Articulating Learning Outcomes:
Knowledge Skills Attitudes/Values/Predispositions

Program Learning Outcomes:

• Focus on what students will learn, rather than on what faculty will "cover."
• Should be widely distributed – in the catalog, on the Web, in department newsletters, and on syllabi.
• Should be known by all major stakeholders, including regular and adjunct faculty, fieldwork supervisors, student support personnel, and students.
• Guide course and curriculum planning so that students experience a cohesive curriculum.
• Encourage students to be intentional learners who direct and monitor their own learning.
• Focus assessment efforts and faculty and staff conversations on student learning.

Examples of Learning Outcomes

• Students can analyze experimental results and draw reasonable conclusions from them.
• Students can use arithmetical, algebraic, geometric, and statistical methods to solve problems.
• Students can locate appropriate sources by searching electronic and traditional databases.
• Students follow professional ethical standards when they provide nursing care to patients.
• Students can analyze the quality of the argumentation provided in support of a position.
• Students can describe the major factors that influenced the development of the American political system.
• Students can distinguish between science and pseudo-science.
• Students can collaborate with others effectively.

Tips to Develop Program Goals and Outcomes

• Fill in the blanks. When students graduate from our program, they should know ____, be able to ____, and value ____.
• Consider two types of goals: those unique to the discipline and those that expand on general education outcomes, such as communication skills and information literacy.
• Consider "best practices" guidelines from professional organizations or accrediting agencies and adapt these to your program.
• Try a "top-down" approach. Use documents that describe your program to identify your goals and outcomes. Examples of such resources are catalog copy, mission statements, program brochures, and accreditation reports.

• Try a “bottom-up” approach. Review instructional materials, such as syllabi, assignments, tests, and texts. Look for faculty expectations, either explicit or implicit, for knowledge, skills, and values that students are expected to develop.
• Ask for input from important stakeholders, such as students, alumni, and employers. What do they believe that students should know, do, or value by the end of the program?
• Describe the ideal graduate of your program. Ask these questions: “What does this person know? What can this person do? What does this person care about?”
• Involve as many of the program faculty as you can. Encourage faculty to explain and defend various perspectives, either anonymously or in open meetings.
• Do not avoid learning outcomes that appear to be difficult to assess, particularly if they are important outcomes. Focus on what faculty believe are the most important outcomes for students to achieve.

Effective program learning outcomes should:

• Use active verbs that specify definite, observable behaviors
• Identify the depth of processing that faculty expect
• Distinguish between absolute and value-added expectations

Bloom’s Taxonomy

Knowledge	To know specific facts, terms, concepts, principles, or theories
Comprehension	To understand, interpret, compare and contrast, explain
Application	To apply knowledge to new situations, to solve problems
Analysis	To identify the organizational structure of something; to identify parts, relationships, and organizing principles
Synthesis	To create something, to integrate ideas into a solution, to propose an action plan, to formulate a new classification scheme
Evaluation	To judge the quality of something based on its adequacy, value, logic, or use

Examples of Learning Outcomes at Various Levels

Level	Learning Outcome
Knowledge	Students can *list* the major theoretical approaches of the discipline.
Comprehension	Students can *describe* the key theories, concepts, and issues for each of the major theoretical approaches.
Application	Students can *apply* theoretical principles to solve real-world problems.
Analysis	Students can *analyze* the strengths and weaknesses of each of the major theoretical approaches for understanding specific phenomena.
Synthesis	Students can *combine* theoretical approaches to explain complex phenomena.
Evaluation	Students can *select* the theoretical approach that is most applicable to a phenomenon and *explain* why they have selected that perspective.

Outcomes for Administrative and Academic Support Units

Nichols, K. W., & Nichols, J. O. (2000). *The Department Head's Guide to Assessment Implementation in Administrative and Educational Support Units.* New York: Agathon Press.

- Processes (e.g., travel claims or applications are processed efficiently and equitably)
- Learning Outcomes (e.g., students who receive training can write an effective resume or can use the campus email system; staff who receive training can effectively use campus accounting procedures; students who are served by the Counseling Center report fewer plans to withdraw from campus; employees know campus health and safety procedures)
- Satisfaction Indicators (people supported by the unit report satisfaction with the service, e.g., students report satisfaction with Health Center services)

Examples:

1. Accurate, real-time class enrollment data are continuously available to faculty and administrators.
2. Students who attend a Career Orientation Workshop can prepare a resume, interview well, and use our on-line bulletin board to monitor potential employment opportunities.
3. All students attending orientation will receive email accounts and will know how to use the email system to communicate with students, faculty, and staff.
4. Interlibrary loan materials will be delivered within eight working days.
5. Students report satisfaction with Health Center Services; ratings will average at least 3.80 on a 5-point rating scale.

6. On average, at least 100 students will attend each cultural event sponsored by the ASI.
7. Faculty who attend Blackboard workshops will be able to create and update online course materials.
8. Student government meetings follow procedures defined in the Handbook.
9. Staff who are certified to use the enrollment management system can independently add and delete courses, place enrollment restrictions on courses, and monitor course enrollments.
10. Students using the Writing Center improve writing skills.

Frequently-Used Assessment Strategies (Nichols & Nichols)

1. Counts (e.g., number of students who eat in the cafeteria or the number of days to process an invoice)
2. Client satisfaction measures (e.g., ratings from surveys, interviews, and focus groups; broad-based and point-of-contact data may be collected)
3. External evaluation reports (e.g., Health Department review of the food service unit)
4. Learning Outcomes (e.g., quality of student resumes after a workshop at the Career Center)

Sometimes data are analyzed separately for subgroups of respondents, such as international students, athletes, evening students, or recently-hired employees to verify that all campus segments have benefited from the unit's services.

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