Sampling Best Practices for Program Assessment

Adapted from [University of St. Thomas](https://www.stthomas.edu/accreditation-assessment/assessment-best-practices/sampling/)

# Why Would We Sample?

Program assessment works best when it is ongoing rather than episodic and meaningfully integrated into the program. For this reason, we recommend exploring whether assessment can be tied into the program’s regular workflow rather than treated as a separate piece. For example, a department might decide to use a common rubric that addresses some of their program’s major student learning outcomes as the standard way in which faculty evaluate their students’ capstone projects. These rubrics would serve the dual purpose of giving students feedback and evaluation of their work, as well as providing data for program assessment. In this case, it might be most efficient to consider data from all students during program assessment efforts.

However, if program assessment will not be integrated into faculty member’s regular workflow and your program has a large number of students or if the student work products take a long time to review, sampling may be more feasible than assessing work from all students. Sampling is assessing a proportion of students rather than all students in the program.

# Determining Sample Size

A general rule of thumb is to assess 10 students or 10% of the students, whichever is greater. However, there may be circumstances when other sample sizes may be favorable. For example, departments planning on conducting statistical tests to determine differences between groups as part of their program assessment efforts will want to be sure that they have enough [statistical power](http://powerandsamplesize.com/) to detect any real effects that might be present in the population.

In the absence of such statistical testing, practically speaking, the size of the sample depends on two factors:

## The length and complexity of the assignments

## Programs that will be assessing long, complex student work products that will require significant additional effort should use a smaller sample size. Programs that have a short, simple student work products should use a larger sample size.

## The number of faculty/staff members serving on the panel

## If not integrated into the regular workflow, assessment panels should be used to evaluate the student work products.

The number of raters on the panel affects the number of student work products that can be evaluated each semester or year. Programs with a small panel (4 members or less) should evaluate a smaller number of student work products. Programs with a large panel (5 or more members) have the resources to evaluate a larger number of student work products.

# Common Types of Sampling

There are a variety of sampling methods. Simple random, stratified, systemic, and cluster sampling are examples of four common and appropriate sampling methods for institutional assessment activities.

**IMPORTANT NOTE:** Sampling should be representative of all modes of delivery and locations. If you are not selecting your sample from all course sections, your sample should include full- and part-time faculty sections and graduate-student taught sections as well as face-to-face and online sections (when applicable). Selecting sections based on faculty volunteers, should be avoided.

## Simple Random Sampling

## Randomly select a certain number of students or student work products. The students or student work products should be randomly selected from the entire population in a way that each student or student work product has an equal chance of being selected.

## Example: You have 100 students in your program who have completed the mandatory student work product. You want to sample 20% of your student work products (20 student work products). Therefore, you randomly select the 20 students or student work products without any order or plan. Random sampling can be done with a random numbers table, by random number generators (computerized), or by selecting from a hat.

## Stratified Sampling

## Students are sorted into homogenous groups and then a random sample is selected from each group. This is useful when there are groups that may be underrepresented.

## Example: In a program that has few female students, it may be desirable to ensure they are represented in the sample. Therefore, all students are sorted by gender and a sample is selected from each group.

## Systematic Sampling

## You select the nth (e.g. 7th, 9th, 20th) student or student work product from a list.

## Example: You have an alphabetical listing of all 100 students who have just completed your program. You want to sample 20% of your student population (20 students). Therefore, you go through the list of100 students and pick every 5th student as you move down the list.

## Cluster Sampling

## You randomly select clusters or groups (e.g. classes or sections), and you evaluate the assignments of all the students in those randomly selected clusters or groups. If you are using cluster sampling, the selection of sections should be random and should include full- and part-time faculty sections and graduate-student taught sections as well as face-to-face and online sections (when applicable).

## Example: The student work product that represents an important program outcome is a paper that is produced in the highest level course of your program, and there are 15 sections offered a semester. Each section has 30 students. You would like your sample to be 20% (90 students) of your overall student population (450 students) for one semester. Therefore, you randomly select 3 sections, and you evaluate the assignments of all 90 students enrolled in those 3 sections.