Why is it that we entertain the belief that for every purpose odd numbers are the most effectual?

- Pliny the Elder

This column will continue to focus on institutional effectiveness High Impact Practices (IE/HIP) coincident to and culturally significant to the academic/nonacademic implementation of IE standards specifically at the program-, department-, and institution-levels. In the prior IE HIPs article, I posited that institutional – and for that matter, institution-aligned departmental – mission statements drive outcome formulation as well as actualizing their concomitant downstream assessment processes. This column will focus on outcomes, or – more specifically, “outcome management,” which was originally both a now widely applicable assessment locution and a seminal medical construct attributable to the “father of HMO,” Dr. Paul M. Ellwood Jr.’s 1988 Shattuck lecture.

Noted student learning outcome scholar, J. Fredericks Volkwein, has observed that outcomes “are central to the purpose of educational organizations, and the assessment of these outcomes supplies some of the most important evidence demonstrating institutional effectiveness” (2011, p. 3); and, hopeful of outcome quality, Ogles asserts, “outcome assessment also generates quality assurance data” (2002, p. 2). In a 2016 Direct Assessment Competency-based Educational Programs Policy Statement, SACSCOC co-opts the DOE definition of Direct Assessment, i. e.: Federal regulations define a direct assessment competency-based educational program as an instructional program that, in lieu of credit hours or clock hours as a measure of student learning, uses direct assessment of student learning relying solely on the attainment of defined competencies, or recognizes the direct assessment of student learning by others. The assessment must be consistent with the accreditation of the institution or program using the results of the assessment.

Trudy Banta, the doyenne of U.S. higher education assessment, recently underscored the fundamental nature of outcome assessment as an all-important qualitative determinant of directly-measurable student learning: “For many years I have considered student learning outcomes (SLOs) essential foundation materials for assessment. That is, SLOs tell students what they should learn and faculty what they should teach and assess. They also tell employers, accreditors, colleagues, and other stakeholders what a given class, or program of study, should prepare students to know and do…[they] guide course and program design and instruction, then furnish the criteria for evaluating student learning as well as course and program quality. It is SLOs that anchor competence-based courses and degree programs.” (Banta, 2016, p. 3).
Philosophically, SACSOC notes that accreditation is both a product (presumably, a product more than simply a compliance report: more importantly, perhaps, the desired product is the reification of a learning-transformative improvement) and a process (Principles of Accreditation, 2012, p. 2; and 2017, p. 2). For this column, that process is cognate with the SACSCOC-defined IE algorithmic assessment process, which I cite below. Early on, i.e., 1987, three years after SACSCOC introduced the IE construct to higher education assessment, Maryann Jacobi remarked, “the assessment of cognitive outcomes…is perhaps the most difficult task associated with assessment” (p. 30). More recently, Banta, has also emphasizes that “outcomes assessment is at the highest level of cognitive complexity” (Suskie, 2009, p. xiv). Moreover, reductionistically, outcomes themselves comprise cognitively complex "multidimensional concepts," which Frattali insightfully defines “only in terms of the desired results of an intervention” (1998, p. 8). Yet, for our ad rem assessment purposes, I more readily adopt Ruben's generic working definition that, "Outcomes are the organization’s current documented accomplishments, achievements and performance over time. These may relate to purposes and plans, leadership practices, relationships with the beneficiary and constituency groups and organizations, programs and services, faculty/staff and workplace climate, and its approaches to metrics, assessment, and analysis" (2016, p. 66). Outcomes may be established at the institution-level, but – within the context of the PECC – are generally predicated at the institution-leveraged course- or program-levels:

For examples, see Barkley’s “Learning Goals Inventory” (ibidem, p. 425ff, or at https://www.aacu.org/sites/default/files/files/gened16/AlabamaLearningGoals.pdf).

As illustrated below, additionally, Khosrow-Pour provides both a course-level template for “Coursework Assessment” (i.e., an “objective-assessment alignment organization chart”) and a course-modeled example (i.e.: “adapted alignment organization chart”) of a completed template.

**Image 1: Institutional Core Competency to Course-level Outcome:**

(Barkley, 2016, p. 16)

**Image 2: Objective-Assessment Alignment Organization Chart:**

<table>
<thead>
<tr>
<th>Coursework Assessment Item</th>
<th></th>
</tr>
</thead>
</table>
### Course Objective(s) relating to coursework assessment item

1. 
2. 
3. 

