bodies, can provide guidance as the types of measures and instruments that can comprise a robust process of student learning outcomes.

ACBSP Standards and Criteria include one additional assessment-related requirement in Standard 2 of an improvement process "to better address key student and program performance requirements". The strategic process required in the main text of Standard 2 is seen as a basic or fundamental requirement of accreditation. Logically, this would be the process that is used to drive the use of assessment data in the improvement process required in Criterion 4.4.

Given the breadth of the ACBSP requirements, developing a holistic process and program of student learning assessment requires more than a haphazard approach. Because of the need to involve many parts of the organization, it is also important to include design elements addressing more than just the

structure and processes of the assessment program. A successful assessment program should include aspects addressing the organizational capabilitiesof administering, using, and analyzing assessment such as the needed workforce skills as well as technology enabling the program to operate. Those elements are discussed in Section 3 below.

The Need for a Design-Based Approach

A common issue with assessment in higher education is that the approach taken at the university and program level is often fragmented. Figure 1 below illustrates an all-to-common approach with myriad of disconnected parts.

The figure above illustrates several common disconnects or issues that arise in developing an assessment approach. The disconnects or common failings can be thought of in four categories: elements in the basic structure
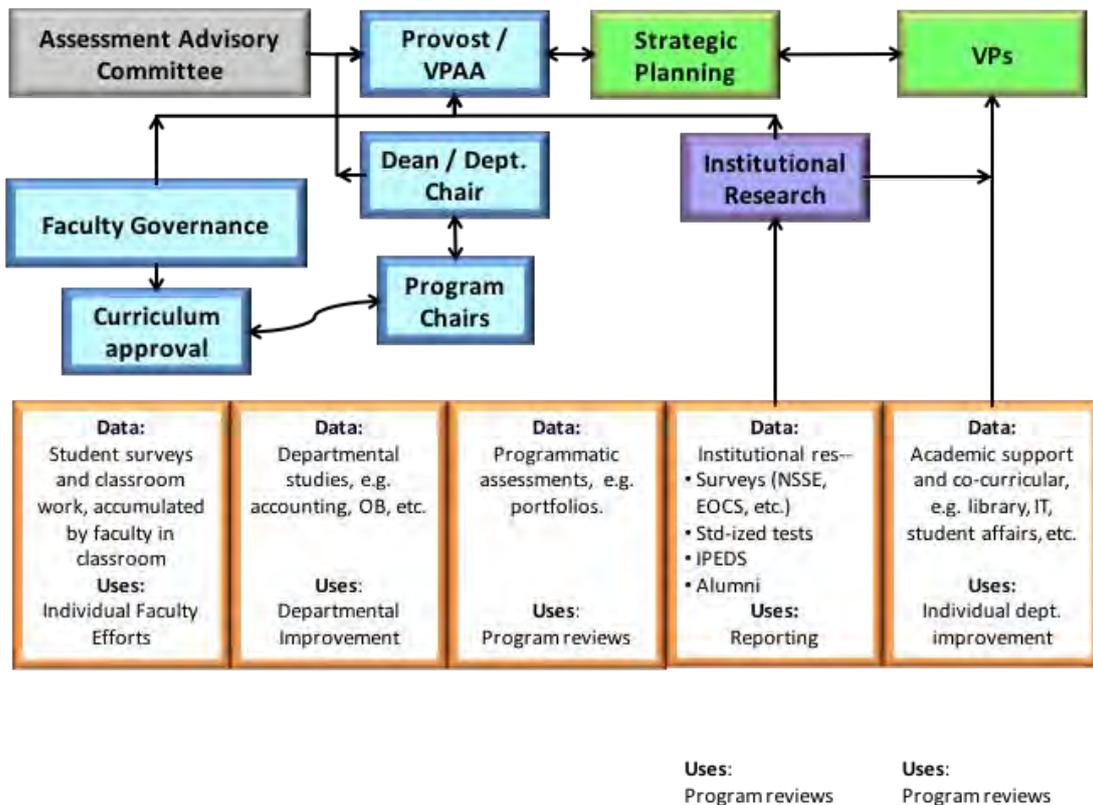

FIGURE 1. A problematic assessment system[5]

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[5] Adapted from Barbara E Walvoord, _Assessment Clear and Simple: A Practical Guide for Institutions, Departments, and General Education_ (John Wiley & Sons, 2010).

of the approach; assessment processes; inappropriate use of technology; and inadequate skills training in assessment. Classrooms, departments, and programs live as data islands. There is little or no connectivity in terms of common approaches or the consistent use of data.

