PROGRAM REVIEW 2015
## Contents

Program/Discipline Overview: ............................................................................................................................ 2
Outcomes and Assessment ................................................................................................................................. 3
Other Curricular Issues ....................................................................................................................................... 6
Needs of Students and the Community ............................................................................................................. 7
Faculty ................................................................................................................................................................ 7
Facilities and Academic Support ......................................................................................................................... 9
For Career and Technical Education (CTE) Programs only ................................................................................. 9
Recommendations ............................................................................................................................................ 12
Index of Appendices........................................................................................................................................... 19
Program/Discipline Overview:

A. What are the educational goals or objectives of this program/discipline? How do these compare with national or professional program/discipline trends or guidelines? Have they changed since the last review, or are they expected to change in the next five years?

The Dealer Service Technology Program or “ThinkBIG” Program as it is known around the world started as an answer to a problem. Caterpillar dealerships were unable to find well qualified technicians to work in their service departments. The students that had completed training in colleges and technical schools had to be sent back to school to receive Caterpillar Technical Training. That is where the Dealer Service Technology Program comes in; to fill the void between a mechanic that needs further training to a profitable technician on day one. My colleagues and I work hand in hand with Caterpillar Inc. and four Northwest Caterpillar dealerships to accomplish this. The educational goal of this program is to equip students with the knowledge and ability to thrive in a Caterpillar Service Career. Our emphasis is not only on the technical aspects of Caterpillar machines and systems but also on the successful transition from PCC to the workplace. The partnership we have with Caterpillar Inc. and our Northwest dealer group allows us to stay current with local and national changes in our industry. The faculty spends time in each dealership making sure we are teaching the most up to date practices possible. Our overall goals as a program are not set to change, but our curriculum is constantly changing to keep up with industry.

B. Briefly describe changes that were made as a result of SAC recommendations and/or administrative responses from the last program review.

With the changes made to our A/C and Electrical classes we have seen an improvement in our students test scores and more importantly in their troubleshooting skills in the dealerships.

We have utilized the additional storage space added to our program and have had the opportunity to move our welders and grinders out of our main shop. This allows for superior contamination control in our main shop during component take down.
Outcomes and Assessment

Reflect on learning outcomes and assessment, teaching methodologies, and content in order to improve the quality of teaching, learning, and student success.

A. Course-Level Outcomes: The College has an expectation that course outcomes, as listed in the CCOG, are both assessable and assessed, with the intent that SACs will collaborate to develop a shared vision for course-level learning outcomes.

i. What is the SAC process for review of course outcomes in your CCOGs to ensure they are assessable?

The course outcomes for the program are set by Caterpillar Inc. and are only changed if the core curriculum is changed worldwide. We have the same set of core outcomes for all ThinkBIG colleges in order to maintain consistency from program to program.

The outcomes are very straightforward and task oriented making them easily assessable through hands on and written student demonstration.

ii. Identify and give examples of changes made in instruction to improve students’ attainment of course outcomes, or outcomes of requisite course sequences (such as are found in MTH, WR, ESOL, BI, CH, etc.) that were made as a result of assessment of student learning.

The program has the advantage of having two full time faculty that teach all of the core classes. Early on in the program the classes were taught with one instructor teaching all of the fundamental classes and the other instructor teaching all of the advanced level classes. This was immediately recognized as an issue when the
students went from one instructor to the next. It was possible to teach this way but the continuity change in teaching style caused the students to stumble in the advanced classes instead of having a smooth transition into a more difficult subject level.

The program now offers the classes with one instructor teaching the fundamental course and then the advanced course immediately after. This has made a big difference in the students’ comprehension and understanding of the subjects.

B. **Addressing College Core Outcomes**

i. **Update the Core Outcomes Mapping Matrix.**  
   [http://www.pcc.edu/resources/academic/core-outcomes/mapping-index.html](http://www.pcc.edu/resources/academic/core-outcomes/mapping-index.html)  
   For each course, choose the appropriate Mapping Level Indicator (0-4) to match faculty expectations for the Core Outcomes for students who have successfully completed the course. (You can copy from the website and paste into either a Word or Excel document to do this update, and provide as an Appendix.)