### Modular Objective(s) relating to coursework assessment item

1. 
2. 
3. 

### Exam/Capstone Project Item(s) relating to coursework assessment item

1. 
2. 
3. 

(Khosrow-Pour, 2013, p. 10)

---

**Image 3: Adapted Alignment Organization Chart:**

<table>
<thead>
<tr>
<th>Course Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>After completing <em>Western Civilization I</em>, you should be able to discuss:</td>
</tr>
<tr>
<td>The struggle between kings who believed their power was absolute and granted by God, and representative bodies, such as parliament.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Modular Objective(s) relating to course objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The belief asserted by European kings that their power to rule was absolute and given by God.</td>
</tr>
<tr>
<td>2. The rise of France during Louis XIV’s reign and the efforts by other European states to check its power and influence.</td>
</tr>
<tr>
<td>3. The struggle between parliament and King Charles I in England and the resulting civil war.</td>
</tr>
</tbody>
</table>

**Coursework Assessment**

Assessment type: Written assignment question(s), quiz question(s), discussion question(s), problem(s) etc., relating to course objective-modular objective(s) and exam/capstone project assessment components.

1. Although the idea of an “absolute” ruler is not acceptable in modern Western society, what, in your opinion, was Louis XIV able to achieve by having close to absolute power that he could not have achieved through representational government?

1. 
2. 

**Exam/Capstone Project**

Assessment component(s): question(s), problems(s), etc., relating to course objective, modular objective(s) and coursework assessment.

1. 
2. 
3. 

*(ibidem, p. 11)*
NILOA research analyst Terry Vaughan perspicaciously notes that developing institutional-level SLOs involves various constituents negotiating what counts as student learning within their context. This includes being aware of the mission and strategic goals of the institution. In crafting learning outcomes, constituents are bound to have different interpretations of what a student ought to know and, ideally, how to determine if their institution is fulfilling this notion. Thus, developing student learning outcomes at the institutional level requires negotiation, where people exchange and challenge the ideas and assumptions of colleagues. The practice calls for the articulation of values and the use of reason toward defining what exactly it means for a student to learn at a specific institution. As such, student learning outcomes do not appear from the sky; people with agendas, ideas, and/or perspectives struggle over meaning as they construct such outcomes. (2016, p. 4)

This Within this context, coincidentally, SACSCOC defines institutional effectiveness as: INSTITUTIONAL EFFECTIVENESS:
Institutional effectiveness is the systematic, explicit, and documented process of measuring performance against mission in all aspects of an institution.

*SACSCOC Resource Manual, p. 115*

To provide a broader perspective, the aforementioned SACSCOC regional accreditation definition does not accord with the more holistic perspective of at least one assessment guru, Linda Suskie, whose amplification states that:

“Institutional effectiveness refers to the effectiveness of an entire college, as opposed to specific programs, services, or initiatives. Many people—and some accreditors—think of institutional effectiveness as a college’s effectiveness in achieving its purpose (mission) and goals. I think that is too narrow; it ignores the other fundamental responsibilities discussed here. I therefore define institutional effectiveness as a college’s effectiveness in meeting all five fundamental responsibilities listed here.” (p. 148)

Her five fundamental responsibilities include:

1. Meet stakeholder needs, especially its students’ needs.
2. Keep its promises.
3. Ensure its health and well-being, and deploy resources effectively, prudently, and efficiently.
4. Serve the public good.
5. Demonstrate its quality and effectiveness in fulfilling these responsibilities. This is accountability. (*ibidem*)
A plethora of other perspectives also exist, e.g. one articulated in innovative educational assessment guru Jack Schneider’s recent Harvard University Press book, *Beyond the Scores: A Better Way to Measure School Quality*, whose **Key Outcomes** (i.e. results) are illustrated below:

**Image 4: Somerville (Massachusetts School District) School Quality Framework**

In contradistinction to these cognoscenti-speak, SACSCOC does not define “outcomes,” but – in its gloss on the critically important IE comprehensive standard 3.3.1, the **SACSCOC Resource Manual** does provide the following elucidative commentary:

...institutions should interpret “expected outcome” in a manner consistent with that administrative unit’s role in the institution. It is the institution’s responsibility to explain how and why these expected outcomes are determined.