Common issues relating to the processes of assessment often reside in a lack of shared understanding across the organization about how the processes of assessment should be carried out. Typical issues include blurred or non-existent assessment roles and responsibilities. It is is also all too common that there are multiple cycles of improvement isolated from one another, despite the ACBSP requirement of a consistent continuous improvement process.

Because of the abundance of technology solutions available to educators, technology drift also is a common problem. Frequently one-off approaches to technology are implemented by the most technology astute faculty. The availability of free or relatively low cost rubric, grading, and survey technology permit individual solutions for each classroom. Although the use of technology often represents the ability to create a more engaging and interesting classroom environment, the ability to aggregate data to allow systematic tracking and trending across the business unit and program is lacking.

Perhaps the most tell-tale sign of problematic assessment is inconsistency in the human or people element of a systematic approach. A common issue comes from unclear, separated, or disjointed assessment responsibilities among faculty, staff, and administration resulting in silos of data collection and use. As depicted in Figure 1 the lack of process can lead to data not being effectively used. It is also common during site visits to see a central assessment department collecting and aggregating data with little cross-functional inter-departmental perspective.

The alternative is to develop and deploy a systematic and complete approach to

assessment. Within the purview of the ACBSP Standards and Criteria as well as the Baldrige Criteria, there is guidance on how to determine whether an approach is systematic and complete. The next section will discuss how to define a framework for a systematic and complete approach to assessment and evaluation.

The discussion of what constitutes a complete and systematic approach should start with an understanding of the idea of *approach*, which is a term of art in the ACBSP / Baldrige area. The current ACBSP Standards contain a definition of approach as follows:

> The term "approach" refers to the methods used by an organization to address the criteria requirements. Approach includes the appropriateness of the methods to the requirements and the effectiveness of their use.[6]

The Baldrige definition adds the element of that "[a]pproach is one of the factors considered in evaluating process" and specifically the maturity of the process[7].

In the context of assessment, the sub-criteria to ACBSP Criteria 4.1 establish the minimum elements consisting of PLOs, internal and external assessment approaches, formative and summative processes, reporting with time series, and comparisons to external comparative sources. To be complete, all of these elements need to be present and evidenced in the institution's overall approach to assessment. The presence of the various elements, however, is not enough to ensure that the approach is *systematic*, which is a further requirement of the Standards and Criteria.

Systematic is a defined term of art for ACBSP and refers to "approaches that are repeatable and use data and information so learning is possible".[8] The current Baldrige criteria further inform the understanding by explaining that something is systematic if it is "[w]ell-ordered,

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[6] ACBSP, *ACBSP Standards and Criteria for Demonstrating Excellence in Baccalaureate/Graduate Degree Schools and Programs. Revision J., 62.*

[7] BPEP, *Educational Criteria for Performance Excellence*, 53.

[8] ACBSP, *ACBSP Standards and Criteria for Demonstrating Excellence in Baccalaureate/Graduate Degree Schools and Programs. Revision J., 71.*

repeatable, and exhibiting the use of data and information so that learning is possible." [9] Thus, an acceptable approach to assessment requires not only the constituent parts but also that those parts work together. The following sections describe how a design-based approach can deliver a holistic approach to assessment.

A Design-Based Assessment Architecture for ACBSP Requirements

The concept of basing academic assessment on a approach based on design is not new. At the primary and secondary levels of education excellent works such as that of Marzano and Pickering, Wiggins and McTighe, and Suskie,[10] have focused on the design of assessments to ascertain levels of student learning. Pellegrino, Chudowsky, and Glaser in their well-researched work, *Knowing What Students Know. The Science and Design of Educational Assessment*,[11] summarize thinking in the area by describing the complex interrelationships of curriculum, instruction, and assessment. Elements such as program learning outcomes, external and internal assessments, and formative vs. summative assessments are reflected in the literature and practice surveyed by these authors. The sub-criteria in ACBSP Criteria 4.1 ACBSP require these elements and thus reflect the mainstream of assessment literature and practice.

The idea that curriculum should be improved as a result of assessment is also prevalent in current thinking and literature. The explicit design of assessment to capture an understanding of the student and stakeholder value propositions in curriculum is a concept present in some assessment literature but often not a central point of focus.

The Key Differences of ACBSP Standards

A significant difference of ACBSP's approach to assessment lies in the types and extent of integration of multiple aspects of the assessment. The requirement of integration is reflected in the evaluation factors requiring full *deployment* of the assessment processes. Unless assessment is carried out in an integrated fashion throughout the organization, the process will be considered as needing improvement and may result in the inclusion of notes or conditions in the accreditation decision.

