

Defining Objectives

Objectives, goals, outcomes -- which is which and why do we need them all? One of the goals of this chapter is to help you become more familiar with these terms and the differences between them. While the language can seem confusing at first, learning the difference between outcomes and objectives is essential to understanding this process. This chapter includes definitions, charts and comparison table that will help you increase your understanding of the outcomes process. Here are the definitions of some of the most commonly used terms.

Objectives
<p>Definition: Refers to the specific knowledge, skills, or attitudes that students are expected to achieve through their college experience; expected or intended student outcomes</p>
Institutional Outcomes
<p>Definition: Benefits or changes in a population, organization, or community due to program activities; typically expressed in aggregate form. These benefits may include research, economic, civic, service, community, as well as student learning.</p>
Student Learning Outcomes
<p>Definition: The achieved results or the actual consequences of what a student has demonstrated or accomplished; may be academic and occupational, as well as the intellectual, personal, civic development, attitudes, values, and beliefs that students attain as a result of postsecondary education.</p>

Objectives are the goals that faculty set for student learning within the classroom. **Student Learning outcomes** are those things that students have attained by the end of their college experience – including things learned in classes, occupational programs, degrees, certificates and even encounters with Student Services, the Library, or Counseling. When discussing Student Learning Outcomes, the focus is on ***what students can do*** with what they have learned and ***how they can apply*** that knowledge in their lives.

What is the difference between objectives and Student Learning Outcomes?

Student Learning Outcomes can be assessed within the course by examining what students can do at the end of a specific class. They can also be assessed at the end of a degree or certificate program by examining what students can do at the end of

their course of study. It is easy to confuse Student Learning Outcomes with course objectives as they can discuss similar topics. The key difference is that outcomes look at the broader picture of student learning. Rather than focusing in on specific skills or content, Student Learning Outcomes look at the “big picture”.

For example, when trying to develop student learning outcomes, try to think broadly:

- Describe the broadest goals for the course, particularly ones that require **higher-level thinking** abilities.
- Require students to **synthesize** many discreet skills or areas of content.
- Ask them to then **produce** something – a paper, project, portfolio, demonstration, performance, art work, exam, etc. – that **applies** to what they have learned.
- Remember to **evaluate** or **assess** the product to measure a student’s achievement or mastery of the outcomes.

Course objectives are on a smaller scale and describe discreet skills or the “nuts and bolts” of a particular course. They can be thought of as subsets of Student Learning Outcomes. The following chart can be helpful in comparing the two.

Objectives	Student Learning Outcomes
Objectives describe skills, tools or content that a student will master by the end of one specific course.	Outcomes describe over-arching goals that a student will be able to demonstrate by the end of a course or degree/certificate.
Objectives require the use of basic thinking skills such as knowledge, comprehension and application.	Outcomes require the use of higher level thinking skills such as analysis, synthesis, and evaluation.
Objectives do not necessarily result in a product. Most often, objectives are synthesized or combined to produce something that measures an outcome.	Outcomes result in a product that can be measured and assessed.



Concept Check: Choose an objective from one of your course outlines. Try to write it in the form of a Student Learning Outcome. Having trouble? Consult the next few pages for suggestions.

Writing Student Learning Objectives is often a very difficult task. The following charts have been adapted from the work of Janet Fulks and Kate Pluta from Bakersfield College. They have tried to create a flow or line of progression from course objectives to the most sophisticated types of Student Learning Outcomes. To help you write your Student Learning Outcomes they have noted the words from Bloom’s Taxonomy that can be used to describe either an objective or outcome.

KNOWLEDGE

OBJECTIVES

Basic Knowledge

OUTCOMES

Higher-Level Thinking



Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
Student remembers or recognizes information or specifics as	Student grasps the meaning behind the information and interprets,	Student uses information to relate and apply it to a new situation	Student discriminates, organizes, and scrutinizes	Student creatively applies knowledge and analysis	Student judges or evaluates information based upon

communicated with little personal assimilation	translates, or comprehends the information.	with minimal instructor input.	assumptions in an attempt to identify evidence for a conclusion	to integrate concepts or construct an overall theory.	standards and criteria, values and opinions.
Cite	Convert	Apply	Analyze	Assemble	Access
Label	Define	Chart	Compare	Create	Appraise
List	Describe	Compute	Contrast	Construct	Conclude
Enumerate	Discuss	Demonstrate	Correlate	Design	Critique
Identify	Estimate	Determine	Diagram	Develop	Decide
Imitate	Explain	Dramatize	Dissect	Formulate	Defend
Match	Generalize	Establish	Differentiate	Generate	Diagnose
Name	Identify	Make	Distinguish	Hypothesize	Evaluate
Quote	Illustrate	Manipulate	Infer	Initiate	Judge
Recall	Locate	Prepare	Investigate	Invent	Justify
Reproduce	Paraphrase	Project	Limit	Modify	Rank
State	Restate	Solve	Outline	Reframe	Recommend
Write	Summarize	Use	Separate	Synthesize	Support