Please refer to the Appendix for this information.

---

**For Career and Technical Education Programs: Degree and Certificate Outcomes**

i. **Briefly describe the evidence you have that students are meeting your Degree and/or Certificate outcomes.**

   As a program we have had 100% of our students hired immediately after completing their core classes in the past 5 years. The students are working with their future employers throughout the program and simply go from part time to full time after graduation. The program is designed to assess the students’ ability throughout the two year degree. If there are any issues along the way they are addressed and remedied.

ii. **Reflecting on the last five years of assessment, provide a brief summary of one or two of your best assessment projects, highlighting efforts made to improve students’ attainment of your Degree and Certificate outcomes.**

   As a Caterpillar Inc. program we have switched since our last review to a new post program test offered by the Association of Equipment Distributors or AED. This test is given to all of our incoming students on the first day of orientation as a pretest and again the week before they graduate as a post test. This gives us a clear view of what they learned in the program, where we are excelling and where we have
room for improvement. We noticed that our safety scores, although they were above the needed benchmark for graduation, they were not in the excellent range we thought was appropriate.

In order to improve these scores we introduced additional safety training assignments throughout the curriculum and added safety tasks to be accomplished while performing lab exercises in other subjects. With these small changes we saw our safety scores increase and we continue to strive for excellence in this area.

iii. Do you have evidence that the changes made were effective (by having reassessed the same outcome)? If so, please describe briefly.

As a program we saw an increase in the students’ safety scores and were also able to observe the change in their interaction in the lab settings. The students are all assessed with a pre and posttest allowing for us to have a clear idea of what they have learned in the program.

iv. Evaluate your SAC’s assessment cycle processes. What have you learned to improve your assessment practices and strategies?

The program’s assessment cycle could be improved by adding in some more specific assessment areas. We will continue to do our overall pre and post testing but will need to add in more focused assessments when it comes to PCC’s core outcomes.

v. Are any of PCC’s Core Outcomes difficult to align and assess within your program? If yes, please identify and explain.

Community and Environmental Responsibility can be difficult to fit into our core classes as a substantive portion of the curriculum. We discuss the importance of following the laws and the ramifications of chemical spills and environmental damage but our main goal is to teach them how to safely and effectively repair machines. I believe we convey the importance of this core outcome but have no true way of knowing the affect we have on the student’s future outlook.
Other Curricular Issues

A. Which of your courses are offered in a Distance Learning modality (online, hybrid, interactive television, etc.), and what is the proportion of on-campus and online? For courses offered both via DL and on-campus, are there differences in student success? (Contact the Office of Institutional Effectiveness, either Laura Massey or Rob Vergun, for course-level data). If so, how are you addressing or how will you address these differences? What significant revelations, concerns, or questions arise in the area of DL delivery?

We currently do not offer any of our courses in a Distance Learning (DL) format. We have encouraged our students to attempt Writing 121 online during their internship. We have seen a difference in student success when compared to offering the same course on campus. Writing 121 quickly passed Math 65 as our most troublesome course.

B. Has the SAC made any curricular changes as a result of exploring/adopting educational initiatives (e.g., Community-Based Learning, Internationalization of the Curriculum, Inquiry-Based Learning, Honors, etc.)? If so, please describe.

NA

C. Are there any courses in the program offered as Dual Credit at area High Schools? If so, describe how the SAC develops and maintains relationships with the HS faculty in support of quality instruction.

We do not offer any dual credit courses. The courses must be taught by an experienced Caterpillar Specific Instructor and it is not possible to guarantee this will take place at a high school level.

D. Please describe the use of Course Evaluations by the SAC. Have you developed SAC-specific questions? Has the information you have received been of use at the course/program/discipline level?

