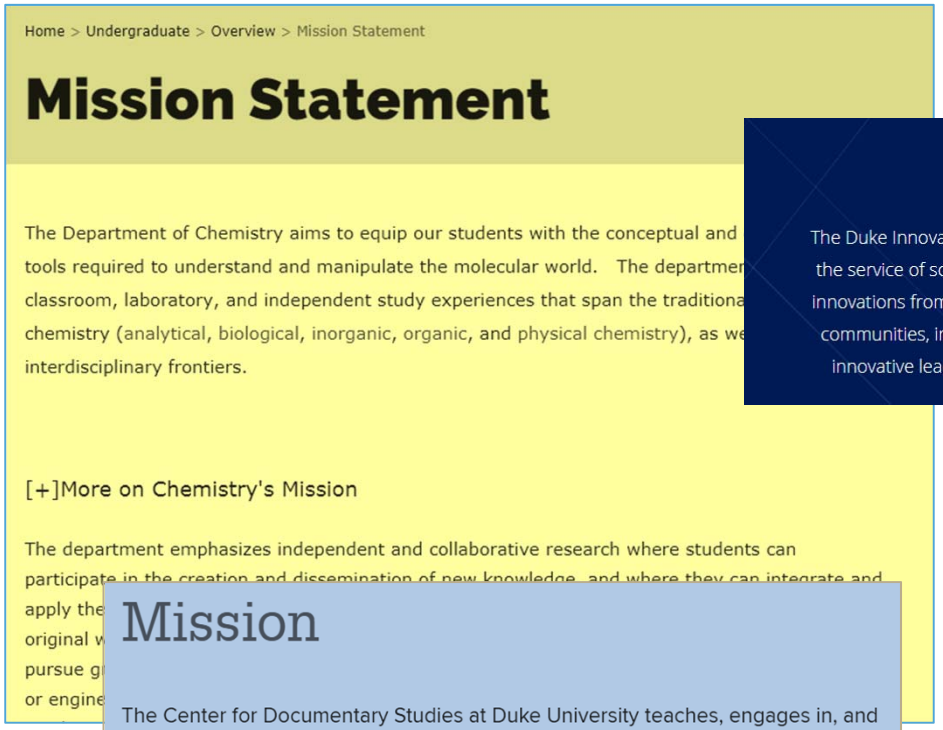
Writing and evaluating student learning outcomes and program objectives

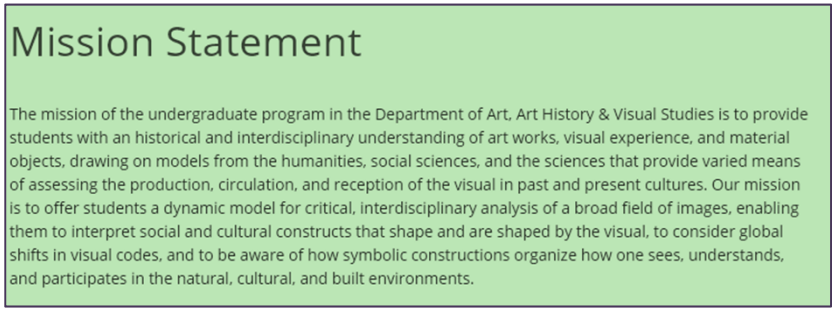
Office of Assessment
September 2017

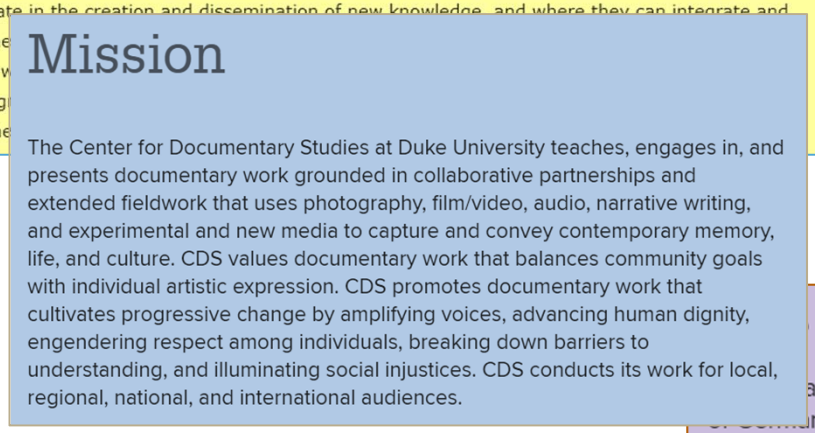
(c) 2017, Office of Assessment, Trinity College, Duke University

