Developing Student Learning Outcomes

1. What are program student learning outcomes?

Program student learning outcomes (SLOs) are clear, concise statements that describe how students can demonstrate their mastery of program goals (Allen, M., 2008). These statements identify the knowledge, skills, or attitudes that students will be able to demonstrate, represent, or produce upon successful completion of the program.

2. Why develop and publish program student learning outcomes?

Student learning outcomes:

- Help students learn more effectively
- Make clear what students should expect from their educational experience
    - Encourage students to be intentional learners who direct and monitor their own learning
- Help faculty design courses, curriculum, and programs
- Make graduates' skills and knowledge clear to employers, accrediting agencies, etc.

Questions that student learning outcomes address include the following:

- What knowledge, skills, abilities, and values should the ideal student graduating from our program demonstrate?
- How will they be able to demonstrate these capabilities?
- How well does our program prepare students for careers, graduate school, professional study, and/or lifelong learning?
- What evidence can we use to demonstrate growth in students' knowledge, skills, abilities, and values as they progress through our program?

Characteristics of program student learning outcomes:

- Describe what students learn, rather than what faculty will do or "cover"
- Framed in terms of the program and not individual courses
- Observable or measurable
- Important
- Alignment:
    - Program SLOs align with school/college goals and institutional goals
    - Course SLOs align with program SLOs
- Rely on verbs that specify definite, observable behaviors
- Focus on the central abilities of the discipline. Incorporate or adapt professional organizations' outcome statements when they exist.
- Stated such that evidence related to the outcome can be gathered by more than one data-collection method
- Collaboratively authored and collectively accepted
- 3-6 outcomes are ideal

3. Good outcomes use verbs that describe definite, observable actions

Bloom et al.'s taxonomy is a well-known description of levels of educational objectives. It may be useful to consider this taxonomy when defining your outcomes.

4. Developing program student learning outcomes

Before developing program student learning outcomes, it might be helpful to consider these questions which focus on outcomes in slightly different ways:
For each of the stated program goals, what are the specific knowledge, skills, or attitudes that would tell you this goal is being achieved?
What would a skeptic need (evidence, behavior, etc.) in order to see that your students are achieving the major goals you have set out for them?
In your experience, what evidence tells you when students have met these goals – how do you know when they're "getting" it?
Learning outcome statements may be broken down into 3 main components:

A verb that identifies the performance to be demonstrated
A learning statement that specifies what learning will be demonstrated in the performance
A broad statement of the criterion or standard for acceptable performance
For example:

5. Examples of program student learning outcomes

Natural Sciences

- Students can apply the scientific methodology in a research proposal.
- Students can evaluate the validity and limitations of theories and scientific claims in experimental results.
- Students can assess the relevance and application of science in everyday life.

Psychology

- Graduates can write research papers in APA (American Psychological Association) style.
- Graduates can analyze experimental results and draw reasonable conclusions from them.
- Graduates can recognize and articulate the foundational assumptions, central ideas, and dominant criticisms of the psychoanalytic, behaviorist, humanistic, and cognitive approaches to psychology.

History

- Students can list major events in American history.
- Students can describe major events and trends in American history.
- Students can apply their knowledge of American history to examine contemporary American issues.

6. Good practices

Publicize program outcomes in the catalog, on the web, on syllabi, annual report, brochures, etc.
Use program outcomes to guide course and curriculum planning so students experience a cohesive curriculum
Use program outcomes to shape assessment efforts and faculty/staff conversations surrounding student learning
Collaboratively develop program outcomes; discuss and collectively accept program outcomes

Sources consulted:
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