At this time we have not introduced SAC specific questions, but we do plan to do so as another tool for our yearly assessments.

E. Identify and explain any other significant curricular changes that have been made since the last review.

As a Caterpillar Specific Training program our curriculum is standardized through Caterpillar Inc. and the Caterpillar Dealerships from around the world. We meet every two years for a Global Conference to fine tune and update our curriculum adding best practices. There have not been any significant changes to the program just updates and layout.
Needs of Students and the Community

A. Have there been any notable changes in instruction due to changes in the student populations served?

As the program has matured there have been changes in the presentation of material and the use of lab versus lecture formats. We have not seen a big change in student population because we continue to pull from throughout our Northwest Territory.

B. What strategies are used within the program/discipline to facilitate success for students with disabilities? What does the SAC see as particularly challenging in serving these students?

Due to the nature of our program and the type of work we perform in the shop we do not deal with many physical disabilities in our student population. We do however have many students that choose this industry thinking that it will all be hands on work not requiring high levels of reading comprehension and study skills.

C. Has feedback from students, community groups, transfer institutions, business, industry or government been used to make curriculum or instructional changes? If so, please describe (if this has not been addressed elsewhere in this document).

As mentioned before we rely on our advisory group for feedback and direction on what is expected of our students and what is required to succeed in their industry. We also use our students’ internship evaluations to help us gauge the effectiveness of our teaching practices.

Faculty

Reflect on the composition, qualifications and development of the faculty

Provide information on:

A. How the faculty composition reflects the diversity and cultural competency goals of the institution.
The faculty for the program were chosen for their expertise in the subject areas and industries directly relevant to their work/teaching assignments. One instructor coming all the way from New York and the other coming from Northern California. The goal of the school to “Recruit, hire and retain a diverse and qualified faculty and staff” has been achieved in our program.

B. Changes the SAC has made to instructor qualifications since the last review and the reason for the changes. (Current Instructor Qualifications at: http://www.pcc.edu/resources/academic/instructor-qualifications/index.html)

Education:

*Caterpillar Specific certification in all areas of instruction is required within the first year of hire for full time faculty. AAS or Bachelors Degree (or higher) in diesel service or a field appropriate to diesel service is preferred but not required.*

Experience:

*Five years recent diesel service experience required. Recent experience teaching at the college level or industry trainer experience or a combination of full-time equivalent teaching at the college level and industry trainer experience may be substituted, year for year, for recent diesel service experience.*

The Instructor qualifications were changed to include the requirement for Caterpillar Specific Training. The program had used the same qualifications as the Diesel Service Department but felt the need to add the language requiring Caterpillar certification in the areas they will teach.

C. How the professional development activities of the faculty contributed to the strength of the program/discipline? If such activities have resulted in instructional or curricular changes, please describe.

The faculty members continue to attend the Global ThinkBIG Conferences meeting with the ThinkBIG instructors from all over the world. This is a conference designed to include best practices and fine tune the curriculum to meet the latest industry demands. It is run much like a global curriculum meeting breaking up the instructors into specific subject work groups to update the program together. The PCC ThinkBIG program was the first to introduce the use of Caterpillar online courses for all of its students as study aids, which is now a practice adopted by all ThinkBIG Schools.

The faculty continue to complete Caterpillar online training courses and travel to corporate training events to stay up with the latest and greatest technology. The industry
is constantly changing requiring the instructors to be in constant training to stay ahead of the curve.

All of the new technologies are immediately introduced to the students to keep them up to date with the machines they will be seeing on their internships.

Facilities and Academic Support

A. Describe how classroom space, classroom technology, laboratory space, and equipment impact student success.

As a program we must have the ability to access the internet and Caterpillars’ websites. When we do not have access we are many times kept from being able to complete our demonstrations and lab assignments. The students must be able to follow along with their computers if we hope for any long term retention of the material being presented. We have seen firsthand how students are impacted when they cannot access any of the material or technology needed to practice.