ACBSP's focus on knowledge used specifically for assessment process improvement also represents a much needed extension of existing practice largely missing in assessment literature. This aspect is derived through the rating factors for the *learning* component of process evaluation and the *linkages* aspect of results evaluation. The current Baldrige Criteria, which have evolved these ideas, provide additional insight through the definitions of organizational *learning* and *integration*.

The Baldrige definition of processed-focused learning is as follows:

- "the refinement of your approach through cycles of evaluation and improvement,

- "the encouragement of breakthrough change to your approach through innovation, and

- "the sharing of refinements and innovations with other relevant work units and processes in your organization".[12]

The linkages language in the ACBSP Standards has been replaced in the Baldrige results rating factors with *integration*, which is defined as "the extent to which

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[9] BPEP, *Educational Criteria for Performance Excellence,* 53.

[10] Robert J Marzano, Debra Pickering, and Jay McTighe, *Assessing Student Outcomes: Performance Assessment Using the Dimensions of Learning Model* (ERIC, 1993); Linda Suskie, *Assessing Student Learning: A Common Sense Guide* (John Wiley & Sons, 2010); Grant Wiggins and Jay McTighe, *Understanding by Design* (Alexandria, VA: ASCD, 2005).

[11] James W Pellegrino, Naomi Chudowsky, and Robert Glaser, *Knowing What Students Know. The Science and Design of Educational Assessment* (Washington, DC: National Academy Press, 2001).

[12] BPEP, *Educational Criteria for Performance Excellence*, 30.

• "your results measures (often through segmentation) address important performance requirements relating to students and other customers, educational programs and services, markets, processes, and action plans identified in your Organizational Profile and in process items;

• "your results include valid indicators of future performance; and

• "your results reflect harmonization across your processes and work units to support organization-wide goals." [13]

Using a Design Approach

In order to deliver the based assessment requirements of structure and process and the organizational learning aspects, a different design approach is needed. Figure 2 illustrates a design approach that addresses ACBSP requirements fully.

The model depicted by the diagram can be used at the degree program level or for a portfolio of academic programs comprising multiple degrees, with majors, concentrations, or specializations. The value propositions served by the program are the first point of focus and should ultimately drive the overall design of assessment. Supporting the value proposition, there are four types of design components represented by the structure, process, people, and technology columns in the diagram

Structure. The elements in the structure column are representative of the requirements of ACBSP Criterion 4.1a. Learning outcomes are shown in what is a typical cascading hierarchy from program descriptions to program learning outcomes, course descriptions and course-specific learning outcomes. The types of assessments, e.g. tests, papers, projects, etc., used are also typically described in the structural elements of an assessment approach.
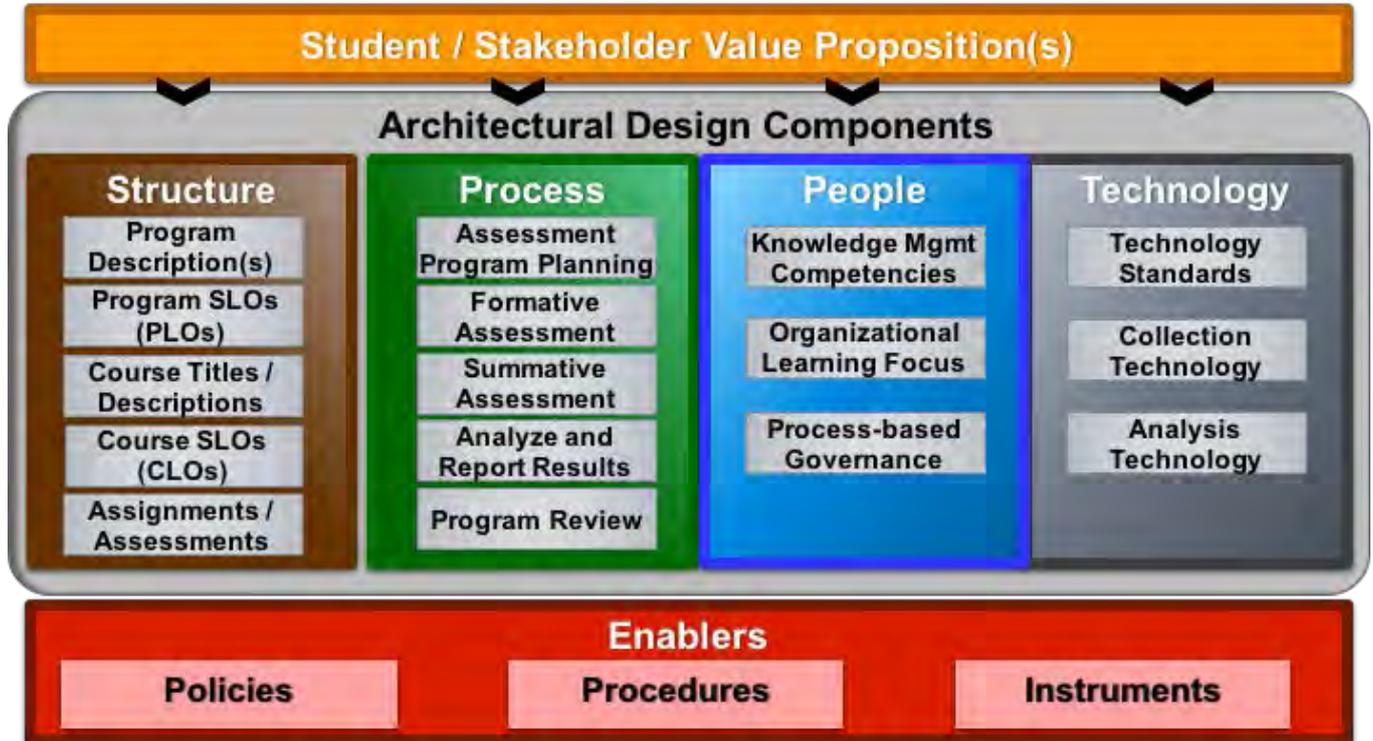