*SACSCOC Resource Manual, p. 61*

Among the guides listed on the SACSCOC web page are four documents developed by the Council of Regional Accrediting Commissions (CRAC), an organization of the six regional commissions in the United States that accredit degree-granting institutions. The web page states, “The documents provide a framework within which institutions, regardless of regional affiliations, might give a central focus to student learning as a demonstration of institutional quality.” Each document foregrounds the following salient mission-reflexive aspects of outcomes:

1. **The centrality of student learning in its mission.** The institution defines educational quality—one of its core purposes—by how well it fulfills its declared mission on student learning.
2. **Documentation of student learning.** The institution demonstrates that student learning is appropriate for the certificate or degree awarded and is consistent with the institution’s own standards of academic performance. The institution accomplishes this by: a. setting clear learning goal, that speak to both content and level of attainment; b. collecting evidence of goal attainment using appropriate assessment tools; c. applying collective
judgment as to the meaning and utility of the evidence; and d. using this evidence to improve its programs.

3. **Compilation of evidence.** The institution derives evidence of student learning from multiple sources, such as courses, curricula, and co-curricular programming, and includes effects of both intentional and unintentional learning experiences. Evidence collected from these sources is complementary and demonstrates the impact of the institution on the student.

4. **Stakeholder involvement.** The collection, interpretation, and use of student learning evidence is a collective endeavor, and is not viewed as the sole responsibility of a single office or position. Those in the institution with a stake in decisions of educational quality should participate in the process.

5. **Capacity building.** The institution uses broad participation to reflect upon student learning outcomes as a means of building a commitment to educational improvement.

While all this is contributory information, in the final analysis, it is tangential to what **outcomes** actually are: fundamentally, outcomes are results – not desired student learning results, but gilt-edge, rubber-hits-the-road results of meaningful and measurable student learning: not what might be student learning; but what is learned. Taxonomically, outcomes should be differentiated from **outputs**: “Positive metrics should emphasize outcome, rather than output, measurements wherever possible” (Shapiro, 2008, p. 1770). From the perspective of a librarian, in her recent LJ article entitled *Meaningful Measures | Assessment*, Koerber suggests:

> Libraries are very good at counting outputs…it’s more difficult to count outcomes,” says Stacey Wedlake, research and communication coordinator for Impact Survey, one of several national projects developed over the past ten years to help public libraries jump that hurdle. “It takes a different way of thinking and approach to understand and then count how people **were changed due to the access and use of your services.**” (2017, n. p.)

Irrespective of its library-specificity, the key behavioral impact for these outcome taxonomies is “were changed due to [some intervention].” In the following excerpt, whose most salient sections I have bolded, research scholar, Darla Deardorff differentiates outcomes from outputs:

**Outputs**

*Who is involved in the activities and who are the activities affecting? Outputs often include participation numbers, such as the number of students in an education-abroad program. A prime example of outputs is the participation numbers appearing in the annual Open Doors report published by the Institute of International Education. While numbers can be a starting point for assessment, we need to go beyond numbers to outcomes (changes) if we want to know the results of international education efforts.*

**Outcomes**
What are the results of the learning activity for individuals, programs, departments, and the institution? The results are the expected or actual effects of the outputs of an intervention (activities). In other words, what change will occur? Outcomes can look at change in the next one to three years (short-term), four to six years (intermediate-term) and seven to 10 years (long-term). Outcomes are directly related to the set goals and therefore often identified on a deeper level than outputs—as in the meaning (outcomes) behind the numbers (outputs). Intercultural learning outcomes are often stated in terms of specific knowledge, skills, and attitudes that students should acquire. An example of a measurable outcome statement in an international (2015, p. 55)

www.tamug.edu/academicaffairs/documents/Writing-Learning-Outcomes.pptx

These prevailing distinctions – preponderate largely as theories, much like physicist Fermi's famous paradox, viz.: an apparent contradiction exists between the lack of evidence and high probability estimates – and, underwhelmingly, do not prevail distinctly in reality. Some assessment scholars, with whom I have conversed bemoan the poor quality of evidence, Pliny's ineffectual "odd numbers." These "odd numbers" often eschew qualitative statistical reasoning, or appears consistently oriented in one deplorable direction, i.e.: is institutionally “tidal-locked” – to use another physics term referring to an orbiting planet perpetual orientation with the same face towards its central star. “To a critical faculty audience,” Volkwein and Yin postulate ten
specific assessment measurement issues, whose “data analysis and measurement problems…can be show-stoppers if they are not properly handled or defended:”

