Developing Measurable Student Learning Outcomes for Community College Students

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MISSION STATEMENT

Student Learning Outcomes should be driven by the institution’s mission and values statements.

GOALS AND OBJECTIVES of STUDENT AFFAIRS/STUDENT SERVICES

With the mission and values statements as the foundation, programs within student affairs need to tie their goals and objectives to those within the Student Services Wing.

REASONS TO HAVE STUDENT AFFAIRS SLOs

Student Learning Outcomes include “structured events that occur outside of the classroom, complement the academic programs, and enhance the overall educational experience of students through development of, exposure to, and participation in social, cultural, intellectual, recreational and governance programs by:

- Encouraging involvement in the campus community and society
- Encouraging exploration of activities that provide opportunities for growth in individual and group settings
- Exposing students to various cultures and experiences, ideas and issues, art and musical forms, and styles of life
- Informing students regarding college policies and procedures and how these relate to their lives and activities
- Aiding in the awareness and utilization of college facilities and resources
- Assisting with developing leadership, decision-making and related skills

Source: Student Life/Leadership, Maricopa Community Colleges, Arizona (www.maricopa.edu, 7/23/07)

“We assess to observe student performance, reflect the performances back to the student, and guide the student to increased awareness about development of their knowledge and skills.

Source: Paradise Valley Community College, Arizona (www.pvc.maricopa.edu/AI/)

“Expectations have been set for all to articulate their contributions to student learning. We know that student affairs and academic support service professionals are partners in learning and development. Thus as educators, these cocurricular specialists are expected to assess the development and learning outcomes of their programs.”


ASSESSING OURSELVES

In addition to the Student Services Program Review process, programs and services need to be assessed regularly to determine whether or not we are accomplishing our goals, objectives, and stated SLOs. This can be accomplished through Annual Program Reviews, which assess SLOs and Planning Objectives, and the Comprehensive Program Review, which assess the entire program every three years. A crucial component to all program reviews is the peer evaluation.
DEFINITIONS of STUDENT LEARNING OUTCOMES:

Definition A:
Demonstrated growth in the following areas:
  - Cognitive skills … “Critical thinking, communication skills, the application of knowledge, decision making, lifelong learning”
  - Personal development … “Affective skills, purpose and integrity, self-esteem, autonomy, interpersonal relationships, practical competence, management of emotions, personal wellness”
  - Societal responsibility … "Respect and appreciation for human differences, ethical behavior, social skills, environmental sensitivity, accountability, altruism" [http://www.bsu.edu/sa/mission/]

Definition B:
“Statements that specify what learners will know or be able to do as a result of a learning activity. Outcomes are usually expressed as knowledge, skills or attitudes. In addition, three distinguishing characteristics of learning outcomes are that the specified action of the learner must be observable, measurable, and done by the learner.” (Paradise Valley Community College, [www.pvc.maricopa.edu/AI/](http://www.pvc.maricopa.edu/AI/))

Definition C:
“Assessment is the ongoing process of understanding, improving and documenting student learning.” (Paradise Valley Community College, [www.pvc.maricopa.edu/AI/](http://www.pvc.maricopa.edu/AI/))

HOW TO WRITE A STUDENT LEARNING OUTCOME

Begin with the end in mind.³

“A robust SLO includes:
  - A behavioral objective that describes what a student will be able to do, know or be at the conclusion of a course/service/program
  - A description of the method(s) to assess performance
  - The criteria for evaluating the outcome” ([www.columbia.yosemite.cc.ca.us/slo/slohome.htm](http://www.columbia.yosemite.cc.ca.us/slo/slohome.htm), 7/23/07)

Bloom’s *Taxonomy of Educational Objectives* (1956) serves as a common foundation when it comes to the use of words to describe the desired learning. The most common behavioral objectives cover the areas of knowledge, skills and attitude.

