

Program Assessment Report

Program: Computer Science and Information Technology - Web - Associate
in Applied Science

Year: 21/22

Division: Business and technology

Contact: Kevin Wyzkiewicz

Delta College



Actions Taken in Response to Last Year's Report

No previous report. This is a new assessment activity.

Rationale for Current Assessments

Assessment 1 of 1

Goal / Project

Construct program code based on an algorithm.

Outcome(s)

Demonstrate web skills commensurate with current industry-recognized standards.

Standard / Objective

80% of students will achieve 80% score or better on defined programming activity.

Method of assessment

Course Embedded Project(s)

Comment/Details about the method of assessment

Student programming assignments will be assessed by CST 186 faculty based on programming assignment requirements for documenting code.

Courses Affected

CST 173

Time Frame

Winter 2021

Submitted By

Dennis Roebuck

Result

Result

(2) Results met expectation/standard

Data Collection (general or specific stats regarding results)

"Students complete multiple programming assignments throughout the course. A portion of their assignment grade is based on documenting their code using internal comments. On average, 89% (8 out of 9) of the students' assignments achieved the goal of scoring ~80% or better, 11% (1 out of 9) students fell short of this goal."

What We Learned (areas for improvements, strengths, etc.)

"I feel these results are typical for students in CST 186. Typically, a few students forget to include these internal comments in their first programs. However, after getting repetitive feedback, students start to get more consistent in including the appropriate amount of comments within their code."

Use of Data to Improve Student Success

(If applicable) Students are always provided feedback as to why they earned less than 100% on an assignment. In some cases, the students may have the opportunity to make corrections, in this case add comments to their code, and resubmit their work for a higher score. In some cases where a student provided no, or limited, comments, I might ask the student to explain specific blocks of their code. If they cannot explain the purpose of that block of code, I will point out that with appropriate code comments... they would not have to try to 'figure out' what the code is doing. The comments provided at the time of writing the code is the 'internal documentation' explaining the program. By developing the habit of including comments, and fine-tuning amount/relevency of the comments will help these students succeed in subsequent programming classes that naturally increase in rigor.

Institutional Student Learning Outcome	Action plan items of what is planned based on the data and results
<input checked="" type="checkbox"/> Apply Knowledge and Skills	<input type="checkbox"/> Change assignments/activities <input type="checkbox"/> Update course content
<input type="checkbox"/> Think Critically	<input type="checkbox"/> Change materials provided <input type="checkbox"/> Update course outcomes
<input checked="" type="checkbox"/> Communicate Effectively	<input type="checkbox"/> Adjust grading rubric <input type="checkbox"/> Update prior courses
<input type="checkbox"/> Act Responsibly	<input checked="" type="checkbox"/> Continue to Monitor <input checked="" type="checkbox"/> Other

Comments and Action Plan

Discipline/Program Comments

Advisory Board Comments

Assessment Committee Comments

To ease in the assessing, using a single assignment near the end of the course could be used rather than a bunch of assignments throughout the course. In this way, assessment would occur at the end of the program when students are most proficient.

Also, if there are 9 graduates in the program on average, e.g., it may be useful to switch to an assessment model in which half of the program outcome are assessed two years in a row so that there is a "critical" mass of students (~20) since making changes based on a small sample is difficult. After the two years, the other half of the program outcomes would be assessed for two consecutive years resulting in reports only every other year on the multiple outcomes.

Curriculum Council Comments

Action Plan

Actions Taken in Response to Older Reports