HAWAI‘I COMMUNITY COLLEGE
ANNUAL PROGRAM REVIEW (APR)

Diesel Mechanics

Date January 15th, 2019

Review Period
July 1, 2017 to June 30, 2018

Initiator: Harold Fujii
Writer(s): Mitchell Soares & Jennifer Siemon

Program/Unit Review at Hawai‘i Community College is a shared governance responsibility related to strategic planning and quality assurance. Annual and 3-year Comprehensive Reviews are important planning tools for the College’s budget process. This ongoing systematic assessment process supports achievement of Program/Unit and Institutional Outcomes. Evaluated through a college-wide procedure, all completed Program/Unit Reviews are available to the College and community at large to enhance communication and public accountability. Please see http://hawaii.hawaii.edu/files/program-unit-review/

Please remember that this review should be written in a professional manner. Mahalo.
## PART 1: PROGRAM DATA AND ACTIVITIES

### Program Description (required by UH System)

| Provide the short description as listed in the current catalog. | This program prepares the student for employment as a skilled tradesperson who troubleshoots, maintains, and repairs various types of diesel engines, trucks, tractors, boats, and other heavy equipment. |

### Comprehensive Review information (required by UH System)

| Provide the year and URL for the location of this program’s last Comprehensive Review on the HawCC Program/Unit Review website: [http://hawaii.hawaii.edu/files/program-unit-review/](http://hawaii.hawaii.edu/files/program-unit-review/) | Year: 2015  
URL: [http://hawaii.hawaii.edu/files/program-unit-review/docs/2015_disl_comprehensive_program_review.pdf](http://hawaii.hawaii.edu/files/program-unit-review/docs/2015_disl_comprehensive_program_review.pdf) |

| Provide a short summary of the CERC’s evaluation and recommendations from the program’s last Comprehensive Review. | SUMMARY OF CERCS RECOMMENDATIONS:  
CERC’s evaluation and recommendations for the last Comprehensive Reviews for AY 13,14 &15 are as follows:  
1. The review’s statements of alignment of the ILOs was very brief and overly general.  
2. Lack of discussion of how course assessment results demonstrate that students are meeting the program’s PLOs.  
3. No discussion of how the program intends to improve students learning.  
4. Program’s goals were “business as usual” and did not cover the program’s goals for improvement, growth, and development.  
*In general, CERC’s recommendations were to more seriously address the overall achievement of the program’s learning outcomes and provide a more comprehensive discussion of its assessments, and reconsider our approach for planning for improvement.* |
Discuss any significant changes to the program that were aligned with those recommendations but are not discussed elsewhere in this report.

1. The program has taken seriously recommendations from CERC. In aligning the CLOs and PLOs to the ILOs. There was very little discussion in the previous assessments concerning ILO alignment, and the program has addressed the ILO alignments in this current AY 17-18 APR.

2. CERCs second recommendation was that the assessments need to demonstrate that students are meeting the program’s PLOs. This was addressed in the various meetings with the Assessment Coordinator, and the instructor, and with the Assessment Coordinator’s assistance, all PLOs were re-aligned to the CLOs and all rubrics and lab-task sheets were revised in order to show how students are in fact meeting the program’s CLOs. Also, because of the curriculum changes that were made in combining two of the courses, the changing of all the CLOs, and the re-alignment all of the CLOs, PLOs and ILOs, the rubrics, lab task sheets, and alignments were revised a second time. The program will continue to modify the assessments as needed with the help of the Assessment Coordinator. Currently, in the assessment results, if a student meets the benchmark of a CLO, the PLO will also be met. In the two courses, DIMC140 and DIMC 150, each CLO is numbered and aligns to each PLO with the same number so that they mirror each other. In the other two courses, DIMC 120 and 130, the wording is mirrored, and most of the numbering as well. This makes assessment outcomes easy to read. Every ILO is aligned to at least three of the program’s CLOs except for ILO 6, which is only aligned to one CLO. See chart in the below “Assessment Action Plan” section of this report.

3. The program has addressed plans for improving student learning in the last and the current annual report by researching the implementation scholarships where incoming students receive training in high school before entering the program, and by
working with industry with internships that have already been discussed and are in the works with a few of the local companies on our island, and also with creating CDL and simulated driving experiences with the goal to aid in the success of the students and increase the level/depth of the current learning outcomes.

The instructor has also modified teaching methods with more “hands-on” instruction in beginning of the semester due to the results of the learning outcomes from the assessments and some of the eCafe comments. See “Action Plan #5” below.

4. The program’s goals have been growing, and the comments from CERC that we need to address these goals, and not just the “business as usual” type goals has been taken seriously. The program intends to outline goals more descriptively, and to include all goals even if they may not be achieved right away, or at all. By including all of the goals, the program can revisit, modify and hopefully witness the success of achieving the goals.

ARPD Data: Analysis of Quantitative Indicators (required by UH System)
Program data can be found on the ARPD website:  http://www.hawaii.edu/offices/cc/arpd/

Please attach a copy of the program’s data tables and submit with this Annual Program Review (APR).

Analyze the program’s ARPD data for the review period.
Describe, discuss, and provide context for the data, including the program’s health scores in the following categories: http://www.hawaii.edu/offices/cc/arpd/

| Demand          | Our demand indicator shows the program to be “cautionary” with only 9 new and replacement positions in the county. As we stated in our last Program Comprehensive 3-Year Review AY 2012-13, AY 2013-14, AY 2014-15, and in our Program Annual Review Report AY 2015-16, and in the Program Annual Review Report AY 2016-17, we would track our graduates work placement and current employment to show that there are more employment |
opportunities in the county overall than the ARPD data shows, giving us a more true number and a better Health Call.

In tracking our previous graduates of SP 2018, we found that that there were more than 20 jobs available for our students locally in Hawaii, both in Hilo, and in Kona. United Laundry Services has many as five positions for the diesel mechanic field for Hawaii Kona and Hilo sides, and neighboring islands of Oahu and Maui as well. Other companies such as Bobcat in Kona are interested in hiring our students as well.

In the Spring of 2018, out of 19 students, one student became incarcerated, one is self-employed, and one student continued on as a student at HCC in the Automotive Mechanics Program. Out of the other 16 students, 13 students became diesel mechanics, two on the mainland and the other 11 on this island, and 3 became automotive mechanics. This shows that the data reported for the AY 16-17 Annual Report does not reflect the actual jobs available to our students. This information is current and pertains to this AY17-18 data and is mentioned here to show the significant difference of the nine reported available jobs to the actual local jobs known available and filled by our graduates, and to show that this seems to be an on-going trend.