Some examples of words to incorporate into SLO statements include (but certainly are not limited to):

<table>
<thead>
<tr>
<th>Demonstrate</th>
<th>Identify</th>
<th>Describe</th>
<th>Display</th>
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</thead>
<tbody>
<tr>
<td>Attain</td>
<td>Access</td>
<td>Develop</td>
<td>Articulate</td>
</tr>
<tr>
<td>Exhibit</td>
<td>Engage</td>
<td>Adopt</td>
<td>Navigate</td>
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<tr>
<td>Define</td>
<td>Commit</td>
<td>Practice</td>
<td>Recognize</td>
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<tr>
<td>Employ</td>
<td>Establish</td>
<td>Evaluate</td>
<td>Manage</td>
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<td>Gather</td>
<td>Organize</td>
<td>Plan</td>
<td>Assess</td>
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<tr>
<td>Work collaboratively</td>
<td>Engage</td>
<td>Incorporate</td>
<td>Assist</td>
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<tr>
<td>Apply</td>
<td>Present</td>
<td>Arrange</td>
<td>Generate</td>
</tr>
<tr>
<td>Explain</td>
<td>Select</td>
<td>Perform</td>
<td>Compose</td>
</tr>
<tr>
<td>Utilize</td>
<td>Maintain</td>
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</table>
MEASURING SLOs

- There are many different ways to measure outcomes. Source: Paradise Valley Community College and Orange Coast College. PVCC’s website offers many more details about each one:
  - Student Portfolios
  - Electronic Portfolios
  - Institutional Portfolio
  - Standardized/National Exams
  - Pre/Post Tests
  - Locally Developed One-Shot Items
  - Capstone Experiences/Courses
  - Classroom Based Assessment
  - Surveys
  - Paper and pencil testing
  - Essays, writing samples
  - Logs, journals
  - Portfolio collections of student work
  - External evaluators’ behavioral observations
  - Graduation rates
  - Job placement data
  - Graduate follow-up studies
  - Retention and transfer studies
  - Surveys of alumni, employers, faculty, administrators, and students
  - Exit interviews
  - Focus Group Interviews

- Potential areas to measure (from West Chester University, http://www.wcupa.edu/_SERVICES/stu/whatwedo/stulearnoutcomes.html, 7/23/07):
  - Development of Identity
  - Development of Cognitive Skills
  - Development of Life Skills
  - Development of Leadership Skills
  - Development of Civic and Global Responsibility
  - Development of Interpersonal Skills

- Potential areas of measure (from NASPA’s Assessing Student Learning and Development: A Handbook for Practitioners, p. 6):
  - Global literacy
  - Accelerated technology
  - Social ethics and social responsibility
  - Organizational networking
  - Expanding diverse consumer markets
  - Empowering-oriented training and policy
  - Analysis of process barriers to goal attainment
  - Multicultural communities and organizations
  - Understanding of teamwork in organizations
  - A fundamental understanding of the operations and assessment associated with quality and effectiveness
  - Use of problem-solving in different settings and contexts
  - Development of general, specific, and contextual communication skills
Example 3 ♦ Mendocino College
([http://www.mendocino.edu/tc/pg/4416/student_learning_outcomes.html](http://www.mendocino.edu/tc/pg/4416/student_learning_outcomes.html), 7/23/07)

1. Assume responsibility for your actions and work effectively as an individual and as a member of a group.
2. Express ideas with clarity, logic, and originality in both spoken and written English.
3. Apply mathematical principles to address and solve problems.
4. Gather and interpret data, using a variety of scientific methods, to address and solve both practical and theoretical problems.
5. Analyze, understand, and evaluate diverse ideas, beliefs, and behaviors.
6. Access, interpret, evaluate and synthesize information using multiple resources, including current information technology.
7. Enhance physical and psychological well-being by examining and applying health and wellness concepts.
8. Explore and express personal creativity throughout your life.
9. Understand yourself and others as members of our diverse global community.
10. Understand and evaluate issues concerning use of the world's natural resources.