SKILLS AND ABILITIES

OBJECTIVES

Basic Knowledge
Basic Skills

OUTCOMES

Higher-Level Thinking
Critical Understanding
of Performance



Observe	Model	Recognize Standards	Correct	Apply	Coach
Students translate sensory input into physical tasks or activities.	Students are able to replicate a fundamental skill or task.	Students recognize standards or criteria important to perform a skill or task correctly.	Students use standards to evaluate their own performances and make corrections.	Students apply this skill to real life situations.	Students are able to instruct or train others to perform this skill in other situations.
Hear Identify Observe See Smell Taste Touch Watch *Usually no outcomes or objectives written at this level.	Attempt Copy Follow Imitate Mimic Model Reenact Repeat Reproduce Show Try	Check Detect Discriminate Distinguish Notice Perceive Recognize Select	Adapt Adjust Alter Change Correct Customize Develop Improve Manipulate Modify Practice Revise	Build Compose Construct Create Design Originate Produce	Demonstrate Exhibit Illustrate Instruct Teach Train

ATTITUDES

OBJECTIVES

Elementary Values and Behaviors
 Inherited Value System
 Egocentric View

OUTCOMES

More Highly-Developed Attitudes
 Well Thought-Out Value System
 Higher Level Abilities to Identify and
 Articulate Others' Values



Receiving	Responding	Valuing	Organizing	Characterizing
Students become aware of an attitude, behavior, or value.	Students exhibit a reaction or change as a result of exposure to an attitude, behavior, or value.	Students recognize value and display this through involvement or commitment.	Students determine a new value or behavior as important or a priority.	Students integrate consistent behavior as a naturalized value in spite of discomfort or cost. The value is recognized as a part of the person's character.
Accept Attend Describe Explain Locate Observe Realize Receive Recognize	Behave Comply Cooperate Discuss Examine Follow Model Present Respond Show Studies	Accept Adapt Balance Choose Differentiate Defend Influence Prefer Recognize Seek Value	Adapt Adjust Alter Change Customize Develop Improve Manipulate Modify Practice Revise	Authenticate Characterize Defend Display Embody Habituate Internalize Produce Represent Validate Verify

Writing Student Learning Outcomes Statements

Here are some sample Student Learning Outcomes statements. Note the verbs that are used in each one and how they reflect higher level thinking skills, thus making them Student Learning Outcomes rather than objectives.

- **Biology:** Apply concepts of chemistry to physiological systems.
- **Criminal Justice:** Describe the principles of community-based policing and apply them to given situations.
- **Speech:** Organize, outline and deliver well-researched speeches to inform and persuade that are tailored to a specific audience.
- **Dental Hygiene:** Demonstrate technique of soft-tissue curettage on appropriate clinic patients.
- **History:** Evaluate historical myths, clichés, and prejudices that permeate contemporary US culture.
- **Photography:** Manually operate a 35 mm camera to create original photographs applying principles of exposure and development of black and white photographic films and papers with concepts of composition and design, aesthetics and content.
- **Piano:** Sit at the keyboard so that the body will rest on its frame in such a way to be able to use one's hands, arms and fingers to produce a beautiful tone with great speed and evenness.
- **Early Childhood Education (from University of Laverne):** Work successfully with children in early childhood education in public or private schools and/or social service settings.
- **Nursing (from San Jose State University):** Demonstrate critical thinking competencies, including the use of the nursing process, the research process, ethical decision-making, and an attitude of inquiry.
- **Administration of Justice (from San Jose State University):** Integrate theory and current social and behavioral science research in the analysis of contemporary criminal justice issues.

Writing student learning outcomes statements can be a daunting task, but the most important thing to remember is that as faculty you have been doing this all along. Whenever you teach a course, you consider the Student Learning Outcomes in your mind while developing the syllabus, lectures, materials and assignments. Focusing on outcomes assessment allows you to bring that material from your mind onto paper. This will assist you and your students in understanding why assignments are valuable, what skills they need to learn and how their understanding of those skills will be measured.

When you are writing Student Learning Outcomes, there are several things to remember including:

1. Try to keep your student learning outcome to one sentence and use it to describe one **major** piece of knowledge, skill, ability or attitude that

a student will have gained by the end of your course. Describe what the students will **do** – not content, activities, or hours.

2. Use action verbs as suggested on the previous pages.
3. Write it in a language that you and the student understand.
4. Make sure that the outcome is something that can be assessed or tested.
5. Sometimes it's easier to start backwards by thinking about the major assessments you use in the course. These would be the products or demonstrations you use in the course. Make a list of your major assignments for this course. Then try to describe in one sentence what the students are being asked to demonstrate.
6. **One warning:** Be careful when describing attitudes in a learning outcome. They are hard to assess. Ask yourself if the attitude is crucial to success in your class. If a student doesn't have a certain attitude, but possesses the knowledge and skills being taught, is that satisfactory? There were unresolved ethical and pedagogical issues that arise when we assess students about attitudes, yet for certain programs such as nursing, possessing an attitude such as "caring" is vital to success.

