

Assessment of Degree, Certificate, and Credential Programs

To be included in the SDSU Curriculum Guide

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Assessment of Academic Programs

This section is designed to support assessment coordinators, department chairs, and faculty assigned to develop and monitor systems to assess degree, certificate, and credential programs. It includes an overview on program assessment, a step-by-step guide to preparation and implementation of assessment plans and completion of program assessment reports.

Key Principles

The overarching purpose of program assessments is to engage the campus community in systematic and continuous processes that clarify the effectiveness and value of academic programs; promote program coherence; and enhance student knowledge, capacities, and values. Program-level assessment is not aimed at evaluating individual students, instructors, or courses.

As a national comprehensive university and as a member of the Western Association of Schools and Colleges, San Diego State University subscribes to the three principles WASC considers essential to all of its accreditation standards¹:

- establishment of clear outcomes;
- reliance on indicators and metrics of achievement, and/or specific bodies of evidence that can help the institution to determine the degree to which outcomes are being achieved; and
- commitments to take action on the basis of evidence in order to improve performance.

Many SDSU colleges and departments are also committed to similar principles promoted by discipline-specific accrediting agencies or academic and professional associations, many of which require or recommend specific student learning outcomes for academic programs.

The American Association for Higher Education and Accreditation (formerly AAHE) recommends nine principles for assessment of academic programs:²

¹ Accrediting Commission for Senior Colleges and Universities, Western Association of Schools and Colleges. *Handbook of accreditation: 2008*. Downloaded October 28, 2011 and quoted verbatim from http://www.wascsenior.org/findit/files/forms/Handbook_of_Accreditation.pdf

² The American Association for Higher Education (1992), *The nine principles of good practice for assessing students*, pp. 2-3. These principles are quoted verbatim.

Assessment of student learning is founded on educational values.

Assessment is not an end in itself but a vehicle for educational improvement. Effective assessment practices reflect a vision of the kinds of learning outcomes we most value. *Assessment must be based on what the institution (or program) believes is truly important.*

Assessment is most effective when it reflects an understanding of learning.

Because what we value is often complex and multi-faceted, effective assessment practices employ a variety of methods. Learning is a complex process that entails not only what students know but what they can do with what they know; it involves not only knowledge and abilities but values, attitudes, and habits of mind. In order to reflect this understanding, assessment should employ a diverse array of methods that aim to get a more complete picture of learning and, therefore, a firmer basis for improving students' educational experience.

Assessment works best when the programs it seeks to improve have clear, explicitly stated purposes.

Assessment is a goal-oriented process that is most effective when it is based on clear and focused goals and objectives. It is from these goals that educators fashion the coherent frameworks around which they conduct assessment efforts. When these frameworks are not clearly constructed, outcomes will not provide the information and direction necessary to improve programs. Assessment as a process helps to move a campus toward clarity about where to aim and what standards to apply. When goals and learning outcomes are not unclear, a variety of needs assessment tools can help to clarify direction and purpose with real data and real evidence about stakeholder needs.

Assessment requires attention to outcomes but also and equally to the experiences that lead to those outcomes.

To improve outcomes, faculty and administrators need to know about student experiences along the way—about the curricula, teaching and student effort that lead to particular outcomes. Assessment can help you understand which students learn best under what conditions. With this knowledge comes the ability to improve learning as a whole.

Assessment works best when it is ongoing, not episodic.

Assessment is an ongoing process that evolves and is refined over time. Improvement comes when assessment entails a linked series of activities that occur over time. Assessment strategies must be continually evaluated and refined in order to ensure success.

Assessment fosters wider improvement when representatives from across the educational community are involved.

Student learning is a campus-wide commitment, and assessment is a way of aligning responsibilities. So, while assessment efforts may start small, the aim over time is to involve people across the campus community. Assessment works best when it is conceptualized as a group effort.

Assessment makes a difference when it begins with issues of use and when it illumines questions that people really care about.

Assessment recognizes the value of information in the process of improvement. But, to be useful, information must be connected to issues or questions that people really care about. This principle

implies assessment approaches that produce evidence that relevant parties will find credible, suggestive, and applicable to decisions that need to be made. It means thinking in advance about how the information will be used, and by whom. Only then can data guide continuous improvement.

Assessment is most likely to lead to improvement when it is part of a larger set of conditions that promote change.

Assessment alone doesn't result in much change. Its most important contribution comes on campuses where the quality of teaching and learning is visibly valued and worked at. Successful assessment is *directed towards program improvements*. These improvements may occur in teaching, student learning, academic support programs, or institutional effectiveness. Overall, assessment information must be applied systematically toward improvements if it is to have a lasting impact on the institution.