The Diesel Mechanics Program had 19 graduating students, or a 100% graduation rate for Spring 2018. Because the program is a two-year program, every other year the data will show no graduates and every other year our graduating students can seek full-time employment, but because the current industry need for mechanics is so high, employers, such as United Laundry Services, are willing to hire part-time workers that are still in school to fill this need. The instructor has also been asked to recommend mechanics for Kona Trans, for a position in Guam at Morrico Equipment, one for a position at DMS Diesel in Hilo, a mechanic position for Allied Machinery, one position for a diesel mechanic for Herc Rentals, and one for a position at Hawthorne Caterpillar in Oahu. This information supports that there is currently a high
demand for diesel mechanics both locally and abroad and the number is already higher than the reported nine. We will continue to track the employment of our students after graduation to verify this demand and to show that it is most likely that the demand indicator is not “cautionary” but in fact “healthy.”

| Efficiency | The efficiency indicator for DIMC is “healthy” and the program has a 100% fill rate. The majors to FTE BOR Appointed Faculty is 1. Majors to FTE BOR Appointed Faculty is 20.5. In a program with a mandated enrollment capacity, the second method on the rubric is used to determine health score. According to the rubric, if the *Majors to FTE BOR Appointed Faculty is 15-35, the program is healthy. The DIMC program FTE BOR Appointed Faculty is 20.5. The second way to determine the health call for mandated enrollment capacity programs is if the capacity is 75% or better. We forecast that the enrollment will continue to be high and our fill rate will stay above 75%. |
| Effectiveness | The effectiveness score of DIMC has been rated “healthy.” In comparing our health score to that of last year’s, our completion rate is still at 100%, and lines #19 (persistence Fall to Spring) percent increased 2%. Persistence Fall to Fall, line # 19a has decreased, but only because the Spring 2018 students graduated. “Unduplicated Degrees/Certificates Awarded,” line #20, the number of degrees awarded is 19 out of 19 students. The number of degrees awarded has gone up significantly in the past four years, (see line 20 under Effectiveness Indicator). The instructor has tracked the students work load and courses that students take from the first semester they began the program in order to ensure that there was no confusion as to graduation requirements, and now with the permanent hire of an APT, the instructor has assistance in tracking students after graduation, and assistance with helping students with graduation requirements. We will continue to track our graduates work placement and current employment as well as their continuing education and/or other endeavors. |
| Overall Health | The overall program health is “healthy.” Although the demand indicator is flawed and we know that there are more than nine jobs available to our |
graduates, which would give the program a “healthy” score for this indicator; this did not affect the overall health call. The efficiency indicator is “healthy,” and the effectiveness indicator is also healthy. The effectiveness indicator was deemed “cautionary” in AY 16-17 due to not having graduates. This health call can be considered flawed because we are a two-year program and there are not graduates every other year, so every other year, we will continue to receive a “cautionary” for this indicator. All of the scores in the effectiveness area have increased except the number of degrees which was 20 in the AY 16-17, and is 19 in the AY 17-18, however, 19 is our capacity. Also, the “Fall Part-Time” has decreased, but this number does not pertain to our program, all of our students are full-time. The program is pleased that the overall health call is healthy, and will continue to work to keep the indicators “healthy.”

| Distance Education | N/A  
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<td>We do not teach distance education.</td>
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| Perkins Core Indicators (if applicable) | For the 2017-18 year, the Perkins Core Indicator 1P1, the Technical Skills Attainment was met with a score of 100.00. As stated in the AY 16-17 Annual Report, this benchmark will only be possible to meet every other year because we are a two-year program. The Perkins Core Indicator 2P1 Completion was not met with a score of 0. As stated above, this data is from the 2016-17 year when we had no graduating class. Every other year data will show that we do not meet 1P1 because every other year the students will be half way through their required courses. For the Perkins Core Indicator 3P1, Student Retention or Transfer, the data was pulled from the 2016-17 year and shows that met with a score of 100.00. The goal was 81.81. The instructor is pleased that there were no withdrawals, and although some of the students struggled because of outside hardships with family, and life circumstances, every student persisted and graduated on time. For the Perkins Core Indicator 4P1, Student Placement, the data shows that we met with a score of 77.78. The goal was 64.51. We do meet the 4P1 indicator |
every other year when our students graduate. If we looked at student placement for the 2017-18 year when the students graduated, it would show that there were 13 available local jobs and that our 13 of our 19 students are working as diesel mechanics. We are currently tracking our students work placement and employment and will continue to do so in order to have accurate numbers for all of the future Program Annual Review Reports.

For the Perkins Core Indicator 5P1 Nontraditional Participation, the goal was 23.00 and the actual was 4.76. The goal for the Perkins Core Indicator 5P2, Nontraditional Completion is currently shown as N/A. The Perkins Core Indicator 5P1 Nontraditional Participation has always been a challenge and we are currently emphasizing recruitment of non-traditional students by going to job fairs and talking to non-traditional students. We have also hired a permanent female APT in Fall 2016 and she is active in encouraging prospective non-traditional students to visit our booth/display, to ask questions or to examine diesel engines on the various outings that do to promote our program. We will continue to look for opportunities to recruit non-traditional students to our program. Although we did not meet the goal, the score is higher than the Ay 16-17, and we are confident that we will continue to get closer to the goal throughout the life of the program, even if the score fluctuates.

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<tr>
<th>Performance Funding Indicators (if applicable)</th>
<th>Number of Degrees and Certificates</th>
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<tr>
<td>DIMC contributed 4.78% or 28 out of the 586*Degrees and Certificates awarded at Hawaii Community College; the amount the program contributed is ARPD divided by actual. The program’s effectiveness in contributing to this area is 147% in that our capacity is 19. The program’s effectiveness measure was figured out by dividing the Number of Degrees and Certificates by graduating class capacity.</td>
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<td>The program assists in the effectiveness of this performance indicator and is contributing to this measure by operating at 100% capacity or higher and additional growth in this area will come from students completing the AAS</td>
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rather than the CA. After analyzing our data, with 9 out of 19 having received their AAS, roughly 47%, and 53% of these graduates received their CA Degree. We always encourage our students to go for the AAS Degree, and most of them want to, but some cannot because of obligations to work and/or family. Unfortunately this is the life of an average community college student, so increasing this indicator will be difficult. We may already be at the upper limits of our contributions to this area.

**Number of Degrees and Certificates Native Hawaiian**

DIMC contributed 6.61% or 18 out of 272*Degrees and Certificates awarded to Native Hawaiians at Hawaii Community College. Since we do not control who enters the program, the best way to measure the effectiveness of this program’s contributions is to compare the Number of Native Hawaiians that enter the program versus the Number of Degrees and Certificates Native Hawaiian. Currently we do not have the data for Number of Native Hawaiians that enter the program. We will look into a way to start tracking this number so we can properly analyze this measure. Based on data that we do have, this program is doing its part contributing to this measure. The data shows that this program, overall, averages a very high student success rate. If a Native Hawaiian student enters the program, he/she will have a very good chance of completing the program. Like we mentioned before, we do not control who enters the program but we visit, promote, and talk to potential students every year at Kamehameha High School’s Career Day at the Keaau location.

**Number of Degrees and Certificates STEM**

DIMC is not a STEM program.

**Number of Pell Recipients**
DIMC contributed 5.88% or 22 out of 274*Pell Recipients that graduated at Hawaii Community College.

The program does not have control over who enters the program and although we contribute to this effectiveness measure, there is currently no way to track this number. Currently the success rate of Pell Recipients is high.

**Number of Transfers to UH 4-yr**

DIMC contributed 0.0% or 0 out of 463*Transfers to UH 4-yr at Hawaii Community College. DIMC is not a transfer program so there is no effectiveness measure. Although DIMC is not a transfer program, we ask our students about their plans for their future, and in event that a student is interested in transferring, we help advise accordingly. This has happened a few times, but is not the norm for our program.

