Writing Great Student Outcomes

Why are Student Outcomes important?

In general, Student Outcomes (SOs) create the framework for what a Program believes is important for students to know, be able to do, and or accomplish by the time they complete the program. However, there is much more that SOs can be used for (DePaul University, n.d.)

1) SOs can help in curriculum planning and program development.
   o When SOs are defined, Programs can map SOs onto the experiences students obtain while in the program, and use the map to identify overlapping areas in the program or where gaps may exist.
2) With clear SOs, students will have a way to clearly and concisely articulate the knowledge and abilities they have gained.
3) SOs will inform potential students what the program expects of them.
4) SOs will help faculty and Programs determine appropriate assessment strategies.
5) SOs will inform potential employers of the abilities of a Program's graduates.

While many of the points above may seem to be stand-alone statements, they are integral to the interconnected experiences of faculty and students while in a Program. As such, all three of these entities (Programs, faculty, and students) are intricately intertwined in the work happening in the classroom and the products produced.

Goals, Objectives, Outcomes…Oh My!

Goals, outcomes, and objectives are terms that are commonly used interchangeably. This is understandable because all are related to teaching and learning (San Francisco State University, n.d.). However, they are distinct in their purpose and composition. Here is a breakdown of the three:

Goals (Broad) (San Francisco State University, n.d.; University of Connecticut, n.d.)
- Goals are statements about general aims or purposes of education that are broad, long-range intended outcomes.
   o For example:
      ▪ Students will be competent in critical questioning and analysis.
      ▪ Students will have an appreciation of the necessity and difficulty of making ethical choices.

Objectives (More specific than goals but less specific than outcomes) (San Francisco State University, n.d.; University of Connecticut, n.d.)
- Objectives primarily describe the intended purposes of teaching activities and are aimed at describing the teaching that is occurring in the classroom.
   o For example:
      ▪ Students will gain an understanding of the historical origins of art history.
      ▪ Students will study the major U.S. regulatory agencies.

<u>Outcomes (Very specific)</u> (San Francisco State University, n.d.; University of Connecticut, n.d.)
- Outcomes are statements that describe significant and essential learning that students have achieved, and can reliably demonstrate at the end of a course or program.
   o For example:
      ▪ Economics: Students demonstrate graphically and explain how a change in expectations will affect the loanable funds market.
      ▪ Psychology: When given a case study, students will be able to identify whether it describes a case of schizophrenia, and if it does, which of the following schizophrenic reactions are involved: hebephrenic, catatonic, or paranoid.

- There are three different types of outcomes that are pertinent to student experiences in a program.
   o **Learning Outcome**: Emphasis is on knowledge and/or ability gained.
      ▪ *Students will be able to evaluate and rank soil types on their ability to promote citrus tree growth.*
         • *Practiced and observed in a lab.*
         • *Documented through a lab report.*
         • *Lab report is assessed using a specific set of criteria/rubric*
      ▪ *Students will be able to effectively utilize color and shape to unify compositions and support content.*
         • *Practiced and observed in a final art project/installation/gallery.*
         • *Documented through the artwork itself and critiques.*
         • *Assessed using specific criteria using critiques.*
   o **Process Outcome**: Emphasis is on implementation and consistency.
      ▪ *150 students will attend the Resume builder workshops in total over the course of the academic year.*
         • *Observed and assessed using check-in sheets.*
      ▪ *By the completion of the doctorate, each student will submit 5 times for peer-reviewed publication and include evidence of the use of journal reviewer feedback.*
         • *Observed through the submission and returned feedback of article submissions.*
         • *Assessed through a review of the feedback obtained and subsequent changes to future submissions of the same article.*
   o **Satisfaction Outcome**: Emphasis is on satisfaction or enjoyment.
      ▪ *75% of student will be satisfied with the amount of feedback provided by his/her faculty member in a given course.*
         • *Assessed through course evaluations.*

In other words, outcomes are very specific to what students can demonstrate once they have completed a course or a program and not just a description of the learning occurring. Take a look at the following examples and decide for yourself which is the best Student Outcome for learning (the answer will be given in the next section) (Example taken from University of Connecticut, n.d.):

1) Students should be able to recognize and articulate the foundational assumptions, central ideas, and dominant criticisms of the psychoanalytic, Gestalt, behaviorist, humanistic, and cognitive approaches to psychology.
2) Students should know the historically important systems of psychology.
3) Students should know the psychoanalytic, Gestalt, behaviorist, humanistic, and cognitive approaches to psychology.