We are a very well supported program and have actually had to turn down some equipment donations from Caterpillar due to lack of space in our lab.

B. Describe how students are using the library or other outside-the-classroom information resources.

The students do not currently utilize the library for their classes but rely on Caterpillar websites and the library of books provided by the program.

C. Does the SAC have any insights on students’ use of Advising, Counseling, Disability Services, Veterans Services, and other important supports for students? Please describe as appropriate.

The program relies heavily on our Perkins funded Learning Skills Specialist. Having a specific person that knows the program and is available to come and meet with the class is a very valuable tool. The students appreciate the fact that they have one person they can meet with that can answer their questions and has a direct connection to their instructors.

For Career and Technical Education (CTE) Programs only

To ensure the curriculum keeps pace with changing employer needs and continues to successfully prepare students to enter a career field:
A. Evaluate the impact of the Advisory Committee on curriculum and instructional content methods, and/or outcomes. Please include minutes from the last three Advisory Committee meetings in the appendix.

The advisory committee is made up of representatives from each of our dealer partners. They are able to be the voice of their company, approving and suggesting changes in the program along with the overall coordination of the students’ school/internship schedules. We meet at least once a year as an in person group but we are in constant contact throughout the school year.

The most important feedback on students’ outcomes or mastery of subjects comes from the internship visits performed by the faculty. It is on these visits that the faculty is able to follow up with the student’s immediate supervisor and or mentor in regards to the student’s progress. Many of the changes in curriculum or teaching styles comes from these visits. The faculty members note weak areas in the student’s learning to see if it is an isolated issue or something in need of further review or additional training needed on the school side of things.

B. Describe current and projected demand and enrollment patterns. Include discussion of any impact this will have on the program.

Currently the demand for students is very high with the Caterpillar Dealerships needing more full time employees. The industry continues to rebound and grow making its way back from the slowdown that took place in 2008-2011. With the right infrastructure the program could add additional seats meeting the needs of our Caterpillar Dealerships.

C. Explain how students are selected and/or prepared (e.g., prerequisites) for program entry.

All of the students are interviewed and chosen by our dealer partners. They are required to place into Math 60, Writing 115, and Reading 115 as an entry level requirement. Each student will go through an interview process including shop supervisors and service managers making sure they are a fit with company. After the students are selected by their local dealerships their names and information are passed on to the faculty department chair for evaluation and guided through the registration process. We rely heavily on our dealer partners for recruiting and student selection.

D. Review job placement data for students over the last five years, including salary information where available. Forecast future employment opportunities for students, including national or state forecasts if appropriate.
As a program we have had 100% student placement for students completing the Caterpillar Core classes. The program is designed to place students in internship locations that will need a full time employee at the time of the student’s graduation. This process has proven itself out over the life of the program allowing us to boast 100% placement.

Students graduating the program are hired at a range of salaries from $18.00 to $23.00 an hour depending on their dealership location. Students that have been with the dealership over the past 5 years are making anywhere from $21.00 to $26.00 an hour on average.

E. Please present data on the number of students completing Degree(s)/Certificate(s) in your program. Analyze any barriers to degree or certificate completion that your students face, and identify common reasons that students may leave before completion.

In order to find useful data we went back over the last five years of graduating ThinkBIG cohorts. Starting with the class graduating in 2011 and ending with this year’s cohort that graduated in 2015. Due to the sequential nature of the program we start all new groups in the Fall Term. This makes it very easy to track completion rates because the cohort number only changes when a student drops out or is released from the program.

In the 2011-2015 cohorts we started a total of 69 students with 52 receiving their degrees as of today’s date. We have 4 students that are set to graduate this Fall Term after they complete a final General Education course that is in process.
The students that have dropped from the program have done so in their first or second term. Many of the reasons given are family issues or finding out that the desire and or ability are not there to choose this as a career “not a good fit”. This is why the interview process is vital to the programs completion rates.