*Data from John Morton’s Hawaii CC Fall 2018 Campus Report

| What else is relevant to understanding the program’s data? | The program continues to assist the Model Homes Project. In the AY 16-17, we did repairs on various machinery used for the project such as the tractor, backhoe, and the excavator. The Model Homes Project currently uses an older excavator and the upkeep, which is continuous, serves as a great learning tool for our students. This AY 17-18 year we did work on hydraulics and engine and maintenance. We look forward to continually assisting the Model Homes Project.

There is current, significant growth on the Big Island, creating a need for industrial mechanics. A need for skilled mechanics is in high demand. Even though the Diesel Mechanics Program graduates are entry-level, there is more opportunity than in the past for apprenticeship positions in industrial work places such as Macadamia Nut Factory, Bacon Universal, Kona Trans, Puna Rentals, Glover, Sanfords, Allied Machinery, Conen’s, Suisan, Power |

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Generation, Bobcat, Kenworth, Hawthorne Caterpillar Pacific and R&D Diesel and others. The instructor will continue to track the students’ work places and current employment so that we have an accurate account of some of the program’s data that has negatively affected the Demand Indicator, and the Perkins Core Indicator 4P1. The instructor will also start to keep track of the companies that are requesting workers, the type of work, the pay scales, and locations of the organizations. This information will help to support that the demand for diesel mechanics is high, and will also show it this changes. The DIMC program class size has continued to be at full capacity and there is a consistent waitlist to get into the program.

In the last couple of years, there has been evidence of a need for more skilled mechanics than in the past. Mechanics who are retiring need to be replaced and this need has been voiced by industry. With technology constantly advancing, and industry growing, employers are looking for mechanics that are enthusiastic and willing to learn more about the latest technologies. There is discussion of creating more training and apprenticeship opportunities for graduates and students and the concession that it is worth paying higher wages for these more skilled mechanics. The instructor has been meeting with industry and the Advisory Council to discuss different ways to create more training opportunities to meet industry demands.

The need for CDL drivers on Big Island and the mainland is ongoing. The program has witnessed two classes graduate from the HCC OCET CDL program and is looking forward to having the students use the driving simulator throughout the semester. This driving simulator will allow students’ knowledge of the mechanics of a truck to be taken to another level by driving the truck and seeing, hearing, and feeling the mechanics in motion. There is discussion of the requirements for the CDL license and how good drivers make diesel mechanics’ jobs easier and also keep the roads safer in general. Incorporating the simulated driving of a diesel truck into our curriculum will allow the students to understand more fully the importance of their mechanic work.
It is the instructor’s goal to acquire up to date and green equipment technologies so that we maintain a reputation for graduating capable students. The AY 18-19 proved to be a positive step in supporting this goal. New equipment was purchased, and is discussed in this report. It is the consensus of the Advisory Council that we should continue to research green technologies and new technologies and incorporate them into our curriculum. We are always investigating ways in which we can re-use parts and create green equipment and/or be creative in acquiring equipment that is green. It is our goal to produce graduates who are familiar with and embrace these new technologies; industry is constantly changing. It is the instructor’s goal to help produce successful graduates that are enthusiastic about the on-going learning required in their line of work, and are able to embrace change.

PROGRAM ACTIVITIES

Report and discuss all major actions and activities that occurred in the program during the review period, including the program’s meaningful accomplishments and successes. Also discuss the challenges or obstacles the program faced in supporting student success and explain what the program did to address those challenges.

For example, discuss:

- Changes to the program’s curriculum due to course additions, deletions, modifications (CRC, Fast Track, GE-designations), and re-sequencing;
- New certificates/degrees;
- Personnel and/or position additions and/or losses;
- Other changes to the program’s operations or services to students.

CURRICULUM CHANGES:

- Fall 2017, curriculum changes were approved, blocking 30/33, 50/55, renumbering the courses, re-numbering and re-ordering and re-writing the CLOs, re-aligning the CLO’s to PLOs and re-aligning the PLOs to the new ILOs. The program is looking forward to the new Fall 2018 cohort that will start with the new DIMC 120, 130, 140, 150 courses.
In Spring 2018, the following changes were approved by the Curriculum Review Committee:

1. The program added two courses and deleted four courses so that DIMC 30 and 33 are now DIMC 130, and DIMC 50 and 55 are now DIMC 150.
2. The courses DIMC 20, and 40 have been re-named to DIMC 140 and 150.
3. The CLO’s for DIMC 120, 130, 140, and 150 were re-sequenced and re-written.
4. The new CLOs were aligned to the PLOs.
5. The new PLOs were aligned to the new ILOs.

**CDL DRIVING SIMULATOR:**

Curriculum for all of our courses, DIMC 120, Introduction to Diesel Engines, DIMC 130, Introduction to Electrical Systems and Diesel Fuel Systems, DIMC 140, Introduction to Power Trains and DIMC 150, Introduction to Heavy Duty Brakes, Steering, Suspension, Hydraulics, & Hydrostatics have all been enhanced by the incorporation of the CDL driving simulator trainer. The hands-on experiences of using the driving simulator will influence the critical thinking processes of the students when they are diagnosing repairs. Lab-task sheets will be added, and assessment of the virtual driving experience will be evaluated.

**ASSESSMENT CHANGES:**

The learning outcomes in these more comprehensive assessments are clearly defined leaving less room for any possible confusion in student expectations. Because the program has re-worded the CLOs and re-aligned the CLOs, PLOs and ILOs, the assessment results are easier to understand and this helps us to see where there is room for improvement and where the program meets the program learning outcomes.

- Fall 2017 assessments: Closed the loop for DIMC 40
- Spring 2018 assessments: Closed the loop for DIMC 50

**Use of LAULIMA WEBSITE:**

The instructor is still happy with the use of the Laulima website because of the ease of showing the power points as well as having better student access. The students now have 24/7 access to the materials that they need for class/exams and the instructor can make changes, and add or
delete materials directly from Google Drive. All of the newly revised curriculum will be added to the website for the Fall 2019 cohort. The program will continue to use Laulima and seek training from Leanne Urasaki, the College’s instructional technology coordinator.

**EQUIPMENT:**

1. The program has received the new Sting Ray Parts Washer in Spring 2018 and is in the process of installing the parts washer. This will allow students to clean parts and whole engines more easily and in less time.

2. The program has received a donated 3456 Caterpillar Gen Set engine from Hawthorne Pacific Corp. and is optimistic in negotiating donations for the additional parts needed to make the 3456 engine a running dynamometer with additional electronics being bought if the Perkins Grant that will be written in Spring 2019 is approved. The program is always in need of up-to-date technologies, equipment and tools such as this Caterpillar engine. The opportunity to develop instructional aids such as this are a great addition in order to improve student learning.