FIGURE 2. A design-based assessment architecture

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[13] BPEP, ibid.

Process. The elements in the process column are representative of the requirements of ACBSP Criteria 4.1b, 4.1c, 4.1d and 4.2 .[14] Program review—sometimes forgotten as a part of assessment—is a requirement in Criterion 4.4. In these criteria, ACBSP does not prescribe any specific model of assessment processes. In addition to substantial literature in the field of assessment processes, the sharing of best practices at conferences provides another avenue to discover improved approaches.

People. Reflecting the diversity of accredited institutions, the specific roles and responsibilities for assessment are not definitively specified in the ACBSP Standards and Criteria. Assessment ultimately is a people-driven process and succeeds or fails based on the abilities of faculty and staff to develop, deploy, and improve a program of assessment. As well, assessment is a knowledge management set of activities and benefits from deploying practices such as ensuring that faculty and staff understand knowledge management and that processes promote learning at a business unit or university level. There are a myriad of approaches to developing a robust knowledge management system aptly summarized by Dehghani, et al. [15] The competencies needed to successfully develop and deploy an assessment approach using basic knowledge management concepts would include understanding of broad concepts such as metrology, classification, data capture, analysis, and interpretation.[16]

Process-based governance establishing the roles relating to assessment is also critical to avoiding dysfunction in assessment. In most academic organizations assessment is carried out in what could be termed product-based organizations usually focused on programs or knowledge disciplines. Absent cross-departmental process governance concepts, assess-ment will be disjointed and carried out in silos. The similar experience of companies engaging in business-process management clearly points to the need for this essential management structure.[17] A suitable approach to implementing process-based governance is to implement a cross-unit assessment council or committee, charged with the oversight of the assessment processes.[18]

Technology. The technology column is intentionally shown last because technology should be selected based on the desired structures, processes, and human competencies involved in establishing the overall assessment approach. Technology should not be selected randomly based on specific feature sets. Instead, technology selection decisions should be consistent with an overall technology architecture, which is highly important to allow the movement of data between and among systems. When choosing technology the typical types of solutions of highest impact are data collection or capture and analysis.

The falling cost of tools such as centralized rubric software, e.g. Rubrix®, Turnitin®, etc. allow the capture of data from a range of faculty into a central data set that allows for analysis. The use of any of these technologies without basic standards around the technology, collection processes, and time periods will not lead to a systematic capture of data supportive of solid analysis and trending. A common example of where basic standards are needed can be seen in the current dialogue about student success in completing academic programs. It is all too common in a university for there to be multiple definitions of key concepts such as student retention, graduation, progression, etc. Absent agreed definitions and corresponding data sources, little systematic management and comparison is possible.

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[14] Section 5g of the Institutional Overview also contains a specific reporting requirement for making assessment data publically available in some fashion. This requirement is often overlooked by applicants for accreditation or reaffirmation.

[15] Razieh Dehghani et al., "Methodologies for Developing Knowledge Management Systems: An Evaluation Framework," *Journal of Knowledge Management* 19, no. 4 (2015).

