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Creating Student Learning Outcomes: Measurable, Meaningful, and Manageable

Leigh Poole

University of Georgia

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A conversation about creating student learning outcomes that are measurable, meaningful, and manageable cannot begin without first discussing the importance of assessment. As elsewhere noted in this special edition, the term *assessment* has been identified as the “process of defining, selecting, designing, collecting, analyzing, interpreting, and using information to increase students’ learning and development” (Erwin, 1991, p. 15). Frye (1999) noted that the increased focus on assessment has ultimately transformed the higher education landscape in terms of how institutions are evaluated for their institutional excellence. In today’s society, various constituents expect colleges and universities to be able to provide evidence that programs, services and even the quality of education are “commensurate with rising costs, with their [institutional] statements of excellence, and with their desire to retain the competitive edge” (Bresciani, Zelna, & Anderson, 2004, p. 1). Clearly, the assessment of student learning and development has become increasingly important over the past decade for higher education and, more specifically, student affairs (Bresciani, Zelna, & Anderson, 2004; Love & Estanek, 2004; Love & Yousey, 2001; Frye, 1999).

Historically, an institution’s endowment, accomplishments, and the credentials of faculty have been significant indicators of an institution’s quality (Frye, 1999). Now, however, assessment literature (e.g., Bresciani, Zelna, & Anderson, 2004; Frye, 1999) suggests that the most important gauge of institutional excellence and quality is direct evidence that student learning and development have occurred. Additionally, increasing pressure from parents, legislators at the state and national levels, and accrediting agencies continues to push higher education to prove that students are learning from their involvement in student affairs programs and services (Sanderson, 2004). In the past, however, the overarching approach to student affairs

assessment has traditionally centered on satisfaction surveys and not on what students learn by participating in the intervention, service, or program being offered (Hallmann & Barham, 2004).

The *Student Learning Imperative* (American College Personnel Association [ACPA], 1994) challenges student affairs practitioners to alter their professional mindset by refocusing their work around student learning (not merely satisfaction). Additionally, *Learning Reconsidered: A Campus-Wide Focus on the Student Experience* stated “Regardless of our past accomplishments or disappointments, we are all, as colleagues and educators, now accountable to students and society for identifying and achieving essential student learning outcomes and for making transformative education possible and accessible for all students” (National Association of Student Personnel Administrators [NASPA] & American College Personnel Association [ACPA], 2004, p. 1). It is clear that in order to provide evidence of effectiveness, student affairs practitioners can no longer rely on anecdotal proof of student learning. Instead, we must become more intentional with the services and programs offered by creating outcomes that are measurable, meaningful, and manageable to demonstrate evidence of student learning.

Understanding Outcomes

One of the primary forms of measuring student learning and growth as well as assessing the effectiveness of student affairs programs and services is through student learning outcomes (Hallmann & Barham, 2004). As noted in other articles, this special edition defines student outcomes assessment as any change or consequence occurring as a result of enrollment in a particular educational institution and involvement in its programs (Erwin, 1991). In order to effectively assess learning and student outcomes, it is important to first understand what, exactly, comprises an outcome.

Love & Estanek (2004) outlined two main types of outcomes: administrative outcomes and student outcomes. Administrative outcomes are defined as “virtually limitless and are related to the activities of management, budgeting, inventorying, information processing, information dissemination, communication, ordering purchasing, and scheduling” (Love & Estanek, p.89). Student outcomes are described as including “skills, knowledge, attitudes, and higher order thinking (for example, comprehension, application, analysis, synthesis, and evaluation)” (Love & Estanek, p. 89). Hallmann and Barham (2004) explained student learning outcomes as written statements that denote what students should learn (the “intended learning goals for students”) from participating in student affairs programs and services (p. 9). Meanwhile, Frye (1999) specified that student learning outcomes are comprised of cognitive and affective attributes and abilities which are a measure of how college experiences have supported students’ development as individuals.