- The uses of grades in assessment
- Institutional review boards
- Research design as a compromise
- Standardized testing
- Self-reported measures
- Missing data
- Weighting data
- Conditional effects
- Hierarchical linear modeling versus ordinary least squares
- Causation and correlation

(Volkwein, 2010, pp. 141ff)

Almost forty years ago, Scott averred that “quality has proven to be an elusive concept” (1980, p. 2). More recently, assessment experts profess to be soi-disant outcome evidentialists, who like anti-thaumaturgist David Hume “proportions his belief to the evidence,” or to what University of Richmond Department of Philosophy Associate Professor McCormick designates as "doxastic norms" (2014, p. 2). Outcomes should not be "propitious accidents," as Santayana postulated in his introduction to The Ethics of Spinoza (1910), "the natural causes of which are too complicated to be readily understood." Rather, compliance requires very tangible, validity-assured evidence, such as e. e. cummings' brickbat-to-the-cranium extended metaphorical conceit, i. e.: "a bit of the old sixth avenue el; in the top of his head" ("plato told," [poem]). In a July 17, 2017, SACSCOC Summer Institute "Longitudinal Assessment of Student Learning Outcomes presentation, Dr. Timothy S. Brophy insightfully discusses outcome validity analysis within the recent revision of the Standards for Educational and Psychological Testing (AERA, APA, & NCME, 2014):

Validity refers to the degree to which evidence and theory support the interpretations of the test scores for proposed uses of tests….The process of validation involves accumulating relevant evidence to provide a sound scientific basis for the proposed score interpretations. (p. 11) The relevant questions: Does the assessment method yield data that can be interpreted for the proposed intent of the goal? In other words, does the data yielded by the measure inform the goal?” (2017, p. 5).

In his "Developing Program Goals and Student Learning Outcomes," he also stresses the "three R's of SLOs," I. e., that they are recent, relevant and rigorous (2015, p. 4). Yet, to ventriloquize George Santayana’s famous observation about historical mistakes: for those who do not emphasize evidence and who do not compass data-predicate improvements, their accreditation may be condemned to IE noncompliance. In a section related to “Qualitative
Factors,” Marcus cites Scott: “Quality also is revealed by assessing the ends, values, appropriateness, and worth of a program...assessment of programmatic quality must be multidimensional, must take into account the mission of the institution, and must include quantifiable data tied to outcome measures” (1983, p. 49). Miller (1979) agrees that a program’s quality is a “composite of interdependent elements” (p. 6): goals and objectives, students’ learning, faculty performance, and academic programs.

Evaluating Evidence. An institution determines its compliance with the standards by making an honest evaluation of the evidence it possesses at the time it has chosen to make that determination. Because the Compliance Certification requires that the institution demonstrate that it has based its compliance decisions on compelling and appropriately documented evidence, the institution needs to evaluate the evidence it has assembled to support a claim of compliance with a requirement or standard. This evaluation should be based on a careful interpretation of the Core Requirements, Comprehensive Standards, and Federal Requirements and on the cogency of the evidence to be presented supporting compliance with them. Evidence should not be viewed simply as a mass of facts, data, or exhibits. Instead, it should be viewed as a coherent and focused body of information supporting a judgment of compliance. Institutions should ensure that all evidence presented to support assertions of compliance is:

**Reliable:** The evidence can be consistently interpreted.  
**Current:** The information supports an assessment of the current status of the institution.  
**Verifiable:** The meaning assigned to the evidence can be corroborated, and the information can be replicated.  
**Coherent:** The evidence is orderly, logical, and consistent with other patterns of evidence presented.  
**Objective:** The evidence is based on observable data and information.  
**Relevant:** The evidence directly addresses the requirement or standard under consideration and should provide the basis for the institution’s actions designed to achieve compliance.  
**Representative:** Evidence must reflect a larger body of evidence and not an isolated case.

Additionally, the body of evidence provided throughout the Compliance Certification should (1) be shaped, through reflection and interpretation, to support the level of compliance cited by the institution for each standard, (2) represent a combination of trend and “snapshot” data, and (3) draw from multiple indicators.