Examples of SLOs with measurement devices

Example 1
Student Learning Outcomes ♦ Paradise Valley Community College

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Approach</th>
<th>Measures</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. When engaged in a dialogue with team members, or as part of a small group project, students will perform effectively as team members and perform roles effectively if roles have been assigned.</td>
<td>Classroom activities; survey</td>
<td>Peer and/or faculty evaluation sheets; videotape analysis; self report; alumni survey of employers</td>
<td>Classroom activities: each time course is taught&lt;br&gt;Survey: every 3 years</td>
</tr>
</tbody>
</table>

Example 2
Student Learning Outcomes ♦ Central Arizona College

<table>
<thead>
<tr>
<th>CAS (Council for the Advancement of Standards) Learning Outcomes</th>
<th>Applications by Department</th>
<th>Examples of Evidence of Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal and Educational Goals</td>
<td>Advising</td>
<td>Students collaborate with academic advisors to make progress toward completion of degree and certificate program.</td>
</tr>
<tr>
<td></td>
<td>▪ Students select, articulate and pursue individual academic and personal goals.</td>
<td>Students collaborate with academic advisors to prepare for transfer to programs outside OCC.</td>
</tr>
<tr>
<td></td>
<td>▪ Students select most appropriate path and timetable for achieving goals.</td>
<td>Students consult with academic advisors to explore alternative educational paths when personal goals change.</td>
</tr>
<tr>
<td></td>
<td>▪ Students envision long-term goals and achievements.</td>
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</tbody>
</table>
| Intellectual Growth | Special Services | • Receive training on and use of assistive technology (when applicable).  
• Successful completion of and advancement in basic skills coursework for LD students.  
• Successful completion of all courses per semester for all DSC students. |
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Independence</td>
<td>Registrar</td>
<td>• On-line self services: count hits to website</td>
</tr>
</tbody>
</table>
| Social Responsibility| Special Services| • Self-assess vocational interests through career search software.  
• Successfully identify program of study.  
• Successfully complete program of study.  
• Participate in club activities, student government, etc.  
• Record number of students participating in clubs by level of involvement. |
| Clarified Values    | Records & Registration | • How many request to review records or sign a FERPA release forms are there per year? |
| Appreciating Diversity | Various programs | • [diversity exercises]  
• [receive declaration of civility] |
| Meaningful Interpersonal Relationships | Advising | • Students recognize obligations and interests outside the college and schedule classes accordingly.  
• Students adjust and adapt academic goals and schedules to fit with personal life. |
| Satisfying and Productive Lifestyles | Dean of Students | • Decrease the number of code violations that involve unhealthy behaviors, i.e. alcohol and other drugs. |
| Healthy Behavior    | Student Health Center | • Students will make choices that lead to positive outcomes. |
| Enhanced Self-Esteem | Financial Aid    | • Provide Financial Aid workshops/presentations at local community libraries. |
Collaboration | Career Services
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Educational institutions in support of this goal. | Involve faculty, staff, students and employers in determining the employment, educational and developmental needs to implement curricular and co-curricular needs.

- Structure programs and services that meet the need of the stakeholders.
- Develop curricular and co-curricular programs that address the employment, educational and developmental needs of students.

### Glossary (Source: Paradise Valley Community College’s “Assessment Handbook Draft”)

**Assessment**
“The systematic collection, examination, and interpretation of qualitative and quantitative data about student learning and the use of that information to document and to improve student learning” (p. 5)

**Direct Measurement**
“A measurement of student learning outcomes showing what they have learned. Examples of such measures include but are not limited to: … test results; capstone course portfolios; entry and exit test results” (p. 5).

**Quantitative and Qualitative Assessment**
“As part of an assessment technique, grades can provide quantifiable and quickly understood feedback for student performance” (p. 3). Yet, “it seems a common misunderstanding that assessment requires that everything be reduced to statistical measures. The thrust of assessment is objective results such that anyone will know that the learning goals are being met; but this need not be quantifiable.” If something is identified “as an important result” and “is not quantifiable, the process simply asks them to specify some objective means to demonstrate that the results are happening as intended” (p. 4).

**Indirect Measurement**
“A measurement of program outputs using student performance information. Examples of such measures include but are not limited to: number of students successfully transferring; graduation rates; placement data; advisory committee evaluation; and feedback from students, graduates, or employers” (p. 6).

**Rubric or Scoring Guide**
“[A] set of scoring guidelines that can be used to evaluate students’ work” (p. 6).

### References


Council for the Advancement of Standards in Higher Education: various materials on standards, self-assessments of programs and frameworks. www.cas.edu


Many of our fellow institutions have posted their Student Learning Outcomes and Assessments on their websites ... check them out for additional examples!