The students that complete all of the Caterpillar Core classes but have not completed their degree are missing either Math 65 or Writing 121. These courses are the main reason students do not complete on time. Many of the students that struggle have to take these courses 2 to 3 times before they graduate.

F. Describe opportunities that exist or are in development for graduates of this program to continue their education in this career area or profession.

There are opportunities for the students to transfer to 4 year schools but this has not been a common practice with only 4 or 5 students going on to work on a bachelors. The program is designed to help the students enter and start a career and that is what the majority of the students do.

We are currently looking into an Electrical Power Generation certificate/degree to be offered by PCC that would allow the students to return to school and pursue a more specialized training in an up and coming industry.

Recommendations

A. What is the SAC planning to do to improve teaching and learning, student success, and degree or certificate completion?

- Writing 121DL continues to be a struggle for the students. We have set aside a period in the class before Writing 121 is offered where the writing instructor meets the group and explains the expectations. This will be the first time we have done this and we should be able to see the effect at the end of this term as they complete their class.
- Math is a struggle but I believe this is a problem throughout the college. We would like to eliminate the Math 60 class offered in the students first term. Requiring this to be completed or tested out of before they start the program would allow for more time to study and complete the heavy workload required in the first term. I believe this would help not only with retention but also with the students’ abilities to master their classes.
• We continue to add more relevant lab assignments and incorporate new training aids into the curriculum. There are always improvements that can be made to how the classes are structured and presented. Noting best practices and making changes when warranted.

• The Faculty will continue to attend industry trainings and global conferences to keep pace with our forever changing and advancing industry.

B. What support do you need from the administration in order to carry out your planned improvements? For recommendations asking for financial resources, please present them in priority order. Understand that resources are limited and asking is not an assurance of immediate forthcoming support, but making the administration aware of your needs may help them look for outside resources or alternative strategies for support.

1. The program is need of additional space. Caterpillar made an exception when allowing the program to run in the current space provided and it has become very clear that additional space is warranted. The students are in very close quarters with large heavy training aids and this presents a safety issue when we have a full program. We have determined faculty that have been able to make do with space provided but as we move into larger class sizes we spend a lot of time moving training aids and working around things instead of being able to focus on the current class project.

2. Many of the ThinkBIG Colleges have built new buildings to promote safety and student learning allowing for the best use of class and lab time.

3. If we are unable to increase our lab size we would like to add an additional crane to better utilize the space we have.
Index of Appendices
Appendix 1 – Core outcome mapping; page 15

Appendix 2 – Advisory Meeting Minutes; pages 16-26

Appendix 3 – AED Pre and Posttest Results; page 27

Appendix 4 – 2015 Annual Assessment Report; pages 28-
Core Outcomes Mapping

Mapping Level Indicators:
0: Not Applicable.
1: Limited demonstration or application of knowledge and skills.
2: Basic demonstration and application of knowledge and skills.
3: Demonstrated comprehension and is able to apply essential knowledge and skills.
4: Demonstrates thorough, effective and/or sophisticated application of knowledge and skills.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
<th>CO1</th>
<th>CO2</th>
<th>CO3</th>
<th>CO4</th>
<th>CO5</th>
<th>CO6</th>
</tr>
</thead>
<tbody>
<tr>
<td>DST 110</td>
<td>Caterpillar Engine Fundamentals</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>DST 111</td>
<td>Introduction to Caterpillar Svc Industry</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>DST 112</td>
<td>Caterpillar Hydraulic Fundamentals</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>DST 113</td>
<td>Caterpillar Engine Fuel Systems</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>DST 114</td>
<td>Fundamentals of Electrical Systems</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>DST 115</td>
<td>Air Conditioning</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>DST 116</td>
<td>Fund of Transmissions &amp; Torque Converters</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>DST 117</td>
<td>Caterpillar Machine Hydraulic Systems</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>DST 120</td>
<td>Caterpillar Svc Technology Internship</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>DST 200</td>
<td>Undercarrage and Final Drive</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>DST 201</td>
<td>Machine Electronic Systems</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>DST 202</td>
<td>Caterpillar Engine Performance</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>DST 203</td>
<td>Caterpillar Machine Diagnostic</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>DST 204</td>
<td>Machine Specific Systems</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

SAC - DST: Dealer Service Technology

*Core Outcomes:
1. Communication.
2. Community and Environmental Responsibility.
5. Professional Competence.
Meeting called to order at 2:00 pm July 19, 2012 by Mace Gjerman.

