

PROGRAM ASSESSMENT REPORT

I. Background Information

1. Program Assessed

Program name: Automotive Services AS Degree

Program code: APASRV

Division: Adv Tech/Public Service Careers Department: ASV Program Code: APASRV

Type of Award: A.S.

Cert. Adv. Cert. Post-Assoc. Cert. Cert. of Completion

2. Semester assessment was administered (check one):

Fall 2015 - 2016 -2017

Winter 2016 -2017

Spring/Summer 2015

3. Assessment tool(s) used (check all that apply):

Portfolio

Standardized test

Other external certification/licensure exam (please describe): _____

Graduate Survey

Employer Survey

Advisory Committee Survey

Transfer follow-up

Externally evaluated performance or exhibit

Externally evaluation of job performance (internship, co-op, placement, other)

Capstone experience (please describe):

Other (please describe):

4. Have any of these tools been used before?

Yes (if yes, identify which tool)

No

If yes, has this tool been altered since its last administration? If so, briefly describe changes made.

5. Indicate the number of students assessed/total number of students enrolled in the course.

ASV251-01 Winter 2016 (11)

ASV251-01 Winter 2017 (9)

ASV251-03 Fall 2017 (16)

ASV256-01 Fall 2016 (18)

ASV256-01 Winter 2016 (20)

ASV256-01 SS15 (16)

ASV254-01 Fall 2015 (16)

ASV254-01 Fall 2016 (18)

ASV254-01 Winter 2017 (17)

ASV255-W1 Fall 2015 (19)

ASV255-W1 Fall 2016 (19)

ASV255-W1 Fall 2017 (19)

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Fall 2015 - 34 of 35
 Fall 2016 - 46 of 55
 Fall 2017 - 29 of 35
 Winter 2016 - 21 of 31
 Winter 2017 - 24 of 26
 Sp/Sum 2015 - 16 of 16

6. Describe how students were selected for the assessment.

Because the NATEF task list was aligned with the common departmental exam questions, only students that took the exam were included in this assessment. All students enrolled in the selected semesters who took the exam were assessed. The class rosters at the time of the exams indicates that 76 students were assessed; 31 students did not complete the common departmental exam.

a. Describe your sampling method.

The program assessment plan states that 80% of the students will score a 3 of 5 or higher on the NATEF task lists. The NATEF task list data is not available because it is stored on an external server that is not controlled by WCC or the Automotive Service Department. While the data does serve the purpose of tracking completed tasks as a requirement of our accreditation, it is not available in a form that can be used for program assessment.

However, program data is available that can be used for program assessment. It also aligns with the NATEF task system that we are required to use in the Automotive Service Department. Provided in the attached data is a correlation list that shows the NATEF task that is associated with each item assessed on our common departmental exam. This correlated exam data was used to complete this assessment.

While this solves the problem of accessible valid data that can be used for program assessment, it creates another problem with the assessment method. The common exams do not use a performance metric of "(a) score a 3 of 5 or higher). A new rubric was adopted that would align with the data that had to be used. The metric chosen was "80% of the assessed students will score 80% or higher on the NATEF aligned assessment questions".

To gather a pool of data that would be the most likely to be statistically significant, we choose to use data from multiple semesters. The somewhat broad outcome language also meant that we needed to use data from six semesters and twelve course sections. The courses chosen were all advanced courses that the students are required to take to graduate. In addition, the courses are the "capstone" courses for their respective subjects in the respect that there is not another course that is more advanced that covers these topics.

The NATEF task list aligned questions were included in the common department exam were arranged randomly when they were deployed in Blackboard. The Blackboard "attempts statistics" were used to generate a report that indicated the performance on all questions. The data for the specific questions used for this program assessment were manually located using a text search. Once they were located the attempts data was transferred to the data sheet. In summary, this means that each deployment had the questions as different question numbers.

Finally, the data was harvested as the number of students that got the correct answer compared to the number of students that participated in the exam. This percentage was "normalized" because it

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was taken from multiple sections over multiple semesters with a varying number of students in each section. A “weighted average” was calculated so the performance of all of the students could be expressed in a number that reflected the performance of the group with each data point only having as much weight as any other.

- b. Describe the population assessed (e.g. graduating students, alumni, entering students, continuing students)?
Students completing advanced courses required for graduation.