Through assessment, educators meet responsibilities to students and to the public.

Effective assessment programs measure outcomes and then inform their many constituents of the ways in which campus programs and services positively affect students, the community, and society.

Benefits of Assessment to Academic Programs

Many potential benefits ensue from a clear and coherent assessment program, for example:

1. Identifying and remediating basic skills or conceptual understanding.
2. Reducing failure rates.
3. Identifying which skills to emphasize when re-designing courses or updating assignments.
4. Improving course- and department-level grading policies.
5. Articulating department courses more effectively.
6. Refining and simplifying program review and accreditation processes.
7. Setting priorities and making resource allocation decisions (in a budgetary downturn as well as an upturn).
8. Analyzing and justifying workloads for students and faculty.
9. Tracking individual student progress through programs by monitoring individual achievement of objectives.
10. Describing the expected and actual learning outcomes to prospective students and parents, employers, community members, donors, accrediting agencies and other stakeholders.

Assessing Assessment

Assessment is an evolutionary process. It seems reasonable to predict that people who are interested in assessing outcomes and improving processes for achieving outcomes will also be interested in assessing assessment processes. These interests are reflected in various documents developed by WASC, the Western Association of Schools and Colleges, modified by several WASC institutions, and compiled by CSU Polytechnic at San Luis Obispo. Such documents may be helpful in gauging your department's status and progress in developing an assessment system. They may also help faculty to see your program's efforts as an external academic review team might see them.

[WASC Rubric on Program Level Assessment \(PDF\)](http://www.academicprograms.calpoly.edu/pdfs/assess/wasc_student_learn_apr.pdf)

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Mission Statement

A critical early step is to review the academic program's mission statement and how it fits with the Department, College, and University mission statements. Often, at this point, program faculty discover that there is no mission statement or that it is badly out of date. The appropriate response is to construct a temporary working mission statement, labeled as such, to guide initial assessment work and interactions with various stakeholders.

Needs Assessment

The ultimate purpose of a needs assessment is to *establish or reconsider* program goals and outcomes based on verifiable needs and perceptions of program stakeholders. These stakeholders may include students and faculty as well as communities and employers (but may also include legislators, regulators, accreditation organizations, and others) who will monitor or benefit from the capacities of future program completers and graduates.

Needs assessment sets or resets the stage for other aspects of the assessment process which in turn are concerned with the *degree to which the goals and objectives issuing from a needs assessment have been realized*.

The most common needs assessment efforts solicit opinions from stakeholders such as former and current students, community representatives, employers, and faculty. The most common techniques are surveys, interviews, focus groups, and structured discussions with advisory panels.

In addition to sampling stakeholder opinions, many programs will benefit from analysis of market and labor trends, and near-term and long-term economic forecasts. Another important strategy is to review similar programs at other institutions as well as national reports on trends in relevant issues in higher education.

It is also important to consider advances in pedagogy and teaching/learning technologies that may enable new learning outcomes previously considered unfeasible; to use the health care analogy again, many treatment outcomes are now possible and expected that would have seemed impossible or fantastic just a few years ago.

Many departments are surprised to find that their disciplinary and professional organizations have developed inventories of learning goals and objectives or needs assessment reports serve as a predicate for generating goals and objectives. One SDSU language department, for example, struggled with defining program goals and objectives until it realized rather suddenly that it could consult a highly developed and nationally-recognized set of program and course-level outcomes published by the National Standards in Foreign Language Education Project. Similarly, faculty in SDSU's Charles W. Lamden School of Accountancy employed an inventory of recommended competencies for undergraduate and graduate accounting maintained by the American Institute of Public Accountants.

Other programs need to ensure that learning goals and objectives are congruent with the demands of certification and license exams. Finally, numerous professional preparation programs at SDSU are required by their accrediting agencies to address specific learning goals and objectives.

Learning Goals vs. Program Goals

Academic departments establish many *program goals* such as:

- Acquire grants and gifts.
- Recruit faculty.
- Establish a reputation for research.

But this curriculum guide reserves the term *learning goals* to refer to broad, long-range, student-centered aims that describe the *capacities or abilities of program graduates or completers*:

- Use concepts and principles of ecology to explain the interactions of organisms with their environments and with each other.
- Interpret texts and material culture and describe the implications of interpretive methods.
- Synthesize well-organized arguments from textual or other evidence and express such arguments in formal English prose.
- Apply principles of graphic design appropriate to client situations and needs.
- Develop characters that operate from discernable motives consistent with an overarching narrative structure.