In the chapter of her 2009 “common sense guide,” *Assessing Student Learning*, that deals with “Developing Learning Goals,” Dr. Trudy Banta states that “Assessment begins not with creating or implementing tests, assignments, or other assessment tools but with deciding on your goals: what you want students to learn and why” (p. 115). Then, she discusses “the Vocabulary of Goals,” viz.: “goals,” “objectives,” “competencies,” “learning outcomes,” and “proficiencies.” She defines “outcomes” as “goals that refer to a destination rather than the path taken to get here – the end rather than the means, the outcome rather than the process;” and, collaterally, she defines “learning outcomes” as “goals that describe how students will be different because of a learning experience. More specifically, learning outcomes are the knowledge, skills, attitudes, and habits of mind that students take with them form a learning experience” (pp. 116-117). In fact, many years ago, Yanikoski suggested labeling such actual learning-determinant assessment
as “progress assessment” (1987). As illustrated below, the focus of this series of articles will be those issues specifically targeted by the PECC’s Targeted Issues Checklist, the second of which is identification of “Outcomes:”

**Image 5: The PECC’s Targeted Issues Checklist:**

![Image of Targeted Issues Checklist](image5)

To complicate interpretation further, the TIC lists “goals or objective,” but does epexegete those terms with the statement that their use is directed “toward the accomplishment of its (the unit) mission.”

**Image 6: The PECC’s Targeted Issues Checklist’s “Goals or Objective” (Outcomes) statement:**

![Image of Targeted Issues Checklist’s Goals or Objective](image6)
At the “unit”-level – as a former SACSCOC VP notes in her institutional effectiveness PowerPoint, IE relates both to SACSCOC-prescriptive assessment in which outcomes are specifically designed to fulfill the mission/purpose of the program/department, as well as to ensure alignment with the mission/strategic goals of the institution (Williams, 2014). In so doing, as noted above, outcomes need to be measurable in order that their resultant mined analytical data might inform downstream improvements. In her new book, *Data Mining And Learning Analytics: Applications In Educational Research*, Canadian assessment expert Elatia postulates, “Data mining in this way can be seen as the creation of an informational ontology with which to understand, predict, and ultimately engineer the environment. In higher education, this is called institutional effectiveness when it applies to achieving the mission of the institution” (2016, p. 42).

As contextualized institutional “input,” Dodd foregrounds “outcomes” in her schema, below:

**Image 7: Model of Institutional Effectiveness that Integrates Accreditation, Planning, Assessment, and Improvement Initiatives:**
Inevitably, through her input-processes-outputs-outcomes schematization, such “inputs” translate into actionable “outcomes,” which – theoretically, at least – would drive downstream improvement. She also cites the “Baldrige Excellence Framework,” or – as she designates it: “Baldrige Criteria for Performance Excellence in Educational Organizations,” which also emphasizes “results,” although I find its final results to be semantically distinct from one’s initial targeted/projected “outcomes.” Baldrige has become synonymous with the achievement of excellence, which is, of course, SACSCOC motivation for emphasizing (since 1984) institutional effectiveness resulting in institutional-level improvement. For our purposes, one of the BEF’s “Organizational Profile” components, “Measurement, Analysis, and Knowledge Management (read, using data to drive improvements),” see arrow below, align more propitiously with the SACSCOC algorithm to achieve institutional improvement.

**Image 8: Baldrige Excellence Framework:**

- **Direct measures vs. Indirect Measures (aka Outcomes):**

In the grand scheme of IE, any reference to the measurability of outcomes will often focus on formative versus summative assessment, or objective versus subjective assessment, and typically involve the following now-common approaches:
**Direct measures**, as Suskie notes are: “direct evidence of student learning is tangible, visible, self-explanatory evidence of exactly what students have and haven’t learned” (2009, p. 20). Her examples include: student ratings by their field experience supervisors; scores and pass rates on appropriate licensure/certification exams; capstone experiences; other written work or performances; portfolios; scores on locally-designed tests; employer ratings of graduates; student reflections on their values, attitudes and beliefs. Cummings elaborates: “Direct assessments focus on student competences and do not incorporate student behavior or compliance information” (2017, 82). Banta further observes “among direct measures, provosts report that rubrics of classroom-based performance assessment are used most frequently” (2014, p. 93). Direct measures are utilized more frequently due to their efficacy in measuring student learning: in a chapter summary to his book on Executive Intelligence, Menkes avers that, “Direct measures of performance are always dramatically more accurate than indirect measures. As a result, it is inexcusable to rely upon indirect indicators when more direct measures are readily available” (2005, p. 180).