In Attendance:

Mace Gjerman    Sally Hauskin    Cameron Pickett    Ishmael Rivas
Terry Sherman   Sander Torgeson  Misti Wall

Fall Registration:
Peterson currently has 7 students. They will attempt to find an eighth. Misti has one in Washington. Montana has two hoping for 3 Alaska 4 maybe 5 Western states has 5 (19) is approx. number for fall. Have potential to drive up to 22. Dealers would like to hit 20-22.

Ishmael brought up the fact that we should purchase the rest of the computers to meet the expectation of filling all of the seats. All were in favor of purchasing 9 more to meet

Orientation:
PCC has been informing the new candidates about the orientation, but please send the information to your students. Orientation will be 21st of September, please let Ish know if you will be attending with your student. Discussion about adding being under the influence to the orientation as a bullet point approved. The question was posed to Peterson as to what their policy was. Mace stated that it is case by case and is a dealer policy not PCC policy. This impairment in the orientation will include Medical Marijuana. Under no circumstances will it be permitted.

Uniforms:
Ishmael stressed the importance of uniforms in the program. Uniforms and coveralls are needed the first day of class. All students should be treated the same regardless of what dealership they are working for. It is a program requirement and students that don’t have uniforms do feel different, like they aren’t as important to the program. It’s important to have students in their uniforms/coveralls while in class.

SIS and DPC (DLMS) Access:
Sis and DPC (DLMS) access. PCC is asking that the dealerships have log on's for students ready on first day of school for students to gain access. Discussion about DPC over AED. Question posed should we use DPC rather than AED? Associated Equipment Dealers. With AED you comparing against all. AED is two hours. Ish DPC seems to be difficult. Test is nothing like the curriculum. Students aren't ready to go that far yet. Still gap analysis added to DPC. Ish stated that it is useful in breaking down areas you are
weak. Students need a subscription to DPC. Will DLMS be renewed for students who graduate? Peterson yes, dealer specific. No other dealer comments. DLMS access can you set Ish up as a manager? That way he has access to assessments. Students should not be set up as a manager. Dealers said they would check. This would allow Ish to approve assessments. Each dealership would have to give access. Paperwork for internship - new grading. Assigning classes in DLMS during the internship is helpful. As long as dealers will let students use computers during internship, this can be a beneficial addition to the DST150 internship.

**Recruiting:**
Mace said they ran Craig list in Oregon and it was effective. We need to get back into the recruiting. Washington remains soft but power generations hiring. Recruiting is on the agenda with dealers and are projecting hiring to increase. Alaska hiring is also picking up. New flyers and program explanation- switch to online and the book needs to be changed. We need a new updated book. Misti said she will take it to her marketing people. Ish will send file to Misti.

Open house- Peterson hosted an open house in May 2012 it was fairly successful with about 20 people in attendance. Placement testing was scheduled afterwards. It was discussed to hold another open house February 23rd 2013.

**AED Testing:**
Curriculum changes are not being done but some generic changes are being done to meet student’s needs. It was mentioned that Eaton hydraulics has a really good text. Maybe PCC could purchase books and assign chapters to student to read as supplemental text. Mace reiterated not to lose sight that we are a Caterpillar. Ishmael explained that AED Eaton book applies 100 percent to Caterpillar. Mace- if PCC feels these materials are going to improve the students’ knowledge of the materials then that’s fine.