Use the following **Student Learning Outcomes Worksheet** to practice writing your outcomes. A blank copy can be found as Appendix E in this handbook and can be photocopied for your own use.

Course Name _____

Outcome: One sentence that describes a major piece of knowledge, skill, ability or attitude that students can demonstrate by the end of their study.	Outcomes Measure: Major assignment, project or test used to demonstrate or apply outcome.

Checklist for Writing Student Learning Outcomes

Once you have written your outcomes statements, it is always recommended that you get some outside feedback from colleagues or from the Outcomes Assessment Specialist, who is always available for consultation. You can also use this checklist to make sure that you have covered all the main points.

- Have you used action verbs in describing your student learning outcomes?
- Is it written as an outcome rather than an objective?
 - Language indicates the big picture rather than the nuts and bolts
 - Describes what students can do
 - Asks students to apply what they've learned by producing something
 - Addresses student competency rather than content coverage
- Is the student learning objective appropriate for the degree, certificate or course?
 - Represents a fundamental result of the course
 - Represents collegiate level work



Concept Check: Make a copy of the Student Learning Outcomes Worksheet in the appendix (appendix E). Using materials from one of your course, try to write your own Student Learning Outcomes and link them to outcomes measures that you are already assigning. Look for gaps in the chart and decide how to measure any outcomes that you are currently missing.

Writing Departmental Learning Outcomes

The same general rules apply to writing student learning outcomes within the larger department, certificate or degree setting. The faculty will need to come together to develop goals and student learning outcomes that are specific to your department, discipline, or field. The goals and objectives that follow are examples for you to consider as you think about writing your own.

Social Sciences

Program Goal: Students who major in one of the social sciences will learn that they have responsibilities to themselves, their families, peer groups, communities, and society.

Student Learning Outcomes:

- Students can identify the role that cultural diversity plays in defining what it means to be a social being.
- Students can identify the origins, workings, and ramifications of social and cultural change in their own identity.
- Students can compare the distinctive methods and perspectives of two or more social science disciplines.

Natural Sciences

Program Goal: Students who major in the natural sciences will become critical thinkers who are able to judge scientific arguments created by others and see relationships between science and societal problems.

Student Learning Outcomes:

- Students can apply scientific methodology.
- Students can evaluate the validity and limitations of theories and scientific claims in experimental results.
- Students can identify the relevance and application of science in everyday life.
- Students will demonstrate an understanding of basic scientific principles by restating the principle in their own words and giving a real-world example of the principle in action.
- Students will be able to distinguish between correct and incorrect applications of the principle when given examples of each on an objective exam.

Humanities

Program Goal: Students who major in the humanities will begin to recognize themselves as “knowers,” be self-conscious about their participation in a particular culture, and cultivate their ability to discover new knowledge for themselves.

Student Learning Outcomes:

- Students can identify the contributions of the humanities to the development of the political and cultural institutions of contemporary society.
- Students can analyze the meaning of major texts from both Western and non-Western cultures.
- Students can apply the humanistic perspective to values, experiences, and meanings in their own lives.

English

Student Learning Outcomes:

- Students will write five-page essays reflecting on the work of an author of their choice that presents a clear and well-organized argument and uses examples from the author’s work to support the argument.
- Students will use the conventions of Standard Written English in all writing assignments.

Education

Student Learning Outcomes:

- Students will clearly demonstrate an understanding of curriculum theory and standards by preparing a two-page curriculum plan and providing justification from the literature for the chosen curriculum method.
- Students will show an understanding of real-world curriculum needs by including in the curriculum plan details on the content and order of the curriculum, the appropriate grade level, and the time frame for implementation.

Examples on these pages have been adapted from California State University, Bakersfield, PACT Outcomes Assessment Handbook (1999) and University of Massachusetts, Amherst, OAPA Handbook (2001).

The most important thing to remember when writing departmental Student Learning Outcomes for an Outcomes Strategy is that the faculty have control over this process. Ideally, this conversation should happen in a department meeting where all faculty members are present. Each faculty member can come with a completed copy of the **Goal Definition Worksheet** and the **Outcomes Worksheet** in order to facilitate conversation about this project. Blank copies of both worksheets can be found in the Appendix.

Faculty can then discuss several issues in order to develop their Outcomes Strategy. The final product of the meeting should be 3-5 broad goals that describe what department faculty believe should be characteristic of students who graduate with that particular degree or certificate. For example, topics to discuss might include:

- Course objectives found on the course outlines, program brochure or any other advertising material
- Discussing the qualities of an ideal graduate from the program – what skills, strength, knowledge and values should they possess?
- Using that ideal student, ask yourself: what does this student know? What can they do? What do they care about?
- What program experiences are the most influential in producing and supporting the ideal student?
- What should every graduate of this program know?
- What career achievements of your alumni are you most proud of?



Concept Check: Does your department have an Outcomes Strategy? Not sure? Check the TOP website at <http://top.waubonsee.edu> to find out. If you are interested in developing an Outcomes Strategy or working on an existing project with other faculty in your field, contact the Outcomes Assessment Specialist at ext. 2897.