**Indirect measures**, which Scott terms, “surrogate measures” (2010, p. 142), or evidence of student learning “provides signs that students are probably learning, but the evidence of exactly what they are learning is less clear and less convincing” (p. 96). Her examples include grades; admission rates into graduate programs from undergraduate programs; graduate placements rates; student/alumni satisfaction surveys, exit interviews or focus groups; honors, awards and scholarships. In contradistinction to assessment, Suskie notes that grades “may reflect class management goals related to student behavior that are separate from learning, such as attendance, participation, and on-time submission of assignments” (Barkley, 2016, p. 25).

**Normed Outcomes:**

Outcomes may be adopted from benchmarked or nationally- or programmatically-“normed” standards: for example, the accounting department may adapt the outcomes of the American Institute of CPAs; or, a nursing program may adopt the state nursing board or the national association’s outcomes; etc. Categories of outcomes range from mastery of content knowledge, critical thinking, analytical reasoning, problem solving, personal development, moral enhancement, civic engagement, etc. (Renn, 2012, p. 220ff) As an additional benefit, these “normed” outcomes generally also provide national, regional or programmatic averages or expectations of success against which a department may measure their outcome achievement.
S.M.A.R.T. Outcomes:

SACSCOC states that: “institutions should interpret ‘expected outcome’ in a manner consistent with that administrative unit’s role in the institution. It is the institution’s responsibility to explain how and why these expected outcomes are determined.” (2018, Resource Manual, p. 61). Once outcomes ARE determined, the Resource Manual reminds us that “expected outcomes [need to be] clearly defined in measurable terms for each unit.” I also like to ask presenters how their outcomes are normed, i.e.: what is the basic for using these specific outcomes. In some instances, a secondary accreditor mandates a department’s outcomes, such as in the nursing program; or, outcomes may be derived from consultation with advisory boards or from professional organizations, such as the Association for College and Research Libraries. Coincidentally, measurability of outcomes is also one of the 3.3.1.3 questions posed in SACSCOC evaluators' new institutional effectiveness training module: http://www.sacscoc.org/modules/ie/story.html. So, measurability of outcomes must be important. In 1949, Tyler recommended that “the most useful form for stating objectives (read outcomes) is to express them in terms which identify both the kind of behavior to be developed in the student and the content…in which this behavior is to operate” (1949, p. 30). More recently, Evans notes her university’s efforts to "improve the quality of their student learning outcomes by recognizing appropriate levels of learning [by means of] increasing the clarity of verbs to match those levels [as well as] making outcomes more measurable, and describing what student need to know and be able to do at the end of the program" (June 2017, p. 2). Many programs also utilize verbs-noun constructs found in Bloom’s Taxonomy of Educational Objectives (1956): many such examples populate the web. In juxtaposition, Ewell offers four basic dimensions of outcomes: (1) knowledge (both breadth and depth) outcomes, (2) skills outcomes (including basic, higher-order, and career-related skills), (3) attitudes and values outcomes (frequently overlooked), and (4) behavioral outcomes (what students do, both during and after college) (Terenzini, 1989, p. 32).

SMART outcomes formulation is seemingly in the ascendancy in many assessment circles: almost 35 years ago, SMART outcomes were first identified by George T. Doran.

Image 9: The “SMART” Approach to Generating Expected Outcomes:

<table>
<thead>
<tr>
<th>Specific</th>
<th>The expected outcome(s) is focused.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurable</td>
<td>An appropriate instrument/measure is selected to assess the expected outcome.</td>
</tr>
<tr>
<td>Appropriate</td>
<td>The expected outcome(s) is within the department’s control to effect change and is a worthwhile focus for the students’ academic year.</td>
</tr>
<tr>
<td>Realistic</td>
<td>The expected outcome(s) is feasible.</td>
</tr>
<tr>
<td>Time limited</td>
<td>The expected outcome(s) is contained within a predetermined assessment cycle.</td>
</tr>
</tbody>
</table>
In addition to Doran’s “SMART” outcomes approach, I also suggest that you review Clifford Adelman’s 2015 essay entitled, *To Imagine a Verb: The Language and Syntax of Learning Outcome Statements*. This occasional paper of the National Institute for Learning Outcomes Assessment, “provides language-centered principles, guidelines and tools for writing student learning outcome statements.” Lastly, Dr. Tony Pina, our Associate Provost for Online, has generated a list of *Measurable and Non-measurable Objectives*, available on the PEConomics LibGuide (http://libguides.sullivan.edu/PEConomics).