3. The program received the 75 ton Press that replaced the previous 75 ton press that was not functioning.

4. The purchase of a driving simulator that was approved by the Perkins Grant funding has been integrated into the curriculum for DIMC 140, CLO: 4, “Demonstrate an apprenticeship level ability in operating specialized power-train equipment,” and to DIMC 150, CLO: 4, “4. Demonstrate an apprenticeship level ability in operating specialized H-D brakes, steering and suspension equipment as well as hydraulic and hydrostatic equipment.” Both of these CLOs are linked to PLO: 4. The experience that the students will receive in driving the simulator, will link the learning outcomes of the CLOs to hands-on experience and fortify the understanding of how the equipment is operated and works mechanically.

5. The program received the 6 mobile column lifts because of budget requests in the last Comprehensive review. These lifts allow for easier access to the under parts of large vehicles and machinery, and make for a better, safer work environment.

6. The program received a donated 20’ trailer from Hawaii Petroleum.
BUDGET:

The operating budget has not increased since the original formula was developed and implemented in the late 1990’s. All of our resource costs have increased with inflation over the years but we still have to manage with the same budget.

It is safe to say that a typical diesel part from the 1990s has increased in price at least 50% when compared to today’s prices. The program is always creatively looking for ways to acquire monies such as donations. We are also mindful of what we do not use and try to refurbish and recycle parts as often as possible.

PROGRAM WEBSITE
Has the program recently reviewed its website? Please check the box below that best applies and follow through as needed to keep the program’s website up-to-date.

☐ Program faculty/staff have reviewed the website in the past six months, no changes needed.

☐ Program faculty/staff reviewed the website in the past six months and submitted a change request to the College’s webmaster on ____________ (date).

☐ Program faculty/staff recently reviewed the website as a part of the annual program review process, found that revisions are needed, and will submit a change request to College’s webmaster in a timely manner.

Please note that requests for revisions to program websites must be submitted directly to the College’s webmaster at http://hawaii.hawaii.edu/web-developer

PART 2: PROGRAM ACTION PLAN

AY18-19 ACTION PLAN
Provide a detailed narrative discussion of the program’s overall action plan for AY18-19, based on analysis of the Program’s AY17-18 data and the overall results of course learning outcomes assessments conducted during the AY17-18 review period. This Action Plan should identify the program’s specific goals and objectives for AY18-19 and must provide benchmarks or timelines for achieving each goal.

1. 3456 Caterpillar Gen Set engine upgrades approved with Perkins Grant in SP 2019, parts to be received, installed summer of 2019, and training on the new components by end of summer 2019.
2. Installation and use of the Sting Ray Parts Washer by Fall 2019.
3. Implement schedule to take students to the driving simulator for the AY 18-19. with the help of the APT so that students can
4. Job Fairs and Career Days for elementary schools as well as High Schools
5. Adjust teaching pedagogy in the AY 18-19 to a more hands-on initial approach
6. Continue to work with the advisory council and industry to develop an apprenticeship for our students
7. Continue to work with Waiakea High School to develop a possible internship for high school students
8. Seek current industry software modules so students can navigate updated maintenance, service, repair and parts for lab task assignments.

Action:

In following students’ employment after graduation, we find that it helps us adjust the curriculum so that it mimics industry standards. There is always a basic curriculum that the program will follow to cover beginning concepts of mechanics because students that enter the program are at different levels of experience. It is not feasible to expect the beginning learner with limited experiences to be able to do advance mechanics. Because of this, the program will always teach the basics of mechanics, and adjust the rest of the curriculum to follow industry standards and stay up on trends and advancements in technology.

The program will continue to work on improving equipment and stay up to date with technologies, look into different strategies to improve student learning and success with adjustments to curriculum and teaching, internships and apprenticeships, and continuous dialogue with industry and the Advisory Council, as well as to participate in job fairs and career days to recruit new students and non-traditional students.
With every step of each action plan that the program pursues, we hope to support the student learning outcomes. Alignments of the CLOs, PLOs and ILOs will be addressed when any curriculum adjustments are made.

**ACTION ITEMS TO ACCOMPLISH ACTION PLAN**

For each Action Item below, describe the strategies, tactics, initiatives, innovations, activities, etc., that the program plans to implement in order to accomplish the goals described in the Action Plan above.

For each Action Item below, discuss how implementing this action will help lead to improvements in student learning and their attainment of the program’s learning outcomes (PLOs).

**Action Item 1:**
The 3456 Caterpillar Gen Set engine is one of the most common and modern engines and is necessary for the program in order to teach students with a training tool that is up to date so that students are current on the latest innovative technology. In receiving the donated engine, at the current fair market value of approximately $35,000, the program now only has to search for funding for some of the missing parts. The program will write a Perkins Grant for the parts and training. If denied, the program will reach out to industry for donations for the parts and ask for assistance in the training.

**Action Item 2:**
The process of installing the parts washer will be time consuming and the instructor hopes to take time during summer and the beginning of the Fall 2018 semester to speak with the technical support persons from Sting Ray Parts Washers so that the parts washer can be used for the DIMC 120, Introduction to Diesel Engines course in Fall 2018. There are numerous steps in the leveling, shimming, adding fluids, adjustments, and add-ons of parts before the washer will be up and running.

**Action Item 3:**
The instructor will make a schedule so that with the help of the APT, students will be able to practice driving with the CDL driving simulator. There are two courses, DIMC 140, CLO: 4, “Demonstrate an apprenticeship level ability in operating specialized power-train equipment,” and DIMC 150, CLO :4, “Demonstrate an apprenticeship level ability in operating specialized...
H-D brakes, steering and suspension equipment as well as hydraulic and hydrostatic equipment” that are linked to PLO: 4. By taking students to train on the driving simulator, they will be able to link the learning outcomes of these CLOs to the hands-on experience of mechanical operations, helping them to understand how the equipment is operated and works mechanically when it is running.

**Action Item 4:**
The Diesel Program is continuing to go to high school career day and job fairs, but with the help of the APT, has recently reached out to elementary schools as well. HAAS Elementary Charter school was first contacted, and the APT for the diesel program went to the school and visited two classrooms to talk about the diesel and welding programs at HCC. We plan to do more outreach to elementary schools in the next year to discuss possible career day dates. By sending our APT we are also reaching out to female students and encouraging non-traditional participation in our visits.

**Action Item 5:**
The instructor is enthusiastic about the restructuring of the lecture time. In the past, the lecture and note taking were done before the demonstration of the use of diagnostic equipment and tools. After multiple discussions with colleagues, diesel mechanics, the Advisory Council, and a retired diesel mechanic instructor from Palomar Junior College in Escondido, California, the instructor has decided that the introduction to the diagnostic equipment and some of the tools will be done first and before the note taking takes place. Students will participate in the hands-on demonstrations with the instructor and then return to the classroom for note taking and lecture. This “hands-on learning first” approach will be implemented in the AY 18-19. In the beginning of the Fall 2018 semester, the instructor will take out multi-meters, electrical testing equipment, voltage drop testers, amp readers, and electrical training boards. Demonstrations and lab tasks will be done before lectures on electrical theory. The instructor feels that by switching this around, the students will have a more concrete understanding of the curriculum before learning the theory behind it and plans to integrate this for every course. Another example would be taking students to Hawthorne Caterpillar in the first couple of weeks of the first semester at the start of the new cohort. Allowing students to see, feel, hear, and experience an actual operating local diesel mechanic shop will give them a better idea of the mechanic work that will be expected of them in industry from day one. In the past, students were taken to
the Hawthorne Caterpillar mechanic shop the second or third semesters. The instructor has decided that most of the students in the program are hands-on learners and prefer tangible to theory. In teaching the hands-on lessons first, the instructor feels the students will be more motivated to learn the classroom lessons which involve lecture, note taking, and reading and studying the text books and manuals. Results of the integration of this approach will be discussed in the next Annual Review.