[16] Eliezer Geisler and Nilmini Wickramasinghe, *Principles of Knowledge Management: Theory, Practice, and Cases* (New York: Routledge, 2015).

[17] Michael Rosemann and Jan vom Brocke, "The Six Core Elements of Business Process Management," in *Handbook on Business Process Management 1*, ed. Michael Rosemann and Jan vom Brocke (Heidelberg: Springer, 2015).

[18] Walvoord, *Assessment Clear and Simple: A Practical Guide for Institutions, Departments, and General Education.*

Enablers. The enablers of policies, procedures, and agreed instruments allow the assessment processes to function in a consistent or systematic and repeatable fashion. These types of architectural elements would be familiar to anyone implementing a quality management system such as ISO 9001 in a commercial enterprise. In academia, however, systematic approaches to the definition and use of policies and procedures are often not the norm but would provide great benefit.[19] Policies and procedures could include such things as whether there are signature assignments—requirement assignments for all professors, the points at which different types of assessments are to be used, program review schedules, etc. Ensuring consistency and ultimate data comparability will often depend on the instrumentation.

Relating Design Elements at the Business Unit, Program, and Course Levels.

As mentioned above, higher education institutions often have a plethora of assessment tools in use, often without a clear understanding of what tools or instruments serve different purposes. One approach to represent the collection of tools and instruments in a cohesive manner is to depict instruments against certain processes and ACBSP Standards and Criteria. Figure 3 shows an approach to represent the various options available to a business program in relation to the ACBSP Standards and Criteria that define required evaluation and assessment. The figure shows the three levels of the business unit, the academic program, and for individual courses. When transitioning from
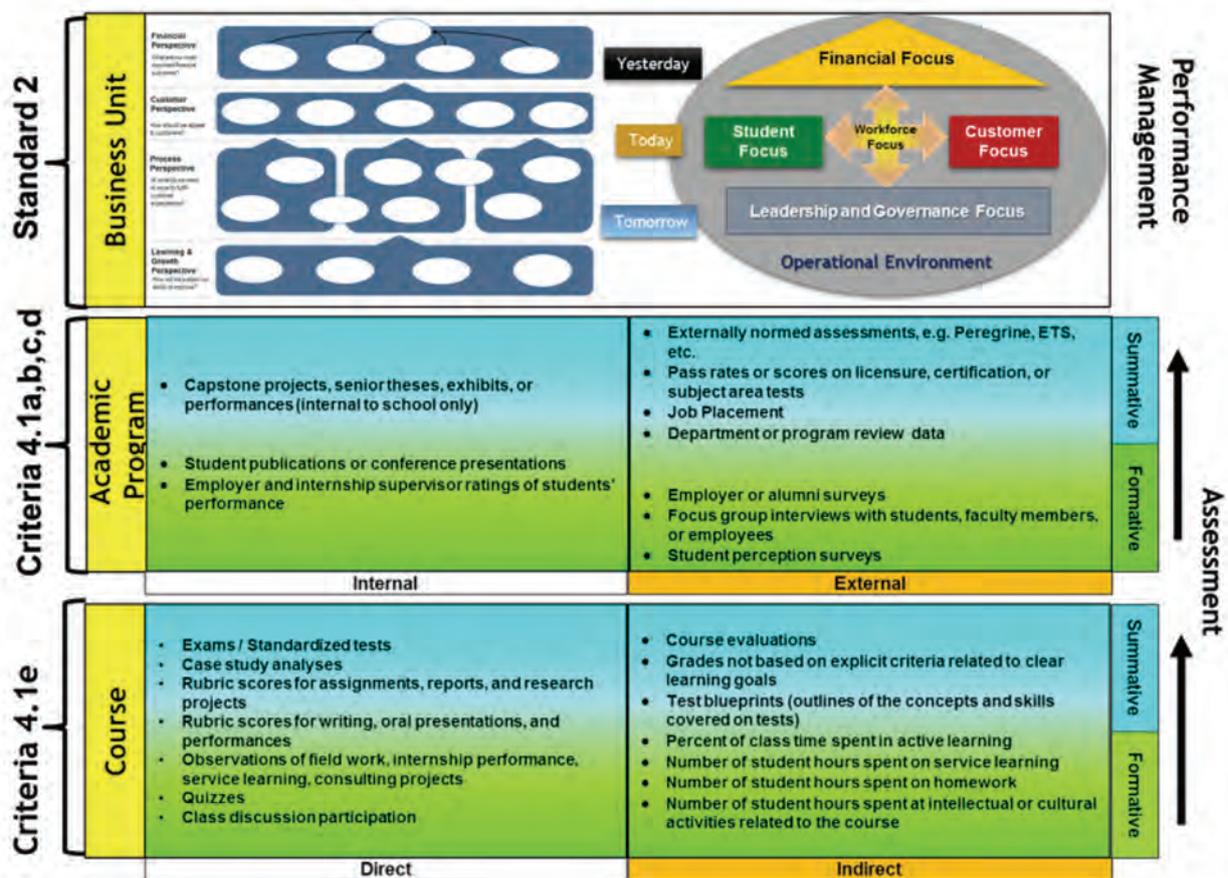