How do you write great Student Outcomes?

Creating great SOs can be challenging, especially when it comes to addressing all of the factors that go into creating an SO. However, great SOs are foundational to effective program development and assessment. Here are some common characteristics of good SOs (DePaul University, n.d.; San Francisco State University, n.d.; University of Connecticut, n.d.):

1) They specify the level, criterion, or standard for the knowledge, skill, ability, disposition, or experience that the student must demonstrate.
2) They include conditions under which they should be able to demonstrate their knowledge, skills, abilities, dispositions, or experiences.
3) Action verbs are used.
4) They are measurable.
5) They do not indicate a specific avenue for demonstration to occur (this is important because the door will be left open for individual faculty to decide on the teaching and assessment methods).
6) Statements are single-barreled where possible.
    o Single-barreled: Customers will be highly satisfied.
    o Double-barreled: Customers will be highly satisfied with the service <u>and requests for service will increase.</u>
        ▪ The underlined section of the statement does not allow for assessment to be targeted with only one tool. Here is an example of an SO that joins to separate statements that does work and can be analyzed using a single method:
            • Students analyze and appreciate the interconnectedness of global and local communities. *Can be analyzed using a single paper with a rubric that includes analysis and interconnectedness.*

Looking at the example in the previous section (**Goals Objectives, Outcomes…Oh My!**), number (1) is the best example of a SO in psychology that has enough specificity and action that can be measured. Although number (3) is a good start, there is no indication in the statement for number (3) what the students will do, whereas in number (1) there is.

Given the difficulty and time it may take to create or revise SOs, here are some steps that can be used to get the process going (DePaul University, n.d.; San Francisco State University, n.d.; University of Connecticut, n.d.):

1) Reflect with others on what graduates with a degree from your Program should know and be able to do? The people involved in this process should primarily be faculty within your Program. However, whenever possible, consider including students, alumni, and even professionals in the field in this conversation.
2) Refer to resources from your discipline. Disciplinary associations often have websites and publications that provide useful assessment materials. You can also talk to your friendly Evaluation and Assessment person, Omar Safie (omar.safie@ucr.edu), when you help.
3) In order to keep SOs student-centered, begin each statement with "Students will be able to…" and use action verbs to clearly articulate what should be observed and measured. For examples of action verbs, take a look at Bloom's Taxonomy with Action Verbs in Appendix A.
4) Group outcomes in broad categories based on similarities to determine if one outcome can take the place of several.
   - For example, the following three:
     - Students will be able to design and conduct experiments to address questions germane to the discipline.
     - Students will be able to design and administer surveys that address questions appropriate to the discipline.
     - Students will be able to conduct interviews and focus groups that address questions relevant to the discipline.
   - Can be merged into just one SO:
     - Students will be able to design and execute research plans using the major methodologies of the discipline (experiments, surveys, qualitative techniques) to answer disciplinary specific research questions.
5) Share the draft SOs with others to make sure that the most significant learning is captured in the outcomes and that the language is understandable to those who do not have a background in the field, such as potential students, parents, and employers.
6) Make sure that the focus is on creating a manageable number of significant outcomes. It is better to have five or six really targeted outcomes than ten or twelve that are scattered, general, and/or difficult to manage periodic assessment of.

In the End

Creating SOs is a process. The really good ones are created over time and revisited at the time of assessment. So, take your time, be focused, and you will be able to create great SOs as well.

If you have any questions, contact Omar Safie in the Office of Evaluation and Assessment at omar.safie@ucr.edu.