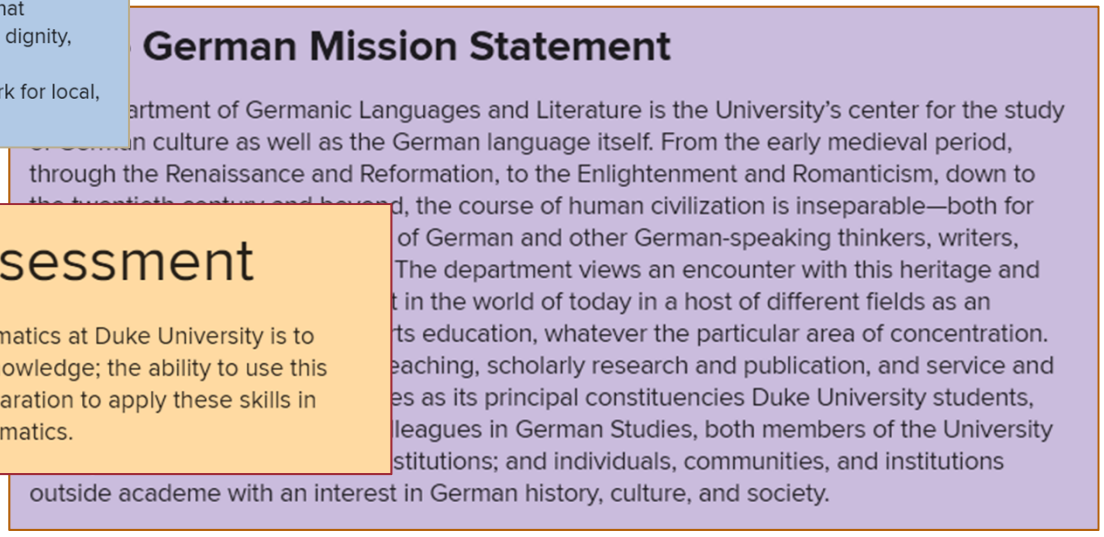
What motivates your assessment work?

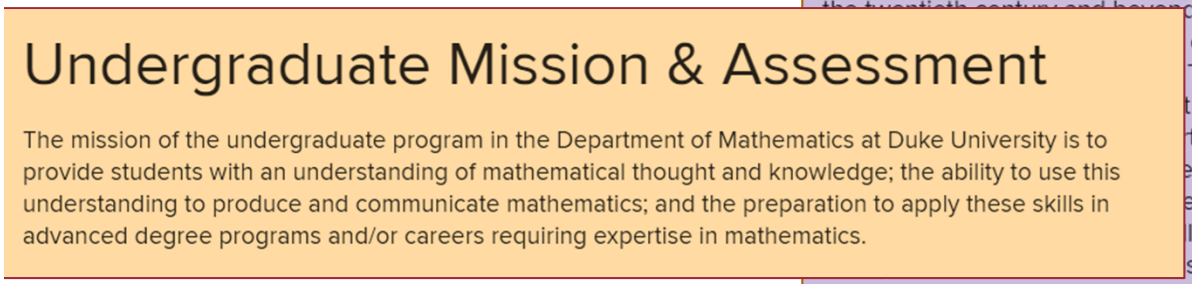
(c) 2017, Office of Assessment, Trinity College, Duke University