FIGURE 3. Depiction of tools and instruments with processes and standards

[19] NMMN Azizaman et al., "ISO 9001: 2008 Implementation in Higher Education: Does It Contributes to the Student Satisfaction?" (paper presented at the The Role of Service in the Tourism & Hospitality Industry, Jakarta, Indonesia, August 23-24 2014).

course and academic program to the business unit level, the shift from assessment to organizational performance management is shown.

At the business unit level two approaches at structuring tools and instruments are shown. The first is a representation, on the left, is that of the strategy map / balanced scorecard model, an approach often used by corporations following the work of Kaplan and Norton.[20] The second representation is an adaptation of a performance measurement framework developed at Skandia and inclusive of intellectual capital elements [21] coupled with the framework used in the Baldrige Criteria. The advantages of the different approaches would merit a separate paper. For purposes of this analysis, the two approaches are shown to illustrate the need to have a framework for performance of the business unit as a whole that is distinct from student assessment of learning.

The second tier of the figure captures examples of assessment instruments that can be used to address the requirements of assessment at the program level. To satisfy Criteria 4.1a and b learning outcomes and assessment processes must be stated. The distinctions of internal and external assessment, as required by Criterion 4.1c, and d and shown at the program level along with the distinction of formative and summative as required by Criterion 4.1e.

The third tier represents the implicit requirements of the ACBSP Standards and Criteria and demonstrates instruments and models used at the course level. As with the second tier the formative and summative distinction is retained. Unlike the internal and external distinction at the program level, course level measures tend to be distinguished as direct and indirect in nature.

The following section provides illustrative examples of the deployment of performance measurement and assessment approaches. The examples are meant to be suggestive and not representative of a prescriptive or definitive solution. Each business unit will

Identify and Meet Community Educational Needs	Monthly Score		Previous Month Score	End of Year 07/08 Score
Five Key Performance Indicators				
Initiate proactive community relationship building (5%)	9.94	🟢		
Conduct open, regular communication with community stakeholders (10%)	10.00	🟢		
Increase enrollment in service area underserved populations (15%)	10.00	🟢		
Provide business and industry work force training (20%)	8.81	🟡		
Respond to community educational needs (50%)	9.23	🟢		
Enable All Students to Succeed	Monthly Score		Previous Month Score	End of Year 07/08 Score
Three Key Performance Indicators				
Monitor and improve student success (40%)	9.75	🟢		
Monitor and improve success for historically under-served student groups(40%)	9.56	🟢		
Provide proactive student services to address student learning needs (20%)	9.56	🟢		

FIGURE 4. KPI Dashboard with Student Learning Outcomes
(http://www.richlandcollege.edu/assets/uploads/2015/03/Alabama.ppt)

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[20] Robert S Kaplan and David P Norton, *Strategy Maps: Converting Intangible Assets into Tangible Outcomes* (Harvard Business Press, 2004).

[21] Sengun Yeniyurt, "A Literature Review and Integrative Performance Measurement Framework for Multinational Companies," *Marketing Intelligence & Planning* 21, no. 3 (2003).

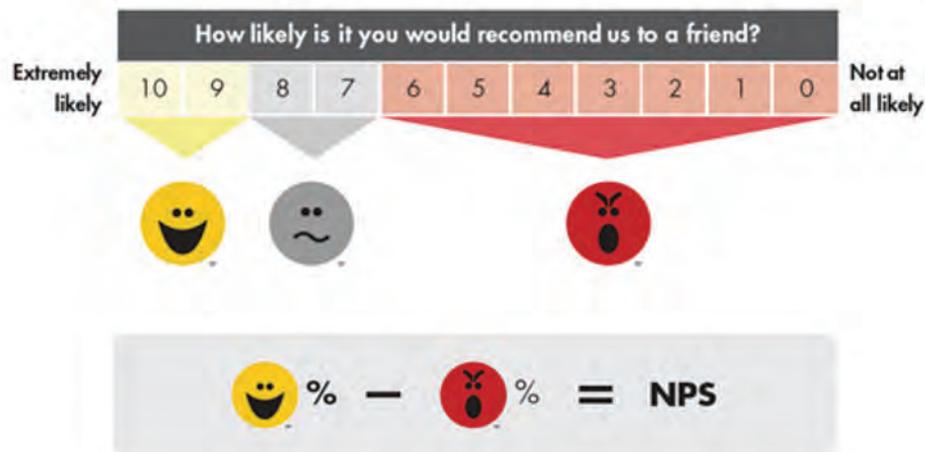likely have slightly different solutions depending on a combination of organizational needs and type as well as the students and stakeholders served.

