

Program Assessment: Guidelines for departments and programs

Arts & Sciences

Office of Assessment Trinity College

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What is assessment? A definition

Assessment is **an ongoing process** aimed at **understanding and improving student learning**. It involves

making our expectations **explicit** and **public**;

—setting appropriate **criteria** and **high standards** for learning quality;

—**systematically gathering, analyzing, and interpreting evidence** to determine how well performance matches those expectations and standards;

—and **using the resulting information to document, explain, and improve** performance.

When it is embedded effectively within larger institutional systems, assessment can help us focus our collective attention, examine our assumptions, and create a shared academic culture dedicated to assuring and improving the quality of higher education.

Uses of Assessment

Beyond accreditation, assessment can and should above all be **useful** to **you**:

- in **improving** your programs, curriculum, courses
- in **articulating the value** of your program / curriculum / faculty etc. to the outside world (administrators, parents, students, grant agencies, etc.)
- in **getting resources** for your program/faculty etc. (internal [budget]and external [grants])

Getting Specific

How do we state overall **goals**?

- How do we state **student learning outcomes**?
- What are **measures or indicators** of student learning?
- How do we **assess** student learning outcomes?
- How do we **use** assessments of student learning outcomes?

What is the difference between a goal and an outcome?

Program **goals** are broad and overarching statements about the skills, knowledge, and dispositions students are expected to gain by the end of their course of study.

Example from German Studies: *In keeping with the general philosophy of Trinity College, and with the mission of the department as described above, our faculty is committed to the following broad goals for undergraduate education in German studies:*

Students develop proficiency **in the German language**, spoken and written, and acquire a broad knowledge of **the German cultural tradition** and its contemporary reality.

Students develop an ability to analyze and interpret texts from a wide variety of media and genre, with particular attention to historical and cultural contexts.

–Students develop an ability to express discoveries and insights in cogent and persuasive fashion, both orally and in writing.

–Students develop an ability to formulate and to carry out research, including ability to use the relevant methodologies of the discipline.

–Students develop an ability to think globally, to understand themselves and the world from multiple perspectives.

•An **outcome** is a statement of what students **will do to demonstrate** that they have achieved (or are on the way to achieving) one or more goals.

Example: Skill: Critical analysis and interpretation:

Students **will use their knowledge** of genre, style, and cultural, social and historical context **to interpret and critically analyze texts** from a wide array of media and genres. *(addresses goals 1 and 2 above)*

Important Points about Student Outcomes

Outcomes should be stated in terms of what students will do and/or know

Outcomes should be linked to the department's learning goals

Outcomes should be measurable/observable

Outcomes should deal with what a department **REALLY** cares about

Outcomes should be comprehensive, but not overly complex

The number of outcomes actually assessed in any given year should be manageable

Limit your assessment to three - five **MEANINGFUL** learning goals and a few outcomes that support those goals

Potential Areas for Learning Outcomes

Knowledge Base – Students will identify and explain the primary domain specific concepts

- **Research Skills** – Students will design and conduct basic studies using appropriate research methods, data analysis, and interpretation
- **Critical Thinking Skills** – Students will use appropriate reasoning to recognize, develop, defend, and criticize arguments
- **Application/Problem Solving** – Students will identify appropriate applications and engage in effective problem solving
- **Communication Skills** – Students will communicate effectively in both written and oral forms

- **Values** – Students will demonstrate the ability to weigh evidence, tolerate ambiguity, act ethically, etc.
- **Attainment** – Students will gain entrance to high quality graduate/professional programs, receive multiple job

Goals and outcomes (cont.)

A goal can have one or more outcomes:

Example:

Goal : Research Skills

Students develop an ability to formulate and to carry out research, including ability to use the relevant methodologies of the discipline.

Learning Outcomes:

1. Students will select and formulate topics or questions of importance to furthering knowledge of language, literature, and culture of German-speaking peoples.
2. Students will locate, use, and cite appropriate library, internet, and electronic resources for their research projects.
3. Students will apply appropriate methodologies accepted by the discipline to produce a scholarly essay.

What is a measure / indicator?

A measure (or indicator) is what the student **does** or **produces** to demonstrate that he/she has achieved (or is on the way to achieving) the goal.

Example:

Goal: Students develop an ability to analyze and interpret texts from a wide variety of media and genre, with particular attention to historical and cultural contexts .

Outcome: Students will use their knowledge of genre, style, and cultural, social and historical context to interpret and critically analyze texts from a wide array of media and genres.

Measures/Indicator(s): Final paper or essay in a course; capstone product;

or honors thesis.

Measures / Indicators of student learning: Direct and Indirect

Direct Measures: Samples of student work that can be observed and mapped onto a learning outcome. (*An attempt is made to directly measure learning.*)

Examples:

Faculty (other-than-instructor) ratings of student work samples – graduate student committee model
Qualitative and quantitative assessments of work samples
Capstone experiences such as research projects, presentations, theses, dissertations, oral defenses, exhibitions, or performances
Employer ratings of recent graduates
Student reflections on their values, attitudes, and beliefs
Scores and pass rates on licensure exams
Ratings of student skills by their field experience supervisors

• **Indirect Measures:** Perceptions of students (or others) of the extent to which a learning outcome has been achieved; other indirect evidence (*An attempt is made to measure the results of having learned.*)

Examples:

- Course grades
- Questions on course evaluation forms that ask about the students' own learning
- Student/alumni satisfaction with their learning, collected through surveys, exit interviews, or focus groups
- Admissions rates into graduate programs
- Quality/reputation of graduate programs into which alumni are accepted
- Placement rates of graduates into appropriate career positions and starting salaries
- Student participation rates in faculty research, publications, and conference presentations
- Honors, awards and scholarships earned by students and alumni

Example

Goal: Critical analysis and interpretation

Learning Outcome: Students **will use their knowledge** of genre, style, and cultural, social and historical context **to interpret and critically analyze texts** from a wide array of media and genres.

