

What were the results of the assessment of learning outcome(s)? Please be specific. Does achievement differ by teaching modality (e.g., online vs. face-to-face) or on-ground location (e.g., STL campus, Madrid campus, other off campus site)?

The result of the assessment is that the group of juniors and seniors scored a 3, the group of sophomores a 1, and the group of freshmen scored a 0. Subjectively, the difference in artifacts was substantial.

1. The freshman group had no work to show, and merely handed in an interval of numbers that showed they had an idea what standard deviation, but no real idea as to how to use programming techniques to solve the problem.
2. The sophomore group was able to write a program that computed an interval based on standard deviation, but it showed a substantial misunderstanding of the problem.
3. The senior group provided a program which correctly computed an interval using good programming practices and appropriate techniques for the problem.

What have you learned from these results? What does the data tell you?

This assessment provides evidence that our graduates are not coming to campus with Learning Objective 1 already mastered, but they are mastering it through their time at SLU.

When and how did your program faculty share and discuss these results and findings from this cycle of assessment?

The results were shared at a department meeting on September 21. An oral presentation of the findings was provided to the department, and discussion ensued.

How specifically have you decided to use these findings to improve teaching and learning in your program? For example, perhaps you've initiated one or more of the following:

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|---|---------------------------------|--|
| Changes to the Curriculum or Pedagogies | < Course content | < Course sequence |
| | < Teaching techniques | < New courses |
| | < Improvements in technology | < Deletion of courses |
| | < Prerequisites | < Changes in frequency or scheduling of course offerings |
| Changes to the Assessment Plan | < Student learning outcomes | < Evaluation tools (e.g., rubrics) |
| | < Artifacts of student learning | < Data collection methods |
| | < Evaluation process | < Frequency of data collection |

Please describe the actions you are taking as a result of these findings.

If no changes are being made, please explain why.

The assessment indicates that students are progressing from freshman to senior year in an appropriate

What is at least one change your program has implemented in recent years as a result of assessment data?

The program has removed the requirement of CSCI 2300 for the data science degree, and replaced it with an elective course.

How has this change been assessed?

The change only occurred recently, so we do not have any assessment of the change. However, we can compare the results of this year's assessment to a cohort which has not been required to take the course.