**Dealer Mentor Training:**
Dealer mentor training- the dealers don't think it can be done at this time. Ishmael and Sander both offered their services to do onsite training. Which would be a one day mentor training. Ishmael stressed that it is in the program and Steve Hitch is big for onsite training. It really needs to continue especially with the change in new employees. January is a great time for Ishmael to come out to dealership to do training. Mace stated that teleconference, ITV training, could possibly be an option. Conduct web based training sessions for the dealerships and follow up with internship visit. Make the first one a web based orientation. Dealers will send out an email to mentors to sign up for training. There could be On-site (PCC) or dealership training. Feedback should be sent to Ishmael. Ideally PCC would like to see number of mentors- 5/1 as the program was intended. PCC would like to see a standard for who the mentors would be, refraining from using foreman or service managers. PCC would like to see a standard for who the mentors are. Ideally this person is somebody over the student that knows, service managers. PCC would like to see former ThinkBIG graduates as mentors. They know the program, how it works, what’s expected and can guide students.
Recruiting for Class of 2014-2015:
Recruiting for class of 2014-2015. Make sure there is a disclaimer that this is not acceptance into the program put on website near application link. PCC asked dealers to please refer to website when recruiting.

Student acceptance date. PCC stressed how important it is to get these candidates soon. It was agreed that June 1st is the set deadline to have candidates chosen and names given to PCC. Candidates who are hoping to get financial aid must fill out the application by January 1, 2013. This date is making candidates who are chosen late by the dealers impossible to qualify and may be the final determination of whether they can “afford” to go to school. So the sooner your candidates know, they better it will be for them when applying for Financial Aid. Fall 2013 registration date (mid July). New PCC policy, students who are not awarded and accepted aid or have a payment plan in place two weeks prior to the start of class will be dropped for nonpayment.

New Business:
Does it make sense to teach old curriculum? PCC and Dealers agree that we need to move to Tier four. Updated curriculum is still behind. There is a time when we need to take the step and move forward with new curriculum.

Financial discussion- financial report given to dealers.

Action Items:
Training aids – PCC needs a hydrostatic machine. A mini loader would be nice. PCC is in need if getting a machine to cover hydraulics. Need a tier four engine. Mace may have a tier four engine to send to PCC. A closed cab is desirable so PCC can use it in multiple classes. Ish will follow up with Mace.
Tool boxes- old standard tool boxes are no longer available? 40" box is still available. Ordering just bottom box 40". Misti will send T & E the box number. T&E also purchased the multimeter. Someone needs to tell them not too PCC is purchasing them for the students.

Other:
Irene, Dean of Math, Aviation and Industrial Technology addressed the state of finance of PCC. We are doing ok. PCC has grown by 50 percent. 22,000 students at rock creek alone. PCC is getting less funding from the state. The next bi-indium will be tougher. We expect to drop some enrollment but it will still be high.

Machine availability. Ishmael stated that the program is supposed to have three machines on campus and rotate them. It was noted that there has been a back log on receiving an excavator. Dealers questioned what dealership was supposed to provide what machine? It was agreed that Dealerships need to recommit to providing this equipment. Can Western States provide machines? Each representative of the meeting will go back to dealerships and talk with their sales people about 950 loader, and a 320 excavator. Misti agrees that everyone needs to get back on track, relieving the burden on Peterson.
Peterson announced that their ThinkBIG candidates are being hired as permanent employees with health insurance being provided as a benefit. This was to accommodate the student that is no longer covered under their parents insurance so they have coverage. Washington said their candidates are hired as temporary employees with no benefits and then once they have completed the program are reevaluated to determine if they will offer the temporary employee a permanent position with the company.

Ishmael reiterated the need to treat students the same. Students talk about not having shirts, hats etc. Students want to feel the dealers behind them.

Update to welding- gear it more towards what they need.