**Action Item 6:**
The Diesel Mechanic Program met with Hawthorne Caterpillar several times to discuss apprenticeships for our students. There is more research needed, curriculum needs to align with the curriculum of Hawthorne Caterpillar’s training modules, and more discussion is needed. The program hopes that if curriculum is aligned during the AY 18-19, then possible apprenticeships could start as early as Spring 2020.

**Action Item 7:**
The Diesel Mechanic Program would like to work with Waikea High School to develop internships for the high school students. The students would be able to shadow our HCC students for a few days out of the week for a few hours in order to show them what college is all about, and introduce them to diesel mechanics earlier. The high school students could possibly earn college credit toward graduating from HCC. We hope to start an internship program in the Spring 2020 semester.

**Action Item 8:**
The program is meeting with Cummins in hopes of acquiring more training software that the students can utilize independently. The Hawthorne Caterpillar software is extremely helpful for students when looking for schematics, parts, systems, and steps and procedures for repairs. It also helps the student learn navigational techniques for software for mechanics. The instructor hopes that in the AY 17-18 year, the software will allow students to navigate training modules that coincide with the curriculum for added reinforcement of the learning outcomes.

**RESOURCE IMPLICATIONS**
**NOTE: General “budget asks” are included in the 3-year Comprehensive Review. Budget asks for the following three categories only may be included in the APR: 1) health and safety needs, 2) emergency needs, and/or 3) necessary needs to become compliant with Federal/State laws/regulations.**

<table>
<thead>
<tr>
<th>Budget ASKS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>For budget ask in the allowed categories (see above):</td>
<td></td>
</tr>
<tr>
<td>Describe the needed item(s) in detail.</td>
<td>No budget requests at this time.</td>
</tr>
<tr>
<td>Include estimated cost(s) and timeline(s) for procurement.</td>
<td>N/A</td>
</tr>
<tr>
<td>Explain how the item(s) aligns with one or more of the strategic initiatives of 2015-2021 Strategic Directions:</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**PART 3: LEARNING OUTCOMES ASSESSMENTS**

For all parts of this section, please provide information based on CLO (course learning outcomes) or PLO (program learning outcomes) assessments conducted in AY17-18.

**Evidence of Industry Validation and Participation in Assessment (for CTE programs only)**

Provide documentation that the program has submitted evidence and achieved certification or accreditation (if applicable) from an organization granting certification/accreditation in the program’s industry/profession. If the program/degree/certificate does not have a certifying body, you must submit evidence of the program’s advisory committee’s/board’s recommendations for, approval of, and/or participation in the program’s assessment(s).

**Please attach copy of industry validation for the year under review.**

**Courses Assessed**
List all program courses assessed during AY17-18, including Initial and “Closing the Loop” assessments.

<table>
<thead>
<tr>
<th>Assessed Course Alpha, No., &amp; Title</th>
<th>Semester assessed</th>
<th>CLOs assessed (CLO#s)</th>
<th>PLO alignment (PLO#s)</th>
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</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>“Closing the Loop” Assessed Course Alpha, No., &amp; Title</td>
<td>Semester assessed</td>
<td>CLOs assessed (CLO#s)</td>
<td>PLO alignment (PLO#s)</td>
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<tr>
<td>DIMC 40 Introduction to Power Trains</td>
<td>Fall 2017</td>
<td>CLO: 1</td>
<td>PLO: 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CLO: 2</td>
<td>PLO: 1,4</td>
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<td>CLO: 3</td>
<td>PLO: 5</td>
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<tr>
<td>DIMC 50 Heavy Duty Brakes, Steering, Suspension</td>
<td>SP 2018</td>
<td>CLO: 1</td>
<td>PLO: 1</td>
</tr>
<tr>
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<td></td>
<td>CLO: 2</td>
<td>PLO: 2</td>
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<td>PLO: 4</td>
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<td></td>
<td></td>
<td>CLO: 5</td>
<td>PLO: 5</td>
</tr>
<tr>
<td>DIMC 55 Hydraulic and Hydrostatic Systems</td>
<td>SP 2018</td>
<td>CLO: 1</td>
<td>PLO: 2,5</td>
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<td>CLO: 2</td>
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<td></td>
<td></td>
<td>CLO: 3</td>
<td>PLO: 1,4</td>
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</tbody>
</table>

Assessment Strategies

For each course assessed in AY17-18 listed above, provide a brief description of the assessment strategy, including:

- a description of the type of student work or activity assessed (e.g., research paper, lab report, hula performance, etc.);
- a description of how student artefacts were selected for assessment (e.g., the assessment included summative assignments from all students in the course, OR a sample of students’ summative assignments was randomly selected for assessment based on a representative percentage of students in each section of the course);
- a brief discussion of the assessment rubric/scoring guide and the criteria/categories and standards used in the assessment.
Course Alpha#/: **DIMC 40**, Introduction to Power Trains

The instructor administered the same written final exam that was administered in the Fall of 2015 at the end of the semester to every student. The exam had eighty ASE style questions meeting Industry Standards. The exam was based on the material that was covered over the entire semester. The goal for this exam was that 75% of the students would receive 75% or better scores. In calculating the results, the instructor found that 11 out of 19 students, or 58% met with 75% or higher scores.

CLO: 1

The instructor evaluated the students’ abilities to disassemble and reassemble a power-trans. Every student was given a “Lab-task” sheet to fill out, with step by step procedures for the student to follow. The instructor examined this performance based activity using a rubric with 16 total points possible. Four skills were assessed. In order to meet the benchmark, the student would need 12 out of 16 points, or 75%. Goal for this assessment was that 80% or 16 out of 19 students would meet expectations. In examining the results of this assessment, the instructor found that 19 out of 19 students, or 100% met the benchmark.

CLOs: 1, 2, 3

The instructor used a rubric at the end of the semester to determine employability, safety, and communications skills of every student. The instructor evaluated the same employability skills that were approved by the Advisory Council as being the most important in employment and what employers look for in an employee. The instructor made two changes to the soft-skills rubric for this assessment. The rubric was changed by adding the skill, “quality of work” and was also changed by adjusting the benchmark so that the student “meets” or “does not meet.” The goal for this assessment was that 15 out of 19, or 75% of the students would meet expectations. The instructor found that 16 out of 19, or 84% of the students met the benchmark.

CLOs: 1, 3

Course Alpha#/: **DIMC 50**, Heavy Duty Brakes, Steering, Suspension

In grading the final written exam for which CLO: 5 was assessed, 89% of the students received 75% or better, or 17 out of 19 students. The instructor had anticipated that 75% of the students would receive a 75% or higher score. These results show that the students assessed did better
on the final written exam by 14%, meeting the expectations for CLO: 5. The over-all average for the final written exam was 80%.

