

Quantitative Literacy Assessment 2024-2025

Executive Summary

During the 2024-25 academic year and the Fall 2025 semester, Washburn University (Washburn) administered the Quantitative Literacy Assessment instrument to Senior level students to assess quantitative literacy skills for the Quantitative and Scientific Reasoning (QSR) University Student Learning Outcome (USLO). The Quantitative Literacy Assessment was administered on the LifeJourney by Territorium platform as one of the five HEIghten Outcomes Assessment suite modules.

Administration Details

- **200 seniors** – proportionately stratified by college/school – were randomly selected with replacement to complete the Quantitative Literacy Assessment in Fall 2024 and Spring 2025.
 - The proportional stratification distribution was:
 - 49% College of Arts and Sciences
 - 27% School of Applied Studies
 - 9% School of Business
 - 5% School of Nursing
 - 1% Exploratory students
- An incentive of \$10 in Bod Bucks was provided to students who completed the assessment.
- Three students started and completed the assessment for a 1.5% response rate in Fall 2024, and during the Spring 2025 administration, an additional 13 students started the assessment and 10 completed the assessment (6.5% response rate), for an **overall total of 13 completed assessments for 2024-25**.
- Due to the low number of completed assessments in Fall 2024 and Spring 2025, an additional administration of the Quantitative Literacy Assessment was conducted in Fall 2025. For this administration, the EAB Navigate 360 platform was used to notify seniors via text messaging.
 - 1,069 were contacted, and of those, 36 started the assessment (3.7% response rate) and 33 completed the assessment. However, two students did not complete more than 75% of the questions and were excluded from the comparative analysis, for an **overall total of 31 completed assessments (2.9%) for Fall 2025**.
- The administrations were closed on November 30, 2025, and reports were generated by Territorial. The 43 completed assessments were compiled by Territorial into two Institutional Score Reports with comparison institution results, attached to this Executive Summary:
 - Seniors Fall 2024/Spring 2025 ($n = 13$)
 - Seniors Fall 2025 ($n = 31$)

Results

- Comparison institutions included **29 institutions with a total of 13,149 students taking the assessment**.
- The Quantitative Literacy Assessment consisted of **25 applied mathematical problems** with multiple choice response options. Scores ranged from 150 to 180; scores of 150-156 were considered Developing, 157-170 were considered Proficient, and 171-180 were considered Advanced.
- Results are displayed by overall scores and sub scores by the two administrations, and together.

Overall Scaled Scores

- The overall scaled scores measured the ability to comprehend, detect, and solve mathematics problems in authentic contexts across a variety of mathematical content areas. See attached for sample questions.

Seniors Fall 2024/Spring 2025

- For overall scaled scores means (i.e., averages) on a scale of 150 to 180, Washburn Seniors Fall 2024/Spring 2025 ($n = 13$) scored 169.5 whereas the Comparison Group scored 162.0, a difference of 7.5. This score is at the upper end of the Proficient level.

- For the percent of students in each proficiency level, Seniors Fall 2024/Spring 2025 scored:
 - **Developing – 0%**
 - **Proficient – 62%**
 - **Advanced – 38%**

Seniors Fall 2025

- The score was 161.8, which is on the lower end of the Proficient level and .02 lower than the Comparison Group.
- For the percent of students in each proficiency level, Seniors Fall 2025 scored:
 - **Developing – 23%**
 - **Proficient – 58%**
 - **Advanced – 19%**

Seniors Fall 2024/Spring 2025 and Seniors Fall 2025

- The score was 164.1, which is closer to the upper end of the Proficient level and 2.1 higher than the Comparison Group.
- For the percent of students in each proficiency level, Seniors Fall 2024/Spring 2025 and Seniors Fall 2025 scored:
 - **Developing – 16%**
 - **Proficient – 59%**
 - **Advanced – 25%**

Subscores

The report subscores are comprised of four dimensions with scales of 1-10: Numbers and Operations, Algebra, Geometry and Measurement, and Probability and Statistics. The Washburn Seniors administration groups are displayed below with the mean scores and the Comparison Group mean scores.

Numbers and Operations

Seniors Fall 2024/Spring 2025 – 6.4
Seniors Fall 2025 – 4.3
Seniors Fall 2024/Spring 2025 and Seniors Fall 2025 – 4.9
 Comparison Group – 4.4

Algebra

Seniors Fall 2024/Spring 2025 – 5.6
Seniors Fall 2025 – 3.9
Seniors Fall 2024/Spring 2025 and Seniors Fall 2025 – 4.4
 Comparison Group – 4.3

Geometry and Measurement

Seniors Fall 2024/Spring 2025 – 4.2
Seniors Fall 2025 – 4.1
Seniors Fall 2024/Spring 2025 and Seniors Fall 2025 – 5.0
 Comparison Group – 4.2

Probability and Statistics

Seniors Fall 2024/Spring 2025 – 5.7
Seniors Fall 2025 – 4.0
Seniors Fall 2024/Spring 2025 and Seniors Fall 2025 – 4.5
 Comparison Group – 3.9

The Seniors Fall 2024/Spring 2025 scored **higher than or the same as the Comparison Group on all subscore measures as did the Seniors Fall 2024/Spring 2025 and Seniors Fall 2025**. The Seniors Fall 2025 scored **lower than the Comparison group three of the four subscore measures**, the exception was **Probability and Statistics (4.0 vs 3.9)** for which Washburn students scored .01 higher.

Limitations

The Seniors Fall 2024/Spring 2025 administration yielded 13 responses, which is below the threshold of 30 for which Territorium recommends results should be interpreted with caution as the sample may be unrepresentative, and the results may not generalize to the larger student population.

Raw data results from the administrations were provided from Territorium and results were compiled across the two assessment windows; however, caution should be used when comparing these Washburn Seniors Fall 2024/Spring 2025 and Seniors Fall 2025 results to the comparison institutions as its unknown if Territorium used additional statistical techniques to normalize the data. The analyzed raw data should be considered useful for examining Washburn only.