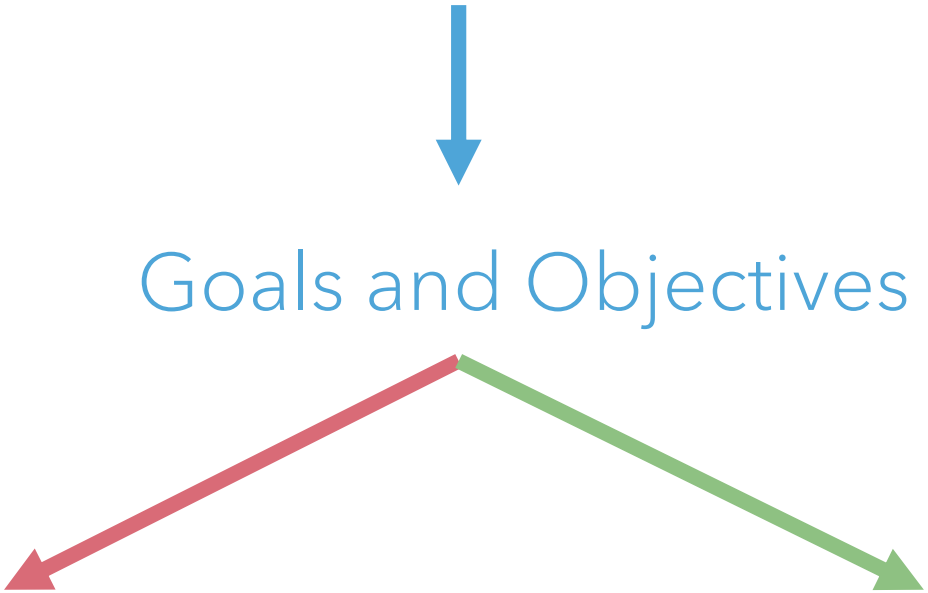






(c) 2017, Office of Assessment, Trinity College, Duke University

Mission statement



Goals and Objectives

Program Objectives

Student Learning Outcomes

(c) 2017, Office of Assessment, Trinity College, Duke University

What is a "Program Objective"?

The things that represent changes to the program over time.

- Improve our outreach to first-year students interested in the discipline
- Increase gateway course enrollments by 25%
- Increase the number of students actively involved with the majors union
- Increase the number of students completing honors theses by 10% in the next 3 years
- Hire 1 new faculty with expertise in [something]
- Repurpose lab space to accommodate undergraduate research projects

You might think of then as *inputs* to learning. They often are related to and support learning.

They inform important decisions about your curriculum.

(c) 2017, Office of Assessment, Trinity College, Duke University

What is a "Student Learning Outcome"?

Specific, measurable statements of what students know or are able to do by virtue of participation in your program

Examples:

- Students will identify relevant assumptions underlying an argument in a scholarly paper.
- Students are able to discriminate between relevant and non-relevant information when forming an argument.
- Students will be able to deliver a persuasive argument in an oral presentation.
- Students form and execute well-functioning teams to solve a real-world problem.

(c) 2017, Office of Assessment, Trinity College, Duke University

More on Student Learning Outcomes

Example	Too general; very hard to measure	Still pretty general; may be tough to measure	Specific; easier to measure
1	Students will have good foreign language skills.	Students can read in the foreign language.	Students will demonstrate strong reading comprehension when engaging texts written in the foreign language
2	Students will develop problem-solving skills.	Students will be able to solve problems that occur in the field.	Students are able to identify and evaluate multiple strategies for solving a problem.
3	Students will have strong critical thinking skills	Students show evidence of good critical thinking skills.	Students systematically and methodically analyze their own and others' assumptions. Students carefully evaluate sources of evidence.
4	Students can do library research.	Students know how to use library resources.	Students access information using effective, well-designed search strategies and appropriate information sources.

Table derived from resources at the University of Rhode Island and the AACU VALUE rubrics

(c) 2017, Office of Assessment, Trinity College, Duke University

More on Student Learning Outcomes: Worksheet

Example:	Not useful: Too general	Better	Best: Specific and measureable
Students will synthesize evidence to reveal insightful patterns, differences, and/or similarities.			
Demonstrate the ability to analyze case studies of science's impact on society in written, scholarly form.			
Students will reflect critically on theoretical and methodological approaches to topic of research			
Students will demonstrate effective communication skills in oral presentations.			
Students will recognize ethical issues when presented in a complex, multilayered context.			
Students understand the structure and the elements of expression of [artistic activity].			
Students engage in discussions about the institutional, economic, social and political complexities of the role of the [institution] in society.			
Students can articulate their individual identifies in a global context.			
Students will evaluate critically the role of the individual in relationship to the governmental agencies, voluntary associations and nonprofit organizations which help to shape civic life.			
Students will explore politics and praxis of global systems.			

(c) 2017, Office of Assessment, Trinity College, Duke University

But how to write a good learning outcome?