In assessment expectations on the performance skills test, the instructor projected that 80% of the students would meet expectations. In using a rubric to score the students, the instructor found that 88% of the students met expectations of the performance skills test. These results show that the students assessed did better on the performance tests by 8%, meeting the expectations. The over-all average for the performance skills test was 91%.

CLOs: 2, 3, 4 & 5

In completing the assessments for the soft skills employability, safety and communication skills, the instructor had projected that 75% of the students would meet expectations. In calculating the results using a rubric, it was found that 68% of the students, or 13 out of 19 students met expectations for these skills, not meeting the expectations for CLO: 1. The combined average score of all the students for this assessment is 78%.

Course Alpha/#: **DIMC 55**, Hydraulic and Hydrostatic Systems

In grading the final exam for which CLO: 2 was assessed, 100% of the students received 75% or better on the final exam. The instructor had anticipated that 75% or better would meet the goal of 75% on the final exam. The over-all average for the final exam for all the students was 88%.

CLO: 2

In assessment expectations on the performance skills test, the instructor had hoped for 80% of the students to meet expectations. In using a rubric to score the students, the instructor found that 81% of the students met expectations of the performance skills test. These results show that the students assessed did better on the performance tests by 1%, meeting the expectations for CLO: 3.

In completing the assessments for the soft skills employability, safety and communication skills, the instructor had hoped for 75% of the students to meet expectations. In assessing the rubric used, it was found that 85% of the students met expectations for these skills, meeting the expectations for CLO: 1. The combined average score of all the students for this assessment is 96%.

CLO: 1
**Expected Levels of Achievement**

For each course assessed in AY17-18 listed above, state the standard (benchmark, goal) for student success for each CLO assessed AND the percentage of students expected to meet that standard for each CLO.

*Example:* “CLO#1: The standard for student success is that students will answer 80% of the questions on the final exam related to CLO#1 correctly. The expectation is that 85% of students will meet this standard for CLO#1.”

*Example:* “CLO#4: The standard for student success is that students will be able to perform skills associated with CLO#4 with 80% proficiency. The expectation is that 75% of students will meet this standard for CLO#4.”

<table>
<thead>
<tr>
<th>Assessed Course Alpha, No., &amp; Title</th>
<th>Assessed CLO#</th>
<th>Standard for Success</th>
<th>% of Students Expected to Meet Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DIMC 40,</strong> Introduction to Power Trains, written Final Exam</td>
<td>CLO: 1</td>
<td>Score of 75%</td>
<td>75% of students meet the benchmark</td>
</tr>
<tr>
<td><strong>DIMC 40,</strong> Introduction to Power Trains, performance test</td>
<td>CLOs: 1, 2 &amp; 3</td>
<td>Score of 80%</td>
<td>75% of students met the benchmark</td>
</tr>
<tr>
<td><strong>DIMC 40,</strong> Introduction to Power Trains, soft skills evaluation</td>
<td>CLOs: 1 &amp; 3</td>
<td>Score of 75%</td>
<td>75% of students meet the benchmark</td>
</tr>
<tr>
<td><strong>DIMC 50,</strong> Heavy Duty Brakes, Steering, Suspension, written Final Exam</td>
<td>CLO: 5</td>
<td>Score of 75%</td>
<td>75% of students meet the benchmark</td>
</tr>
<tr>
<td><strong>DIMC 50,</strong> Heavy Duty Brakes, Steering, Suspension, performance skills test</td>
<td>CLOs: 2, 3, 4, &amp; 5</td>
<td>Score of 80%</td>
<td>75% of students meet the benchmark</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>CLO</td>
<td>Score</td>
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<tr>
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</tr>
<tr>
<td>DIMC 50</td>
<td>Heavy Duty Brakes, Steering, Suspension, soft skills evaluation</td>
<td>CLO: 1</td>
<td>Score of 75%</td>
</tr>
<tr>
<td>DIMC 55</td>
<td>Hydraulic and Hydrostatic Systems, written Final Exam</td>
<td>CLO: 3</td>
<td>Score of 75%</td>
</tr>
<tr>
<td>DIMC 55</td>
<td>Hydraulic and Hydrostatic Systems, performance skills test</td>
<td>CLO: 2, 3, 4, &amp; 5</td>
<td>Score of 80%</td>
</tr>
<tr>
<td>DIMC 55</td>
<td>Hydraulic and Hydrostatic Systems, soft skills evaluation</td>
<td>CLO: 1</td>
<td>Score of 75%</td>
</tr>
</tbody>
</table>

Results of Course Assessments

For each course assessed in AY17-18 listed above, provide:
- a statement of the quantitative results;
- a brief narrative analysis of those results.

Course Alpha/#: DIMC 40, Introduction to Power Trains

**FINAL EXAM:** In calculating the results, the instructor found that 11 out of 19 students, or 58% met with 75% or higher scores.

CLO: 1

The instructor found that the results of the Final Exam scores were less than had been anticipated and will strategize methods of instruction in order to assist students in their success in taking the written tests.
PERFORMANCE ASSESSMENT: In examining the results of this assessment, the instructor found that 19 out of 19 students, or 100% met the benchmark.
CLOs: 1, 2, 3
Based on these results which were higher than the set goal, the instructor has concluded that students grasp and understand materials being covered in the curriculum. Students have knowledge and skills to diagnosis and repair and provide maintenance on power-trains, they have the ability to operate specialized power-train equipment and work well collaboratively as well as independently.

SOFT SKILLS: The instructor found that 16 out of 19, or 84% of the students met the benchmark.
CLOs: 1, 3
These results help to conclude that the students are ready to go into the workforce and possess the necessary soft skills to be successful in industry.

**Course Alpha/#: Course Alpha/#: DIMC 50, Heavy Duty Brakes, Steering, Suspension**

FINAL EXAM: In calculating the results, the instructor found 17 out of 19 students, or 89% met with 75% or higher scores. The combined average scores of all the students’ final exams was 87%.
CLO: 5
The instructor was pleased with the results of the final exam and has concluded that the students are improving with their writing and test taking skills, and that they are also realizing the importance of the final exams and putting more effort into their note taking.

PERFORMANCE ASSESSMENT: In examining the results of this assessment, the instructor found that 15 out of 19 students, or 78% met the benchmark. The overall combined average was 87%.
CLOs: 2, 3, 4 & 5
Based on these results which were slightly higher than the set goal, the instructor has concluded that students grasp and understand materials being covered in the curriculum. Students have knowledge and skills to diagnosis and repair and provide maintenance on heavy duty brakes, steering, and suspension and they have the ability work well collaboratively as well as independently.
SOFT SKILLS: The instructor found that 13 out of 19, or 68% of the students met the benchmark. The combined average score of all the students for this assessment is 78%.

CLO: 1

This was a particularly difficult cohort, with students missing more days of school then in the past due to family problems, hospitalization, and incarceration. The “job-readiness” of this cohort was lacking, and although there were a few outstanding students with adequate soft-skills, the ones who struggled, still made it through the program, made-up hours, and communicated with the instructor, showing that the level of effort was high.

Course Alpha/#: DIMC 55, Hydraulic and Hydrostatic Systems

FINAL EXAM: In calculating the results, the instructor found 16 out of 19 students, or 84% met with 75% or higher scores. The combined average score of all the students’ final exams was 86 %.