Bresciani (2001) focused on three types of outcomes including program outcomes, learning outcomes and developmental outcomes, which are defined in the following way:

- Program outcomes include what a student affairs practitioner wants the program to do and/or accomplish. Program outcomes differ from learning outcomes in that they focus on the program itself and what it is intended to achieve.
- Learning outcomes exemplify the learning that is to occur. Additionally, learning outcomes assess cognitive abilities (thinking skills), not affective dimensions or attitudes (affective objectives).
- Developmental outcomes demonstrate the desired affective dimensions (attitudes and values) achieved (or not) by the program, service, or process. (p. 3)

Although not an exhaustive list, Bresciani's work creates a foundation for understanding various types of outcomes. Distinguishing one kind of outcome from another is the first step to being able to write student learning outcomes that are measurable, meaningful, and manageable.

Additionally, there are numerous subtypes of outcomes that can be classified into a variety of different categories (Bresciani, 2001) and defined in a number of ways. Schuh & Upcraft (2001) nicely summarized several categories of student learning outcomes from other sources:

Complex cognitive skills—Reflective thought, critical thinking, quantitative reasoning, and intellectual flexibility

Knowledge acquisition—Subject matter mastery and knowledge application

Intrapersonal development—Autonomy, values, identity, aesthetics, self-esteem, and maturity

Interpersonal development—Understanding and appreciating human differences, ability to relate to others, and establishing intimate relationships

Practical competence—Career preparation, managing one's personal affairs, and economic self-sufficiency

Civic responsibility—Responsibilities as a citizen in a democratic society and commitment to democratic ideals

Academic achievement—The ability to earn satisfactory grades in courses

Persistence—The ability to pursue a degree to graduation or achieve personal educational objectives (p. 155)

The previous list could serve as a future framework for developing learning outcomes as well as creating specific learning objectives for programs, services, and facilities offered (Schuh & Upcraft).

After comparing and contrasting these various definitions and categories of outcomes, it should be clear that there is a marked difference between student learning outcomes and other types of outcomes. For the purposes of this article, the definition of student learning outcomes will be a combination of Hallmann and Barham (2004) as well as Bresciani (2001), as follows: student learning outcomes are written statements that describe the learning that is to occur from participation in (student affairs) programs and services. Now that the importance of assessing learning outcomes has been described, various types of outcomes have been discussed, and the definition of student learning outcomes has been clearly delineated, it is time to focus on how to develop student learning outcomes and what makes them measurable, meaningful, and manageable.

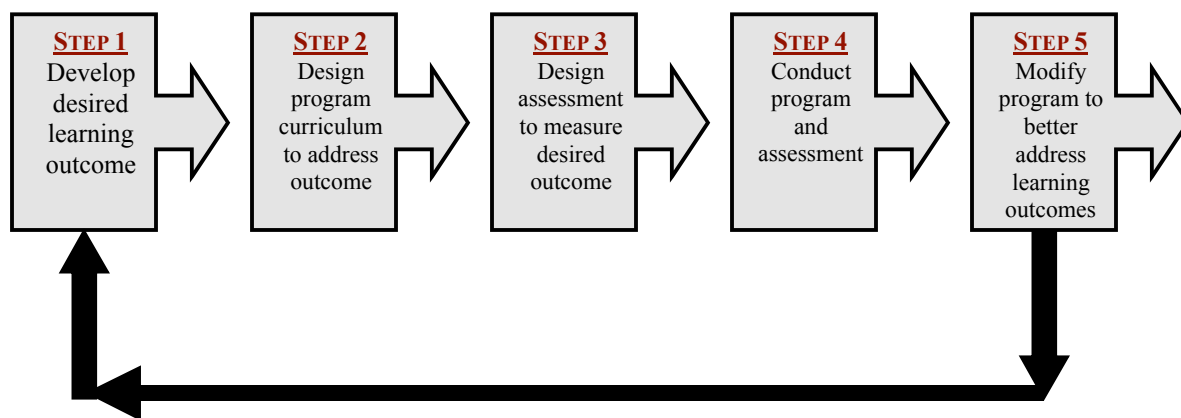
Developing Student Learning Outcomes

According to Bresciani (2001), before beginning the process of identifying or articulating outcomes, it is vital first to clearly define as well as clarify the mission and objectives of what is to be assessed. Additional important questions to answer before starting the outcome creation process include: why the assessment is being conducted, for whom the assessment is intended, how the results will be used, to whom the results will be given, information concerning the timeline for follow up assessments, and what decisions will be made from the assessment findings. Only after considering and answering the previous questions can the creation of outcomes begin.