Often, three to seven well-stated learning goals are enough to define the essential expectations for most degree, credential, and certificate programs. Limiting the number of learning goal statements will assist in writing overarching statements and creating an assessment plan that is both meaningful and feasible.

Student Learning Outcomes

Whereas learning goals reflect broad and fairly abstract intentions, student learning outcome statements or *objectives* describe tangibles (observable and/or measurable performance) that directly evidences capacities or supports strong inferences about capacities. In other words, learning outcome statements describe what “comes out” (or ensues) from a learning process or intervention. This usage is analogous to that employed by health care organizations where practitioners refer to “patient outcomes” or “health outcomes” as intended results of some process, treatment, or intervention.

Student learning outcomes help educators and students alike to focus on the specifics of what will be taught and assessed. For more on Student Learning Outcomes, see *Student Learning Outcomes* in this Guide. For a very well-developed and integrated set of learning goals and capacity statements approved by the SDSU Senate see, the *General Education* section in this Guide. In scope and style, these are very appropriate models for program-level learning goals.

Mission Statements for Academic Programs

Generally, an ***academic program mission statement*** describes the purpose of a degree program (and any major, minor, or concentration within that program or a certificate program). Such a program-level mission statement is typically considered component of or adjunct to a department-level mission statement.

Department mission statements typically address multiple concerns that are not directly related to student pursuit of a specific degree. These include faculty research, scholarship, creative activity, grants and contracts, and fundraising, as well as university, community, and disciplinary service. Increasingly in the age of the internet, there are times when an academic program’s mission statement will need to stand alone: in catalog copy, on websites, in grant applications, in response to specific student queries.

Because academic degree and certificate programs are primarily focused on the development of student capacities and capabilities, an academic program mission statement helps to frame and contextualize program-level **learning goals** and thus plays a critical role in establishing how programs will be assessed and evaluated.

Departments that neglect mission statements for their academic programs may be setting the stage for troubles later during curriculum design and program assessment and in accreditation and academic reviews. On the other hand, a well-crafted program-level mission statements can serve as a powerful tool for generating curricular coherence, for building faculty consensus, for recruiting and motivating students, for highlighting program aspirations and strengths, and for working collaboratively with other programs and stakeholders.

Content. An academic program mission statement should be broadly informative and consonant with department, college, and university mission statements. It should emphasize the program's distinctive character and purposes. The mission statement may be framed as responses to questions such as these:

- **Overview:** Who does the program serve, support, challenge? What is the disciplinary context (“subject matter”) for this program?
- **Capacities:** What are the key capacities and capabilities of program students/graduates?
- **Roles:** What roles do students/graduates play in meeting the needs of employers, communities, and society in general?
- **Values:** What values, principles, and practices guide the program's teaching-learning community?
- **Learning in Context:** In what ways do research, scholarship, creative activity, and/or community service enhance student learning?

Scope. The university community needs to be able to access the mission statement for each degree program (major, minor, concentration) and certificate program. Could the same mission statement be used to describe the purposes of several related programs in a department? Perhaps. Yet, programs that diverge significantly in character and purpose should probably have their own mission statements.

Readers and Readability. Readers of mission statements might include parents, prospective students and faculty, journalists, legislators, and potential benefactors. As with any mission statement, clarity and concision are key. Assign a good writer to your mission statement team. Strive for jargon-free language that’s accessible to general readers. Avoid “academese” and “leagalese;” write at the level of a thoughtful newspaper or magazine article. Consider beginning longer mission statements with a single paragraph that stands on its own as a “mini-mission” yet also serves as overview.

Informing the Statement. Good mission statements are founded on real understanding of a program’s purposes and intentions. Developing a mission statement also depends on an appreciation of the needs of stakeholders, analysis of trends in demands and resources, and identification of emerging challenges and opportunities. Sources informing the process of creating a mission statement include:

- surveys and interviews of employers, alumni, and other stakeholder communities;
- certificate, licensure, or credentialing agencies;
- standards or recommendations developed by professional or disciplinary associations;
- comparisons or “benchmarking” against programs at other institutions; and
- department or college strategic plans and vision statements.

Integration of Mission Statement, Program Goals, and Learning Outcomes

The following inset uses a hypothetical department of history, based loosely on statements from multiple institutions, to demonstrate the relationship between a department mission statement and goals and program-level student learning outcomes for BA and MA degrees.