II. Results

1. If applicable, briefly describe the changes that were implemented in the program as a result of the previous assessment.
No previous assessment.
2. State each outcome (verbatim) from the Program Assessment Planning or Program Proposal form for the program that was assessed.
Diagnose, repair and service mechanical, hydraulic, and electrical engine components
Diagnose, repair and service major suspension, steering, and brake components
Students completing the Automotive Service Technology program will gain automotive-related employment.
3. Briefly describe assessment results based on data collected during the program assessment, demonstrating the extent to which students are achieving each of the learning outcomes listed above. *Please attach a summary of the data collected (as a separate document).*
The outcome was too broad to be assessed with one tool. We decided to break down each outcome into these individual assessable segments. Based on the data attached the students are achieving the learning outcomes as listed. The performance was as high as 98.36% for on assessed item, and as low as 82.81% for another.
4. For each outcome assessed, indicate the standard of success used, and the percentage of students who achieved that level of success. *Please attach the rubric/scoring guide used for the assessment (as a separate document).*
Diagnose, repair and service mechanical, hydraulic, and electrical engine components

Diagnose, repair and service major suspension, steering, and brake components

Outcome 3: All Automotive Service graduates technology program will gain automotive-related employment.

Outcome 3 standard of success: 70% of graduates will gain automotive-related employment.

Using the 2015-2016 Graduation Survey Report information it appears that there were only 4 respondents of 22 polled.

The percentage of graduates working in an occupation related to their program by division was: Advanced Technology and Public Service Careers (75%). Three students were employed.

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5. Describe the areas of strength and weakness in students' achievement of the learning outcomes shown in assessment results.

Strengths: The assessment results of outcomes 1 and 2 indicate that the students were successful at gaining the core technical skills and principles.

Weaknesses: Although the departmental exam was used as an assessment tool for outcomes 1 and 2, it does not provide the information needed to measure students hands-on automotive servicing skill and abilities.

For outcome 3, the survey data set was not large enough to draw any conclusion about student success. Thirteen responded out of an unknown number of respondents.

III. Changes influenced by assessment results

1. If weaknesses were found (see above) or students did not meet expectations, describe the action that will be taken to address these weaknesses.

The revisions needed to strengthen the program assessment include replacing the NATEF task list as the assessment tool used for outcomes 1 and 2; the survey will be removed for outcome 3. We will continue to use the common departmental exam and add a practical tool, such as project vehicles scored using a performance rubric, to measure student success. All outcome language will be revised to reflect a more narrow and focused intent that will provide a manageable means to measure student success.

2. Identify any other intended changes that will be instituted based on results of this assessment activity (check all that apply). Describe changes and give rationale for change.

- a. Outcomes/assessments from Program Assessment Planning or Program Proposal form:
Assessment tools used will be defined under the tools used for each outcome. Outdated tools that do not provide appropriate data will no longer be used or listed.
- b. Program Curriculum:
- course sequencing
 - course deletion
 - course addition
 - changes to existing program courses (specify):
 - other (specify):
- c. Other (specify):

3. What is the timeline for implementing these actions? The revisions will be submitted during Fall Term of 2018.

IV. Future plans

1. Describe the extent to which the assessment tools used were effective in measuring student achievement of learning outcomes for this program

The departmental exam used for outcomes 1 and 2 seems to measure effectively the stated outcomes although the broad language makes it difficult to apply a strong measurement of student success.

The survey was not an effective tool for outcome 3 because program graduates did not respond in adequate numbers resulting in a non-representative sample size.

2. If the assessment tools were not effective, describe the changes that will be made for future assessments.
- Outcome 1 and 2 language will be narrowed and will focus on no more than 2 core technical skills. Outcome 3 will be measured using a capstone project vehicle scored using a performance rubric, to measure student success.

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3. Which outcomes from Program Assessment Planning or Program Proposal form have been addressed in this report?


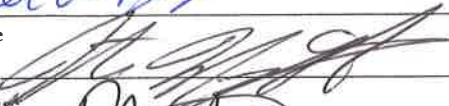

All X Selected _____

If "All", provide the report date for the next full review: Fall 2019_____.

If "Selected", provide the report date for remaining outcomes: _____.

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Submitted by:

Name:  Date: 10/25/2018
Print/Signature
Department Chair:  Date: 10/26/2018
Print/Signature
Dean:  Date: 10/27/2018
Print/Signature

Please return completed form to the Office of Curriculum & Assessment, SC 257.