Hallmann and Barham (2004) noted that learning outcomes “focus on the outcome of an event or activity” and assert that there is a “direct link between assessment and the outcome” (p.

10). Hallmann and Barham created a model (see Figure 1) that helps clearly outline the process of creating student learning outcomes as well as implementing the assessment cycle. Their model depicts a process that includes formulating an assessment plan to measure the desired outcome, implementing both the program and the assessment plan, using this information to effect change, and then cycling back around to the first step (creating learning outcomes).

Figure 1: Model for learning outcomes process



In this model (Figure 1), the desired outcome for the program/activity has been identified first before planning any other aspect of the program or service. This process permits the student affairs practitioner to select and develop components that will best support the intended learning outcome (Hallmann & Barham, 2004). Furthermore, “because the outcomes have been identified on the front end [of the planning process], and the program intentionally structured to address the outcomes[,] the assessment process becomes fluid” (Hallmann & Barham, p. 10).

In addition to understanding the process for creating student learning outcomes in terms of programs and services, Bresciani (2001) provided support for the burgeoning number of assessment practitioners by discussing four important components of a “good outcome,” summarized as follows:

1. What is being assessed must be clarified. That is, the program, service, process, etc. must be clearly defined and delineated; if it is not, then it can not be measured.
2. The outcome itself must be measurable; in fact, in order to provide evidence that the outcome was (or was not) achieved, it must be able to be measured. One of the most important aspects of writing “good” outcomes is through word choice (especially the verbs used in the outcome).
3. The intended outcome has to measure something useful and meaningful – something that will be important to others in the field.
4. Use the outcome statement itself to clarify and outline the most important criteria for assessing its effectiveness.

According to Bresciani (2001), the creation of good learning outcomes takes a great deal of time and practice. Writing student learning outcomes can be likened to a complex calculus or trigonometry problem or a difficult grammatical exercise or rule. At first, the math problem or grammatical rule seems unintelligible, but by breaking it down into smaller parts and practicing each aspect of the puzzle numerous times, eventually the problem becomes much more measurable, meaningful, and manageable to the person working on it.

Love and Estanek (2004) also offered a number of general suggestions for the assessment process that can be utilized when creating student learning outcomes. The salient points include: (1) implement training in order to create a common language and understanding of the assessment process, (2) clarify the current student affairs mission to insure that student learning outcomes are a direct reflection of that mission (as well as that of the institution), (3) identify initial areas on which to focus as well as paying close attention to what is important in terms of student learning outcomes (not just what is easy to measure), (4) involve key players for support,

(5) consider any political consequences of the process, and (6) identify a champion for the assessment and student learning outcome processes (pp. 114-116). An additional suggestion includes involving students in the process of creating learning outcomes for themselves.

Practical Examples

In order to complete the discussion of creating measurable, meaningful, and manageable outcomes, it is important to provide practical examples of the process of crafting student learning outcomes. As noted by Hallman and Barham (2004), what students should gain from participation in an intervention should provide both the focus and direction for the learning outcomes as well as structure for the program, service, or activity offered. Simply stated, “the outcome is considered first and the process is built around the intended result” (Hallman & Barham, 2004, p. 9). For instance, consider that the goal is to have students at a fictitious university read the institution’s student code of conduct in its entirety. A potential learning outcome might be: Students will demonstrate their knowledge of the student code of conduct by passing the examination portion of the required on-line orientation regarding the institution’s judicial process. In this particular example, the outcome (students’ familiarity with the student code of conduct) has been considered first. Only then is the program designed (an on-line orientation that tests students’ knowledge of the judicial process) to address the outcome. Ultimately, the proof behind whether or not the outcome has achieved its goal will be demonstrated through the results of the examination of the students’ knowledge of the institution’s student code of conduct.