For more detailed advice, please consult the following guides:

- [Writing Measurable Learning Outcomes](#) (Sandi Oister and F. Simone Tui, Gavilan College)
- [Creating Good Student Learning Outcomes](#) (Guilford College)
- [How to Write Program Objectives/Outcomes](#) (University of Connecticut)
- [Writing Student Learning Outcomes](#) (Laney College)
- [Guide for Writing Student Learning Outcomes](#) (University of Florida)

**HIGH IMPACT PRACTICES (HIPs):**

a. As noted in the ALIGNMENT OF MISSION IE HIPs: since departmental outcomes devolve directly from the department’s mission, they should be specifically articulated in their totality in formulation of departmental missions. NOTE: If outcomes do not align with departmental mission statements, either the derivative outcomes OR the mission statement, itself, should be rewritten in order to achieve the requisite alignment.

b. The most important question to ask when articulating learning goals is, “Why?” (Suskie, 2009, p. 115)

c. Be a comparative outcomes generator by examining outcomes from similar departments at other schools, such as those on the National Institute for Learning Outcomes Assessment (NILOA) Transparency Framework web page: [http://www.learningoutcomesassessment.org/TFComponentSLOS.htm](http://www.learningoutcomesassessment.org/TFComponentSLOS.htm)

d. Any compliance component listed in the mission statement should be measurable. If any qualitative compliance components are included in outcomes, they should be qualitatively measured. NOTE: Once outcomes ARE determined, the Resource Manual reminds us that “expected outcomes [need to be] clearly defined in measurable terms for each unit” (pp. 50-51). Moreover, SACSCOC defines “compliance components” as: “*Embedded in the wording of the Core Requirements, Comprehensive Standards, and Federal Requirements (and frequently signaled by numbers, commas, and the use of compound modifiers), the compliance components are the multiple discrete issues that must be addressed for each requirement and standard*” (SACSCOC Resource Manual, p. 109).

e. Outcomes are results – not desired student learning results or outputs, but gilt-edge, rubber-hits-the-road results of student learning, which are meaningful and measurable.
f. Outcomes should be written as outcomes, not as one- or two-word phrases, so that everyone understands them. This is in contradistinction to Suskie who avers: “It is okay to have goals that are a bit broad and nebulous, as long as everyone has a common understanding of what they mean;” and, ironically, that, Well-expressed learning goals minimize fuzzy terms. (Suskie, 2009, p. 115) Use the appropriate outcome rhetorical guides as needed, such as those on NILOA’s Resources web page: http://www.learningoutcomesassessment.org/SLOSresources.html

g. Where applicable, outcomes should adopt, or “norm on,” programmatic accreditors’ outcomes; and, utilize any concomitant benchmarks signaling success.

h. Do not try to generate outcomes for everything, for as Thomas Aquinas states: “any agent inclined to several effects will produce none of them, unless it is determined to a particular one by some other cause” (Summa Theologica).

i. Any extraneous outcome statements that are not measured may be perceived as non-compliant.

j. While Bloom’s taxonomy is the best-known framework for articulating learning goals, other taxonomies fill in some voids. (Suskie, 2009, p. 115)

k. Outcomes evolve amenable to regular department-specific updating as well as PECC feedback.

l. Any single measure of student learning should be a part of a larger holistic assessment plan (http://highered.ssrc.org/projects/measuring-college-learning-project/, p. 8)

m. Measures of student learning should be rigorous and high quality and should yield data that allow for comparisons over time and across institutions (http://highered.ssrc.org/projects/measuring-college-learning-project/, p. 10)

n. The assessment of student learning begins with educational values. (Astin, 1992, n. p.)

o. Many of the 800+ SACSCOC member universities have Offices of Institutional Effectiveness web pages which provide additional helpful perspectives on outcomes. Additionally, SACSCOC members’ compliance reports typically list unit (AKA departmental) assessment under 3.3.1. Those assessment reports are replete with outcomes which may provide useful comparative input for SU departments’ formulation of their own outcomes.
References


*Institutional Effectiveness Continuous Improvement Circle (fig.)*. (2015). Unpublished manuscript, Sullivan University Creative Communications Department, Sullivan University, Louisville, KY.