CLO: 3

As stated with the DIMC 50 course, the instructor was pleased with the results of the final exam and has concluded that the students are improving with their writing and test taking skills, and that they are also realizing the importance of the final exams and putting more effort into their note taking.

PERFORMANCE ASSESSMENT: In examining the results of this assessment, the instructor found that 16 out of 19 students, or 84% met the benchmark. The overall combined average was 93%.

CLOs: 2, 3, 4 & 5

Based on these results which were slightly higher than the set goal, the instructor has concluded that students grasp and understand materials being covered in the curriculum. Students have knowledge and skills to diagnosis and repair and provide maintenance on hydraulic and hydrostatic systems and they have the ability work well collaboratively as well as independently.
**SOFT SKILLS:** The instructor found that 12 out of 19, or 63% of the students met the benchmark. The combined average score of all the students for this assessment is 75%.

CLO: 1

As stated above in DIMC 50, this particular cohort struggled with outside situations that affected their soft-skill abilities although a large effort was made on their part to pass the course.

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**Other Comments**

Include any additional information that will help clarify the program’s course assessment results, successes and challenges.

In scoring all three of the assessments, the instructor has found that the expectations were mostly met. The instructor found that the areas where students lacked were in the soft-skills. This is different from previous cohorts who had high soft-skill levels and lacked in the reading and writing and note taking. The instructor is confident that this is due to outside influences that negatively impacted students’ success and does not see any reason for the situation to reoccur, but has taken steps to contact counselors, child care services, financial aid and scholarship options, HINET, Claudia Wilcox-Boucher at the Food Bank as well as colleagues in order to consider different means in assisting students in being successful outside of school so that they are more successful when in class.

We can conclude that the students’ achievements in learning the course learning outcomes are adequate and that the students, over-all, have the attitude and work ethics, as well as the entry-level knowledge of the fundamental skills, required for employment in the diesel mechanics industry. In examining the results of the assessments, the instructor has concluded that the student learning outcomes are being met

Discuss, if relevant, a summary of student survey results, CCSSE, e-CAFE, graduate-leaver surveys, special evaluations, or other assessment instruments that are not discussed elsewhere in this report.
The results of the eCafe for the Fall 2016 and Spring 2017 semesters were positive. Mostly the students commented that they enjoyed the hands-on learning, and interactive assignments, the variety of the type of jobs that they got to work on, and the instructor’s knowledge.

*See following cut and pasted from results:

very hands on
I liked all activities and projects we completed in this course
hands on work
I like everything that this course and instructor brought to us by Mitch.
hands on learning..
For this semester, the course provided me with a lot of helpful information and in class projects that relates to what the instructor is teaching us in the classroom
the course was very knowledgeable and able to comprehend very easily
The on equipment training helped understand the classroom studies and lectures.
I like that we do alot of hands on projects. its one thing to read a book but another to actually do it.

When asked if there were any suggestions for improvement, the students commented:

more trucks
Have breakfast ready for us at the beginning of every class.
no...its perfect..ive learned a lot and still learning
N/A
a teachers aid.. sometimes time gets wasted because teacher is busy with another group
more trucks
N/A
A full-time “teacher’s aide” has been hired in the Summer of 2017 and a full-time retired Diesel Mechanic volunteered for three months in the SP 18 semester. It is difficult to give students the one-on-one that would be ideal for learning, but with the help of the APT, sometimes a volunteer, and as the students’ familiarity of the shop increases, more one-on-one time is possible. The instructor is also encouraging independent research and training through the Hawthorne Caterpillar website, and hopes to acquire more software that the students can navigate for reinforced learning. After reading the eCafe results and the students’ responses to the hands-on learning, the instructor is enthusiastic about the integration of the “hands-on learning first” approach that was discussed earlier in this report under the “Action Plan” section. Results of the integration of this approach will be discussed in the next Annual Review.
Also in the “Action Plan” below, under number “8,” the instructor has added plans for more up-to-date software that students can navigate for additional resources if they have down time.

## Next Steps – ASSESSMENT ACTION PLAN for AY18-19

<table>
<thead>
<tr>
<th>Describe the program’s intended next steps to improve student learning, based on the program’s overall AY17-18 assessment results.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include any specific strategies, tactics, activities or plans for improvement in program or course assessment practices, methods or tools, rubrics, schedules, etc.</td>
</tr>
</tbody>
</table>

Most of the previous assessments done in the past have been sporadic, inconsistent and sometimes unclear. Now, with the aid of the Assessment Coordinator, the hiring of the APT, and the newest assessment website “Campus Labs,” the instructor is confident that because assessment processes have gotten more clear and will continue to do so, will in turn, allow the instructor to assess more confidently and have a better understanding of how to gage student achievement and better understand the results.

The program has taken the year to follow-up on assessment strategies and to understand the need for more comprehensive assessments as recommended by CERC. Results have been reviewed, lab-task sheets have been updated for the driving simulator as well as other learning outcomes, and all rubrics are currently in the process of being edited. Expectations of student learning outcomes have and still are in the process of being evaluated before the next round of assessments begin in Spring 2019 and the Assessment Coordinator will be consulted before, during and after the assessment process as was done in the AY 17-18 assessments for DIMC 40, DIMC 50 and DIMC 55.

In reviewing the results of previous assessments and student learning outcomes, the instructor is adjusting teaching techniques to accommodate the need for a more hands-on approach in the beginning of the semester. The results of the assessments from AY 16-17, showed that the students struggled in the lab when practical applications of previously studied theory were applied. The instructor is optimistic that the results of the student learning outcomes will improve with this new approach, the goal being that all the students meet the benchmarks for all the course CLOs. Now that the new alignments have been made with the CLOs, PLOs and ILOs, and with the revision of all the assessments and rubrics, any deficiencies or achievements
will be more obvious. The instructor is pleased with the new alignments and that the learning outcomes align well with the college’s Institutional Learning Outcomes. Working with the Assessment Coordinator made this possible and it is more evident now how these assessments play a key role in teaching strategies.

<table>
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<tr>
<th>ILO</th>
<th>PLO 1</th>
<th>PLO 2</th>
<th>PLO 3</th>
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**PART 4: ADDITIONAL DATA**

Cost Per SSH *(to be provided by Admin)*

Please provide the following values used to determine the total fund amount and the cost per SSH for your program:

- General Funds = $__________
- Federal Funds = $__________
- Other Funds = $__________
- Tuition and Fees = $__________

**External Data***

If your program utilizes external licensures, enter:

- Number sitting for an exam _____
- Number passed _____

*This section applies to NURS only.*
AY 17-18 Student job Placement (graduates from Sp 2018)