The next step in the process of creating student learning outcomes is to evaluate whether or not the outcome is measurable, meaningful, and manageable. To determine whether or not an outcome meets the criteria of being measurable, meaningful, and manageable, Bresciani (2001) recommended asking the following questions: (1) Is it clear what is being assessed? (2) Is the

intended outcome measuring something useful and meaningful? (3) Is the outcome measurable?
 (4) How will this outcome be measured?

Using the previous example, is it clear what is being assessed? Yes, the writer of the outcome wants evidence that students have read the student code of conduct in its entirety. Next for consideration, is the intended outcome measuring something useful and meaningful? Yes, the writer is measuring the students' knowledge of the student code of conduct. Subsequently, it is important to question whether or not the outcome is measurable. In this case, it is measurable because the writer asks the participants to demonstrate proof of their knowledge during the on-line orientation. Finally, how will the outcome be measured? In this example, it has been clearly stated that the writer will use an on-line examination that measures students' basic knowledge of the institution's student code of conduct.

Another example of a student learning outcome might be: Students at the university will understand the student judicial code of conduct as well as the institution's expectations of its educated citizenry. Does this outcome meet the basic criteria for student learning outcomes? That is, is it measurable, meaningful, and manageable?

First, following Bresciani's (2001) formula, it is important to ask whether or not it is clear what is being assessed. For this second example, it appears that the author of the outcome wants to assess student understanding of the code of conduct as well as institutional expectations of an "educated citizenry". It is unclear what is meant by institutional "expectations" or the phrase "educated citizenry". Clarification of terminology is needed for this particular outcome. Secondly, is the intended outcome measuring something useful and meaningful? It is difficult to answer this question since the author has not made clear what exactly is being measured. Next, is the outcome measurable? For this particular example, the author wants to assess students'

understanding (a general and vague term) versus something more specific (i.e., active verbs such as *describe* or *illustrate*). The outcome could become measurable with the usage of an action verb (Bresciani, 2001). Finally, how will this outcome be measured? Unfortunately, the author does not state specifically how the outcome will be measured. The sentence will need to be reworded before a final answer to this last question can be formulated.

Final Thoughts

As previously noted, assessment (and by its extension, student learning outcomes and outcomes assessment) are not trendy fads that will quietly fade into insignificance after a few years. As more than a decade of assessment dialogue demonstrates, assessment and outcomes are now permanent characteristics of the higher education landscape. A diligent pursuit of the assessment of student learning outcomes in student affairs will lead to a central focus on student learning. Without student learning at the center of our actions, programs, and services, the professional piece of what we do within higher education is without meaning. By not focusing on the actual learning being accomplished by students, we perform a great disservice to them and to ourselves as well as to the core values vital to our profession. Ultimately, the programs and services we create as student affairs practitioners must be organized and planned around the most important individual at our institutions – the student and his/her learning.

Creating student learning outcomes that are measurable, meaningful, and manageable is possible. Bresciani (2001) reminded us that creating outcomes takes practice, time, and repetition. It is important to take the process in small steps, get constant feedback from supervisors and colleagues and/or peers in the field, and practice the writing aspect of learning outcomes constantly. There are no “ten easy steps” that help make writing student learning outcomes a simple task. However, this article has attempted to provide helpful hints and

resources for new assessment professionals or for the modern assessment-minded student affairs professionals undertaking assessment on their campuses. Love and Estanek (2004) noted that “Assessment must be an integral aspect of professional behavior” (p. 90). Furthermore, “Shaping practice in response to the assessment of student learning outcomes most often requires cultural transformation of the organizational unit and, when fully implemented, results in cultural transformation of the unit” (Love & Estanek, pp. 111-112). Creating measurable, meaningful, and manageable student learning outcomes while building assessment into the foundation of every aspect of our professional lives refocuses our energy and intentionality where they belong – on the student’s learning.

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