Examples of Performance Measurement and Assessment Approaches

The first example, shown in Figure 4, is that of a college-level key performance indicator (KPI) report. This example demonstrates an approach taken by the national Baldrige Award recipient Richland College in Dallas, Texas. The KPI dashboard is linked directly to the college's strategic goals including certain student learning outcomes. The example illustrates how student outcomes can be tracked, trended, and monitored at the highest level of the operating unit. The approach would respond to the requirements both of Standard 2 and the Criteria under 4.1.

The second example, exhibited in Figure 5, shows the reporting of the use of signature assignments evaluated using a standard rubric. The use of signature, or what are sometimes called lock down assignments, is commonly seen in ACBSP accredited programs and re-

sponds directly to Criteria 4.1c. To respond to Criteria 4.1c the evaluation rubric needs to be against learning outcomes and not solely for grading. Rubrics can be multi-purposed to provide both grading and programmatic outcome information. In this case a software tool, Waypoint, was used to allow the dual purposing of scoring by faculty members.

Example three in Figure 6 shows the use of the net promoter (NPS) score to measure overall student satisfaction with a course, teaching or a program. The NPS measure looks to the willingness to recommend as a measure of overall satisfaction and quality. This type of evaluation is an external measure responsive to Criteria 4.1d. Responses of 9 and 10 are seen as promoters, 7 and 8 as neutral, and 6 or below as detractors. The goal is to deliver services that will engender as many responses of 9 and 10 as possible.

The next example, in Figure 7, shows a longitudinal or trending score report of percent correct answers to a series of questions in the Peregrine Academic Program Assessment concerning ethics. This example illustrates an approach responsive to Criterion 4.2 trend data

FIGURE 5. Signature Assignment Scored and Reporting using Rubric Software
(University of the Rockies, sample report, June 2015)

FIGURE 6. Net Promoter Score as Satisfaction Measure
Bain & Co. (http://www.netpromotersystem.com/about/measuring-your-net-promoter-score.aspx)

requirement. The results reported are based on a progression of administrations of the assessment. Typically development of trending data requires results from multiple semesters although non-term and module programs, which usually do not use semesters, could develop comparisons in shorter time periods.

The last example, in Figure 8, illustrates the presentation of external comparisons and benchmarking based on the Peregrine Academic Program Assessment examinations. The example shows comparisons of a one program's outcomes on the examinations against an aggregate pool of reference institutions. In this case the modality of delivery—hybrid—is an important characteristic of the reference institutions. This example responds to the requirements of Criterion 4.3, which requires comparisons. Depending on the reference institutions chosen, this approach could extend the analysis beyond comparisons to that of benchmarking, which is defined by the ACBSP Standards and Criteria as "an approach to understand the current dimensions of
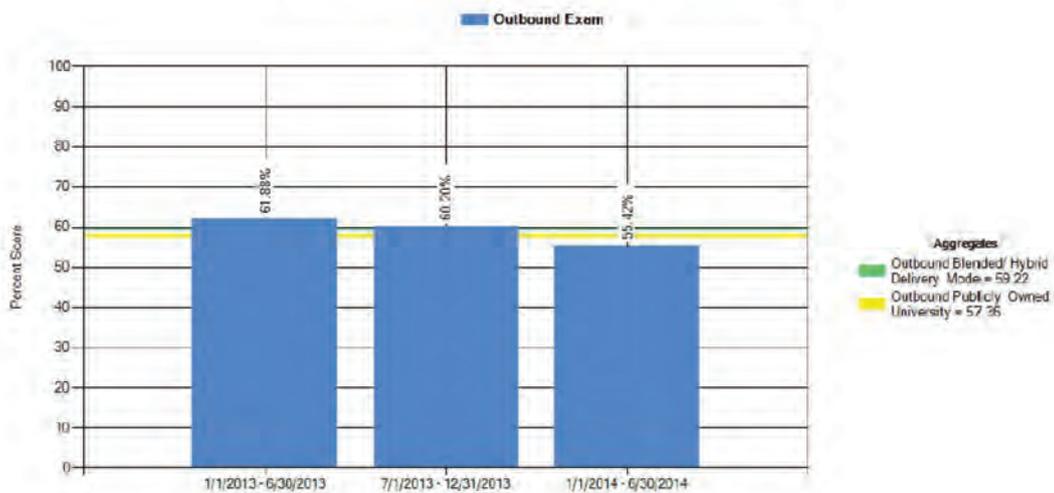