Current as of January 16th, 2018

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<thead>
<tr>
<th>student</th>
<th>Employer(s)</th>
<th>position</th>
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</thead>
<tbody>
<tr>
<td>1. TXXX</td>
<td>Puna Rock &amp; Diamond Rock</td>
<td>Industrial maintenance/mechanic</td>
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<tr>
<td>2. KXXX</td>
<td>Puna Rentals</td>
<td>Industrial maintenance/mechanic</td>
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<td>Power Generation</td>
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<tr>
<td></td>
<td>Auto Body</td>
<td>Auto body and mechanics</td>
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<tr>
<td>3. JXXX</td>
<td>Hualalai Resorts</td>
<td>Industrial maintenance/mechanic</td>
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<td></td>
<td>Sanfords</td>
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</tr>
<tr>
<td>4. JXXX</td>
<td>R&amp;D Diesel</td>
<td>Diesel Mechanic</td>
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<tr>
<td></td>
<td>Kenworth Washington</td>
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<td>5. DXXX</td>
<td>R&amp;D Repair</td>
<td>Diesel Mechanic</td>
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<td>6. CXXX</td>
<td>Orchid Island Hauling and Rentals</td>
<td>Diesel Mechanic</td>
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<td>Penske</td>
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<td>7. WXXX</td>
<td>Aka Mai Machining</td>
<td>Machining and industrial maintenance</td>
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<td>Glover, Hilo</td>
<td></td>
</tr>
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<td>8. KXXX</td>
<td>O’Riley’s Auto Parts</td>
<td>Parts person</td>
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<tr>
<td></td>
<td>Big Island Toyota</td>
<td>Service Writer</td>
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<tr>
<td>9. KXXX</td>
<td>O’Riley’s Auto Parts</td>
<td>Parts person</td>
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<td></td>
<td>Allied Machinery</td>
<td>Diesel Mechanic</td>
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<tr>
<td>10. HXXX</td>
<td>Independent Mechanic Shop</td>
<td>Mechanic</td>
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<tr>
<td>11. DXX</td>
<td>Independent Heavy Equipment Operator in Kalapana</td>
<td>Diesel Mechanic</td>
</tr>
<tr>
<td>12. MXXX</td>
<td>Puna Rentals</td>
<td>Diesel Mechanic</td>
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<td>R &amp; D Repair</td>
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<td>13. BXXX</td>
<td>Kona Airport</td>
<td>Baggage person</td>
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<td>Kona Kennowrth Dealership</td>
<td>Diesel Mechanic</td>
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<td>14. JP</td>
<td>Glover, Hilo</td>
<td>Car/truck Salesman</td>
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<td>Chevy Dealership</td>
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<td>15. RXX</td>
<td>Student</td>
<td>Auto Mechanic HCC Student</td>
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<td>16. AXXX</td>
<td>Self-employed</td>
<td>maintenance</td>
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<td>17. AXXX</td>
<td>Conan’s</td>
<td>Heavy Equipment Mechanic</td>
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<tr>
<td>18. TXXX</td>
<td>Puna Rentals</td>
<td>Heavy Equipment Machanic</td>
</tr>
<tr>
<td>19. SXXX</td>
<td>incarcerated</td>
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## Diesel Mechanics Advisory Council Meeting Notes

March 1, 2018
4:00 – 5:30 p.m.

**Members Present:** Eugene Lyman III, Dennis Rose

**Faculty:** Mitchell Soares

**Facilitator:** Jennifer Siemon

<table>
<thead>
<tr>
<th>AGENDA ITEM</th>
<th>DISCUSSION/NOTES</th>
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<tbody>
<tr>
<td>1. Assessment</td>
<td>Reviewed DIMC 40; course met two of three assessment benchmarks</td>
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<tr>
<td>a) Results of program and course assessment</td>
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<td>b) Review Program Learning Outcomes (PLOs), Course Learning Outcomes (CLOs) – verify that achievement by a student will meet industry needs for entry-level employment.</td>
<td>1) New and revised CLOs 2) Challenges for Industry with some graduates when they first go to work:  - Figure out employer expectations  - Reverse logic and re-ask; check for understanding  - Need to be thorough in answers when boss asks  - Cell phones  - Talks less  - Don’t trust You Tube</td>
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<td>2. Review of courses and curriculum</td>
<td>Program CIP Code is the same</td>
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<td>a) Program CIP Code (if changed in past year)</td>
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<td>b) Updates made/new direction for the program this year</td>
<td>1) Combined courses:  - 28 → 6 → 4 groups  - DISL 50 and DISL 55  - DISL 30 and DISL 33  2) Currently trying to procure Skid steer from CAT for hydraulic repairs and hydrostatic repairs; Industry is in favor of instructors teaching multiple skills 3) Other new equipment:  - Mobile Column lift  - Parts washer (in progress)  - Arbor Press 4) Scholarships for students:  - CAT Hawthorne Caterpillar  - Russell Kuwaye  - CAT and Russell Kuwaye also want to start internships for students</td>
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<td>3. Industry Report</td>
<td>1) More Agriculture – small farms and farm equipment 2) Logging equipment for power plants 3) More big tractors; trucking business growing</td>
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<td>a) Industry needs and trends: Trends – What’s new in your industry? How will this affect our program? (new skills,</td>
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<td>AGENDA ITEM</td>
<td>DISCUSSION/NOTES</td>
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| procedures, technology changes, etc.) – short & long term | 4) Diesel Shop farming out work because busy and overwhelmed  
5) Need for drivers to pre-trip inspections because driving equipment into ground creating more mechanical failures. Need pre-trip training.  
6) Need CDL for mechanics so mechanic can road test vehicles; also a bonus if mechanic has “bus endorsement” and HAZMAT to carry fuel.  
7) Wants cleaner/more green shops, equipment, and practices  
8) Only two shops are certified to do generator inspections on this island, Power Generation and Hawthorne Caterpillar.  
9) No more trouble shooting using internet or cellphone; should use Industry programs instead; new mechanics need to use ‘Quickserve’ |
| 10) Employment forecast – Jobs available short term and long term | 1) A lot of work; some shops (ie: Conens) farming out work because they’re so busy  
2) Hard to find good mechanics  
3) No need for journeyman mechanics; industry still wants entry level so they can train the way they want. Industry is reluctant to hire journeymen; prefers entry-level graduates that are well-rounded.  
4) Industry wants instructors to keep teaching basics  
5) New power plant, logging so high need for heavy equipment mechanics |
| 4. Feedback regarding curriculum in alignment with industry trends | 1) Graduates need to be versatile; know a little about everything:  
- electrical concepts  
- hydraulics  
- welding  
- use of tools, ie: voltmeter  
2) Advice from industry:  
- teach basics  
- wants students to show up at work with good attitude |
<p>| a) Is the program meeting the current needs/trends? | Program was changed so students are admitted every other year and class capacity was lowered to 17 students to accommodate 1 instructor. However, class capacity was raised to 19 students since instructor can teach more easily with one class and have more graduates every two years. |
| b) How best to meet needs and trends (currently not included in courses, ie: modify course, externship, etc.) | |</p>
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<tr>
<th>Print Name</th>
<th>Organization</th>
<th>Title</th>
<th>Phone</th>
<th>Email</th>
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<tbody>
<tr>
<td>Eugene H. Lyman</td>
<td>A&amp;B Fleet Sc</td>
<td>Supervisor</td>
<td>217-1881</td>
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<td>Dennis Rose</td>
<td>P.C.S.</td>
<td>Operator</td>
<td>760-1473</td>
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<td>Mitch Soares</td>
<td>Haw C C</td>
<td>Instructor</td>
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