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Measures / Indicator(s):

Direct: Final paper or essay in a course; capstone product; or honors thesis

Indirect: Item # x on student course evaluation; exit interview; online survey of how well students think they achieved this outcome.

Some notes on (Direct and Indirect) Measures...

Some measures can be both direct or indirect (or either-or), for example:

- An **exit interview** can be a direct measure if •it elicits students' direct knowledge of a field or skill in a particular area (e.g. if the interview is held in a foreign language, it may be used to evaluate a student's language proficiency; or the exit interview can be used as a kind of final oral exam in a subject area)
- An **exit interview** can be an indirect measure if •it asks students how well they think they have achieved the learning outcomes of the program
- Some things are neither direct nor indirect measures of student learning, for example:
 - Numbers of majors
 - Course enrollment statistics
 - Number of Honors Theses

Note that these may play a role in the larger evaluation of the program, but they say nothing about what students are learning, and how well.

Criteria / Standards used to judge quality of learning products: RUBRICS

A note about grades: Grades are what we normally use to judge the quality of student performance in classes, but they say nothing specific about **what** students have learned, and **how well**. They serve at best as an indirect measure of student learning.

Therefore:

It is better to **map criteria directly onto learning outcomes**. This can be done very easily by creating a **rubric** that describes the quality of a given outcome.

Example: Rubric for final paper / capstone project:

Goal: Research Skills

Outcome 2: use of appropriate sources:

Rubric:	excellent (3): use of wide range of databases and other bibliographic references, and relevant to topic	sources are extensive
	good (2): some use of databases and other bibliographic references, source material to topic	for the most part relevant
	poor (1): little use of databases and other bibliographic references, sources often of have little bearing on topic	dubious nature and/or

	4	3	2	1
Explanation of issues	Issue/problem to be considered critically is stated clearly and described comprehensively, delivering all relevant information necessary for full understanding	Issue/problem to be considered critically is stated, described and clarified so that understanding is not seriously impeded by omissions.	Issue/problem to be considered critically is stated but description leaves some terms undefined, ambiguities unexplored, boundaries undetermined, and/or backgrounds unknown	Issue/problem to be considered critically is stated without clarification or description
Evidence <i>Selecting and using information to investigate a point of view or conclusion</i>	Information is taken from source(s) with enough interpretation/evaluation, to develop a comprehensive analysis or synthesis. Viewpoints of experts are questioned thoroughly	Information is taken from source(s) with enough interpretation/evaluation to develop a coherent analysis or synthesis. Viewpoints of experts are subject to questioning	Information is taken from source(s) with some interpretation/evaluation, but not enough to develop a coherent analysis or synthesis. Viewpoints of experts are taken as mostly fact, with little questioning.	Information is taken from source(s) without any interpretation / evaluation. Viewpoints of experts are taken as fact, without question.
Influence of context and assumptions	<i>[see website for complete information]</i>			
Student's position (perspective, thesis/hypothesis)				
Conclusions and related outcomes (implications and consequences)				

Sample rubric... Critical Thinking VALUE Rubric (AAC&U) for

full document, see <http://assessment.aas.duke.edu/documents/CriticalThinking.pdf>

Achievement Targets

Specific levels of achievement tied to each measure that would indicate a successful outcome.

Examples:

- x % of students will have a score of 3 or above on capstone project.
- x% of students will have a proficiency level of “Intermediate High” on the ACTFL Proficiency Scale.
- Students in the revised course Y will outperform students in the previous version of the course on a common final examination.
- x% of students will use their knowledge and skills beyond the classroom (e.g. in civic engagement, internships, research/study abroad, etc.)

Using the information gathered

Reflect on and discuss findings of a given year
in faculty committees and/or faculty meetings
and retreats.

Formulate an **action plan** to address any
perceived needs, possible improvements at program,
curricular, or course level
to address concerns re. assessment process itself
to use findings strategically for internal and external
purposes

Closing the loop

Implement your action plan...

Possible areas for action:

Faculty Development

Teaching
Mentoring and Advising

Course and Curricular Design

Curricular Changes

- New or Revised Courses
- Revised Course Sequence
- Core Requirements

Student Development

- Research Participation
- Placement (Graduate work, employment)

Facilities, Classrooms, Labs, etc.

Specific improvement not required for each outcome, but opportunities should be systematically evaluated

Sustaining the process

Do not try to assess too much in any given year. Plan what you will look at in year one, two, three, etc.. based on time / available resources.

Track findings from year to year.

If a change or changes are instituted in a given year, use following year(s) to assess their effectiveness.

Involve / keep all faculty in the loop..

...and remember

One of the most rewarding aspects of assessment is that it builds departmental unity through reflective dialogue.

Make time to study and discuss (as a department) what the results tell you about student learning in your program.

For further information, see Office of Assessment website 'Resources' page or contact Matt Serra for an appointment:

<https://assessment.trinity.duke.edu/>