Course Assessment- Part B: Your Results & Analysis

COMPLETE #560

Please select your course and name from the drop-down menu. If your course or name are incorrect or missing, contact Sara Wade, the Instructional Services Administrative Assistant, 541-506-6037 or swade@cgcc.edu.

MFG 195- Welding Technology- Robert Wells-Clark - Fall 2022

*** Part B: Your Results DIRECTIONS 1. Report the outcome achievement data gathered via the assignments, tests, etc. you identified for each outcome (question 3) of your Part A. (Only include data for students who completed the course. Do not include students who withdrew or earned an incomplete) Data for all 3 outcomes should be reported below.**

Outcome #1:
Students made marked improvement in Position 1g SMAW in particular as evidenced by the pre and post test results. 5/12 students exceeded an apprentice level of welding and passed an AWS level certifaction test indicating mastery. The other 7 students met the objective very well also, being above an apprentice level of welding but not yet achieving mastery. In position 2 results were similar, but with less students achieving mastery due to running low on instructional time at the end of the year.
Outcome #2:
Similar to the results of outcome 1, however less evidence of mastery. All students met the outlined learning objective, but only 1 achieved mastery. This indicates and imbalance in instructional time or lab time towards SMAW as opposed to GMAW and is something that can be adjusted for next year. 1/12 students achieved an AWS certification mock exam pass and 11 of 12 welded to an apprentice level or above; many getting close to mastery but not quite passing.
Outcome #3:
This assessment is relatively easy when looking at preclass data and post class data in terminology and written exams. While the exams are not designed to address this outcome exactly, they use terminology that students did not know at the start of the term, and were showing mastery of afterwards indicating their success in learning the different tools and equipment (as well as the technical terms they are referred to) used in the welding and fabricating industry. Students all passed their conclusive exam on tools and equipment, where many were not able to identify even basic welding tooling in particular in the first lab walk throughs and reflections.

*** Outcome #1**

12/12 students were able to achieve the outcome.

*** % of students who successfully achieved the outcome (C or above)**

100

*** Outcome #2**

12/12 students were able to achieve the outcome.

*** % of students who successfully achieved the outcome (C or above)**

100

*** Outcome #3**

12/12 students were able to achieve the outcome.

*** % of students who successfully achieved the outcome (C or above)**

100

*** ANALYSIS 3. What contributed to student success and/or lack of success?**

As noted above, the balance between SMAW and GMAW should be adjusted in the future, but overall students were very successful. This can be attributed to successful instruction across a variety of learning modicums to suit a diverse group of learners. Some challenges were present around attendance and illness this term, so learning was interrupted and disjointed, and this took an exceptional amount of extra effort (and time!) compared to prior terms across all MFG courses to address successfully.

*** 4. Helping students to realistically self-assess and reflect on their understanding and progress encourages students to take responsibility for their own learning. Please compare your students' perception of their end-of-term understanding/mastery of the three outcomes (found in student evaluations) to your assessment (above) of student achievement of the three outcomes.**

I somehow messed up the link and students were not able to take the self reflection exam. My sincerest apologies. When I re-sent the link out it had expired.

*** 5. Did student achievement of outcomes meet your expectations for successfully teaching to each outcome (question 4 from Part A)**

Yes.

*** 6. Based on your analysis in the questions above, what course adjustments are warranted (curricular, pedagogical, student instruction, etc.)?**

More focus on GMAW, or an earlier course transition to GMAW from SMAW.

7. What resources would be required to implement your recommended course adjustments (materials, training, equipment, etc.)? What Budget implications result?

None at this time, perhaps a syllabi change to reflect the course layout change.

*** 8. Describe the results of any adjustments you made from the last assessment of this course (if applicable) and their effectiveness in student achievement of outcomes.**

I would say that the assessment adjustments and the new equipment making it possible now have more students achieving mastery than in prior terms.

9. Describe how you explain information about course outcomes and their relevance to your students.

We go through these as a group explicitly the first week using the syllabus and Moodle as method of interacting with COG. After this explicit statement of intent is made, students interact with the outcomes constantly in class as the course delivery scaffolds the content toward meeting the outcomes.

10. Please describe any changes/additions to instruction, curriculum or assessment that you made to support students in better achieving the CGCC Institutional Learning Outcomes: ILO #1: Communication. The areas that faculty are focusing on are: "Content Development"and/or Control of Syntax and Mechanics" and ILO #2: Critical Thinking/Problem Solving. The areas that faculty are focusing on are: "Evidence" (Critical Thinking) and/or "Identify Strategies" (Problem Solving). ILO #4: Cultural Awareness. The area that faculty is focusing on is: "Curiosity" - Encouraging our students to "Ask deeper questions about other cultures and seek out answers to these questions" ILO #5: Community and Environmental Responsibility. The area that faculty are focusing on are: "Applying Knowledge to Contemporary Contexts" and "Understanding Global Systems" ILO#3 - Quantitative Literacy - "Application/Analysis" and/or "Assumptions"

I would say the most work is around ILO#3 in MFG195 particularly. Students are trained to be extremely analytical in their learning of welding so that they know the problems they encounter and the diagnostics required to adjust equipment and process for a more desirable outcome. This is done through a variety of learning styles, including journaling, analytical comparison via physical rubric and a Socratic method in pairs.