DEPARTMENT OF HISTORY HYPOTHETICAL UNIVERSITY

DEPARTMENT MISSION STATEMENT

Our department is a community of faculty, students, and staff that conducts educational activities, research, and scholarship to advance the study of the past and how the past is studied (historiography). We contribute to the understanding and development of history by developing expertise in particular specialties as well as through holistic integration across disciplines.

Our research and scholarship are diverse in terms of geography, culture, and time, yet guided by common interests: in historiographical controversy; in multi-cultural exchanges; and in interpretive paradigms that integrate useful methods and information from the sciences as well as the humanities. Our work encompasses global aspects of historical change including big histories of the universe and our planet, but also acknowledges the rich cultural heritage of historical change at the confluence of the Southwestern US, Latin America, and the Pacific Rim.

DEPARTMENT GOALS

- quality advisement regarding academic challenges and opportunities;
- curricula that offer global perspectives and multiple points of view;
- diverse opportunities to learn historical facts, concepts, principles, interpretations, and methods in learner-centered environments;
- preparation suitable to a variety of professions and careers including teaching, public history, business, law, writing and publishing, and research;
- opportunities to conduct original historical research with appropriate resources and advisement;
- participation in professional organizations and networks;
- knowledge of literatures appropriate to individual specializations;
- adoption and adaptation of information, communication, knowledge management, and productivity technologies appropriate to teaching, learning, research, scholarship, and creative activity;
- service to disciplinary societies and university and regional communities.

DEGREE PROGRAMS³

BA in History

The mission of the BA in History program is to assist students to develop an appreciation of the breadth and depth of human experience through comparative studies of societies and cultures, past and present. Students develop their abilities to conduct research, assess and analyze evidence, and communicate clearly orally and in writing. We emphasize both research with primary resources and critical analysis of arguments and about history and its relevance to contemporary issues. These capabilities enhance the participation of our students as informed, engaged, and thoughtful citizens. We believe they also prepare our students to pursue successful careers as teachers, lawyers, journalists, civil servants, politicians, and, of course, historians.

³ Portions freely adapted from Georgetown University Department of History, <http://history.georgetown.edu/95057.html>

Program Learning Goals

1. classify and describe varieties of historical knowledge and describe the relationship to history of other key disciplines, such as art, music, and literature and geography, economics, engineering, and biology;
2. use historical methods to compare societies and cultures, past and present;
3. describe major schools of historical thought (historiography);
4. apply a general understanding of historical causation to the analysis/ interpretation of historical trends;
5. employ a range of historical research methods;
6. locate, select, evaluate, interpret, and utilize primary and secondary historical sources;
7. communicate to a variety audiences and users effectively in written, visual, and oral modalities;
8. utilize a range of digital literacies in support of the capacities listed above and as preparation for life in the 21st century.

MA in History

Our MA program prepares advanced students to engage in rigorous historical inquiry and debate, to design and conduct archival research, and to refine their skills in responding to historiographical debate in both academic and public contexts. Graduates are equipped to analyze and integrate historical evidence relating to special areas such as politics and states, production and work, environment and society, culture and religion, gender and family. They will also emerge with foreign language, writing and communication skills enabling them to participate productively in fields such as government service, journalism, international agencies, and global business. Finally, students must demonstrate the ability to conduct original historical research of sufficient quality and depth to be suitable for publication.

Program Learning Goals

In addition to further development of the capacities listed above for the BA, students completing the MA will be able to:

1. summarize and apply significant aspects of historical literature in major and minor fields of study;
2. apply historiographical methods and models;
3. identify and describe career options in the field of history;
4. apply theories and ethics of public history;
5. describe professional standards and practices for two fields of history;
6. apply practical skills in two fields of history;
7. conduct advanced historical research leading to publication of an original thesis or completion of a substantive capstone project.

Additional Examples of Program-Level Goals and Associated Objectives (designated by O; note that in WEAVE, Objectives can be associated with more than one Goal.)

Literature

Goal 1. Students will be able to place important literary works in their historical and cultural context.

- O1. Compare authors and literary works across cultures. For example, analyze the character of Satan in Milton's *Paradise Lost*, and compare it to other satanic characters in cultures that have contributed to the Western tradition.
- O2. Analyze novels, short stories, poems, plays and significant works of literary prose using techniques of analysis appropriate to the literary contexts of the relevant cultures and genres.
- O3. Describe major trends in the development and dissemination of literary techniques and genres during the modern era.

