

## Pathways Assessment Data

### How Information Will Be Used and Shared



Pathways assessment data will be used for multiple purposes. Instructors may examine their own results to gain insight into student performance in their course; inform decisions about how information is presented to students; discuss similarities and differences with other instructors if the course has multiple sections; or reflect on the appropriateness of the Pathways student learning outcomes associated with the course.

Once individual course data is reported by Pathways instructors to the Assessment & Evaluation unit in the Office of Academic Decision Support, the data will be aggregated to provide information on the Pathways program as a whole. Data will be collapsed across all sections/courses reporting data for a specific Pathways concept and student learning outcomes. For example, the following table presents aggregate data for seven courses that reported data for the Core Concept of Reasoning in the Natural Sciences.

|       | Number of Classes Reporting Data | Number of Students Assessed | Below Competent    |                        | Competent          |                        | Above Competent    |                        |
|-------|----------------------------------|-----------------------------|--------------------|------------------------|--------------------|------------------------|--------------------|------------------------|
|       |                                  |                             | Number of Students | Percentage of Students | Number of Students | Percentage of Students | Number of Students | Percentage of Students |
| SLO 1 | 5                                | 181                         | 17                 | 9%                     | 57                 | 32%                    | 107                | 59%                    |
| SLO 2 | 5                                | 263                         | 47                 | 18%                    | 88                 | 33%                    | 128                | 49%                    |
| SLO 3 | 6                                | 272                         | 47                 | 17%                    | 98                 | 36%                    | 127                | 47%                    |
| SLO 4 | 6                                | 276                         | 39                 | 14%                    | 81                 | 29%                    | 156                | 57%                    |

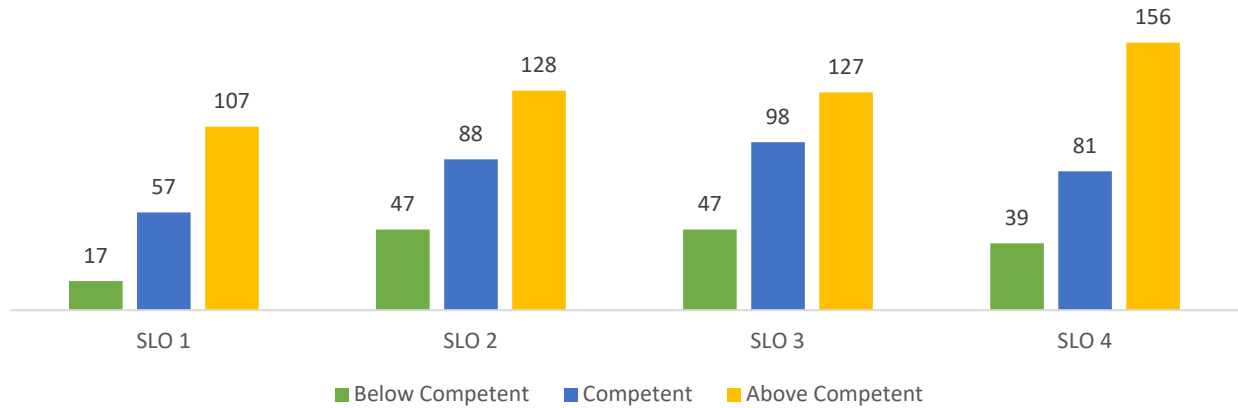
This information will then be used to determine overall student achievement, the extent to which Virginia Tech is achieving its mission for general education, and if improvements need to be made to Pathways student learning outcomes, the program, or both. Pathways data will be used solely for improvement purposes. ***Since data are aggregated at the level of each Pathways student learning outcome and concept, they will NOT be student, faculty, or course identifiable.***

A summary of aggregate data for each Core and Integrative Concept and associated student learning outcomes will be posted on the Pathways website. Faculty will then discuss this information to improve teaching, learning, and the Pathways curriculum.

Pathways data will also be submitted to Virginia Tech's regional and state accrediting agencies to fulfill accreditation requirements.

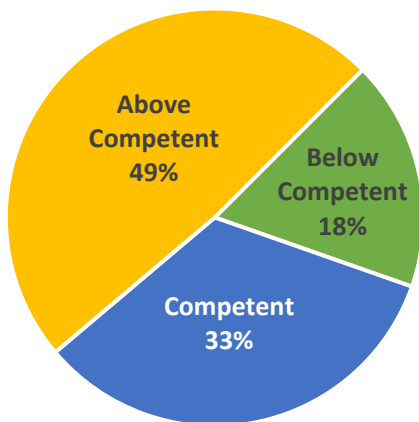
The bar chart below is an example of how aggregate data will be presented to communicate information about student performance on each of the student learning outcomes within the Core Concept of Reasoning in the Natural Sciences. The chart reports only the total number of students at each competency level with no identifiable information about students, faculty, or courses. If only a single course or instructor reports assessment data for a specific student learning outcome or concept, no data will be shared in order to protect confidentiality.

Reasoning in the Natural Sciences  
Number of Students at Each Competency Level per SLO



A pie chart allows for a closer examination of an individual student learning outcome within a Core or Integrative Concept, while a horizontal bar graph allows for the comparison of student learning outcomes by competency level.

SLO 2: Apply principles and techniques of scientific inquiry



Reasoning in the Natural Sciences