FIGURE 7. Longitudinal Results from the Peregrine Academic Program Assessment
(Peregrine Academics, sample reports, June 2015)

world-class performance and to achieve discontinuous (non-incremental) or break-through improvement."[22]

The examples presented in this section are not meant to portray all possible approaches to the use of evaluation and assessment data to understand student learning and organizational performance. Different approaches may be warranted based on an institution's mission, vision, and values and the students and stakeholders served. The types of approaches, however, are indicative of what may best practice institutions are undertaking in responding to the ACBSP accreditation requirements.

Conclusion

In contrast to many accrediting bodies, ACBSP has developed a series of standards and criteria that require a holistic approach to the evaluation and assessment of both student learning and program efficacy and performance. This paper suggests that the use of a design-based assessment and performance management architecture presents a practical and understandable manner to meet ACBSP's requirements. The architecture goes beyond the singular selection of instruments and allows for consideration of needed structures, processes, organizational capabilities, and technologies. By understanding the relationship of those elements, the development of a complete and systematic approach is possible.
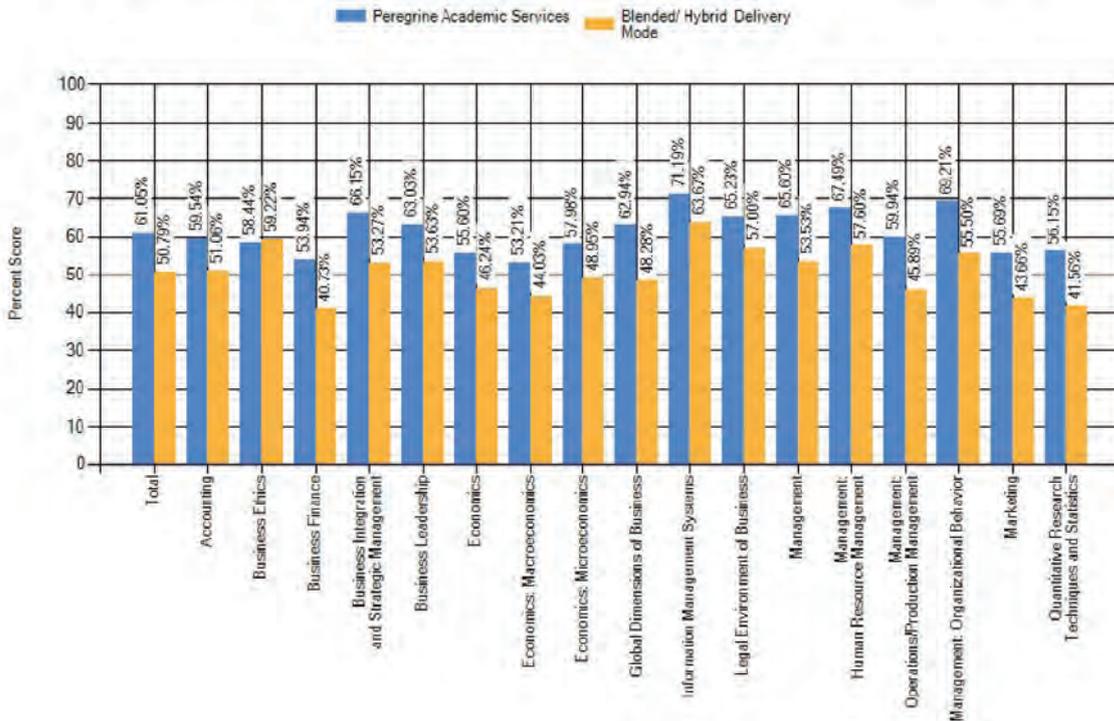

FIGURE 8. Comparative Results from the Peregrine Academic Program Assessment
(Peregrine Academics, sample reports, June 2015)

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[22] Accreditation Council for Business Schools and Programs [ACBSP], *ACBSP Standards and Criteria for Demonstrating Excellence in Baccalaureate/Graduate Degree Schools and Programs. Revision J.*, 63.

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