Actor	Who is demonstrating the learning or change? This is the student, not the program.	Students will be able to… Graduates can… ★ NOT THE PROGRAM ★
Behavior	What will the student be able to do to demonstrate the knowledge or learning? See Bloom's taxonomy or Google a list of active verbs.	… analyze … … interpret… … design … … defend …
Context	What is the context? What is the thing they are using, making, delivering, or acting upon?	Scholarship in the field Oral presentation (concrete & observable product, skill, or activity)

Credit to and adapted from:

Center for Teaching and Learning, University of Georgia
Russell, J. D., Smaldino, E., & Lowther, L. (2007). Instructional Technology and Media for Learning.

(c) 2017, Office of Assessment, Trinity College, Duke University

But how to write a good learning outcome?

Actor	Who is demonstrating the learning or change? This is the student, not the program.	Students will be able to… Graduates can… ★ NOT THE PROGRAM ★
Behavior	What will the student be able to do to demonstrate the knowledge or learning? See Bloom's taxonomy or Google a list of active verbs.	… analyze … … interpret… … design … … defend …
Context	What is the context? What is the thing they are using, making, delivering, or acting upon?	Scholarship in the field Oral presentation (concrete & observable product, skill, or activity)

Our graduates are able to apply appropriate laboratory techniques to answer scientific questions.

Students in the capstone are able to critique (critically analyze) published scholarship in the field.

Students demonstrate understanding of the structure and the elements of expression through a choreographed dance production.

(c) 2017, Office of Assessment, Trinity College, Duke University

Your turn:

Learning outcome:	Actor:	Behavior:	Context:
1			
2			
3			

(c) 2017, Office of Assessment, Trinity College, Duke University

Using the AAC&U VALUE rubrics

https://www.aacu.org/value-rubrics

They help parse nebulous competencies like *integrative learning*, *critical thinking*, and *collaboration*.

You can adapt their language into your own Student Learning Outcome.

They give some sample benchmarks which you might use as targets or in your evaluative rubrics.

(c) 2017, Office of Assessment, Trinity College, Duke University

About Critical Thinking

https://www.aacu.org/sites/default/files/files/VALUE/CriticalThinking.pdf

https://www.tntech.edu/cat/about/skills

Facione & Facione: Critical thinking holistic rubric

(c) 2017, Office of Assessment, Trinity College, Duke University

What does our accreditor (SACSCOC) have to say about your learning outcomes?

Principle 1: The role of student learning in accreditation. The institution defines educational quality—one of its core purposes—by how well it fulfills its declared mission on student learning.

Principle 2: Documentation of student learning. The institution demonstrates that student learning is appropriate for the certificate or degree awarded and is consistent with the institution's own standards of academic performance.

Principle 3: Compilation of evidence. The institution derives evidence of student learning from multiple sources, such as courses, curricula, and co-curricular programming, and includes effects of both intentional and unintentional learning experiences. Evidence collected from these sources is complementary and demonstrates the impact of the institution as a whole on the student.

Principle 4: Stakeholder involvement. The collection, interpretation, and use of student learning evidence is a collective endeavor, and is not viewed as the sole responsibility of a single office or position. Those in the institution with a stake in decisions of educational quality participate in the process.

Principle 5: Capacity building. The institution uses broad participation in reflecting about student learning outcomes as a means of building a commitment to educational improvement.

(c) 2017, Office of Assessment, Trinity College, Duke University

http://www.sacscoc.org/pdf/handbooks/GuideForInstitutions.pdf

Back to the relationship between a Program Objective and a Student Learning Outcome…

Program outcome		Student learning outcome
The program will increase the number of students completing a distinction project by 10% over 3 years.		Students who complete a distinction project are able to compose a comprehensive literature review of scholarly research on a topic.
Increase gateway course enrollments by 25%		Students in the gateway course demonstrate high levels of factual knowledge and comprehension of key themes in the disciplines.
Increase the number of students actively involved with the majors union		Students in the majors union can apply the major methodologies of the field to real world problems.

(c) 2017, Office of Assessment, Trinity College, Duke University

Reminders

- Assessment liaisons should sign up for one-on-one meetings to discuss assessment plans for 2017-18

  See Sept. 18 email from Evan Widney, or visit bit.ly/assessment_fall2017

- Upcoming roundtables

  Wednesday, October 11
  Rubrics for assessment of learning across the program
  1:00 – 2:00 pm in Rubenstein 349 (Breedlove)

  Monday, October 16
  PebblePad information session: Building your program's assessment portfolio
  1:00 – 2:00 pm in Rubenstein 349 (Breedlove)
  One of two identical sessions for assessment liaisons

(c) 2017, Office of Assessment, Trinity College, Duke University