Example 2: Ecology

Goal 2: Students will be able to apply principled reasoning and ecological and evolutionary concepts to explicate interactions of organisms with each other and their environments.

For selected ecological communities, the student will be able to:

- O1. Explicate the interaction of nutrient cycling and energy flow at the ecosystem level across a range of time and spatial scales.
- O2. Describe how the proportion of individuals at various reproductive stages influences population growth rates and illustrate how these relationships might be applied to manage populations.
- O3. Propose a plausible predictive model of ecological succession and identify factors likely to influence community composition and rates of succession.

Example 3: Visual Art

Goal 3. Students will be able to construct visual works of art that reflect creative application of design principles related to:

- line, shape, color, and texture;
- representation of depth through perspective;
- creation of balance through various symmetries;
- orchestration of design elements to guide the viewer's attention to different aspects of the composition.

Example 4: Critical Thinking

Goal 4. Students will be able to apply critical reasoning in preparing written and oral presentations.

- O1. Define problems and consider alternative solution strategies.
- O2. Assess the relevance, accuracy, and validity of findings and conclusions.
- O3. Identify implicit assumptions and potential biases of sources and arguments.
- O4. Integrate and synthesize knowledge across multiple contexts.
- O6. Identify and consider the value of ambiguity, uncertainty, and diverse view points.
- O5. Describe how he/she thought, reasoned, and made value judgments related to the presentation.

Developing Criteria and Standards

Once program goals and objectives have been clarified, one of the most obvious is how good is good enough? What degrees of individual student achievement will be considered satisfactory or excellent? What are the existing levels of aggregate performance for key learning goals, and what strategies and resources will be required to pursue the department's aspirations?

In this context, it's helpful to remember that the primary purpose of *academic program assessment* is to collect and interpret evidence regarding program effectiveness rather than to measure individual student performance. Nevertheless, many academic programs employ measures of individual student performance in concert with standards of aggregate performance:

- At least 70% of lower division students will achieve a score of 12 or better on the college's oral competence rubric.
- At least 90% of graduating seniors will pass the state certification exam.
- Average performance on the XYZ test will exceed 80.
- As determined by a random sample of at least 30 students in the fall semester of every third year, at least half of capstone projects will meet the following criteria...

Readiness for Standards Setting and Validity of Standards

Standards setting is a serious business because it reflects a long-term commitment and because it can guide and justify requests for additional resources. Although program coordinators and faculty may be tempted to pull numbers out of a hat, there are more substantive questions to consider.

- Will program completers take formal examinations administered by an external agency?
- Do accrediting, professional, or disciplinary bodies require or recommend certain levels of performance?
- Is attainment of certain academic goals more critical to success at some later stage of the progress in academia or in life and if so, should relevant standards be set higher?
- Do normative expectations (community or standard practices, “canons” of work to be understood) favor higher levels of performance for certain learning outcomes?
- What are the standards of comparable programs at other universities and what aspects of those programs might be used for benchmarking?

Curriculum Grids

Once program-level goals and objectives have been established, faculty need to assign them to appropriate venues such as courses and co-curricular activities. Plotting the outcomes and venues on a grid can help determine optimal sequences and required resources. In addition to ensuring that all of the objectives/outcomes are taught, grids can assist in deciding the context and timing for assessing students on each objective. A grid can also help with selecting or structuring existing course or co-curricular projects and assignments so they are more consistent with and provide better support for achieving program-level outcomes.

In the sample grid below, learning outcomes are allocated to different courses or co-curricular activities (such as student government, community service, attending conferences, and travel abroad). In this example, a simple scheme of initials has been used to indicate the emphasis on the outcome in each venue, from “foreshadowing,” to “extending/elaborating.”

		Courses or Co-Curricular Activity						
		350A	420	350B	460	485 or 498	475	
Learning Outcome	Lecture	Lecture-Discussion	Lab or Studio	Seminar	Internship or Independent Study	Capstone or Thesis	International program or community service	
	1	F	I	R	R	E	I	E
	2		F	I, R		R	E	
	3	I	R		E		R, E	E
	4		F		I		R, E	E

F - Foreshadowed: Include incidental representation or discussion of concepts or examples that will make them seem more familiar in subsequent encounters.

I - Introduced: Explicitly recognize, identify, describe, characterize, exemplify, and (optionally) apply.

R - Reinforced: Additional experience, clarifying, applying, using, rehearsing, or practicing

E - Extended: Elaboration and/or application to more challenging situation, integration with other content elements or with other skills or knowledge.