Overview of orientation

**Next Meeting Date:** TBA

**Meeting adjourned:** 5:00 pm

Respectively submitted by: Chrissy Randall
Meeting called to order at 1:33 pm July 19, 2012 by Chair Mace Gjerman.

In Attendance: *

*RL Clark  *Irene Giustini  *Mace Gjerman  Sally Haskin
*Cameron Pickett  *Gratia Minor  *Ishmael Rivas  Kay Siira
*Terry Sherman  Sander Torgeson  *Misti Wall  Geri Kinsfather

Approval of Minutes of July, 18, 2012 noting that Irene Giustini was in attendance and was missed off the roster.

Introductions: RL Clark, of the Harnish Group was introduced as their recruiter, he will not be recruiting for ThinkBIG but Misti would like him included on all the email his email is rclark@harnishgrp.com. Misti also announced that Sally Haskin should be removed from the advisory list and email.

Overall health of the program:
Irene updated the advisory of the new renovations and additions happening to the Rock Creek campus due to the BOND. ThinkBIG acquired more storage space to accommodate their growth. A 30x60 area to that is climate controlled which will be good for protecting engines that may be stored in there. Irene reported that the program is financially healthy and no budget cuts were made but she would like to see more students put into the program. Ish stated that the program is striving to push students further and further. There has been quite a bit of attrition that happened last term. Losing three students in one term was big. Mace stated that retention of 81% of ThinkBIG graduates remain successful and most stay, and their retention with Caterpillar are good. Ish explained Gratia Minor’s roll with regards to the ThinkBIG program and how her importance in the program has helped with the student retention/success. She provides group and one on one tutoring in Math and some subject areas in the program helping them understand things like Ohm’s law and functionality of hydraulic components.

Class of 2016 recruiting:
Misti (NC Washington) stated that she has one student that she will be putting into the program and it was discussed that Kay (NC Alaska) has had better success with three students and she thought that Geri (Tractor & Equipment) had two which brings the Harnish groups number to six. Cameron (Western States) reported that he will have five students this program year. Mace (Peterson) reported that he has seven maybe eight. With these numbers the count sits at 17. Gratia voiced her
concern with the lateness of the candidates and is worried that they may not meet the pre-reqs for actual placement into the program so saying that those students are chosen is misleading if they cannot meet the pre-reqs. She reported that only seven students have met the pre-reqs and are ready for entry into the program. She also was concerned about the lateness of the recruitment, not giving the students enough time to get things in order like filing for financial aid, finding housing and meeting the pre-reqs in time for registering for class which is August 9th. Mace stated that his recruitment from Craig’s list was not as successful and recruiting was late. He announced that Peterson is in the process of hiring a recruiter. It was also discussed that perhaps putting people from current employment into the program might be successful. Peterson also announced that starting fall of 2013 it will be paying the tuition of their student’s internships. Third party payment of the tuition will be sent to Mace so that he can set it up with the business office. Two open houses will also be held to facilitate early recruitment for ThinkBIG the first open house is scheduled for Saturday, November 2, 2013 @ 9:00 – 2:00 pm and the second open house is scheduled for Saturday, March 1st @ 9:00 – 2:00. Gratia said that once students are accepted she sends out information packets that contain PCC information on what the student needs to do, once accepted by the dealership, housing and program costs. She will send it to the dealers to have as a resource.

**Internship Management:**
Mentor training will be set up and will be conducted on site in addition to internship visits. Ish and Sander will be conducting the training. It was asked that all internship visits be scheduled two weeks in advance so that the dealership has advanced notice and is prepared, making sure all the necessary people are there when the visits are being conducted. It was also stated that if an instructor is in the area visiting another branch that it would be ok for them to just stop in without notice to utilize them if the dealer happens to be recruiting. Ish stated that this can be done.

Ish explained that it has been difficult at times to track the success of the students tasks with regards to the internships, so PCC will be incorporating Desire to Learn in the that particular course allowing better management of the sign off sheets. There seems to be a hole with this particular part of the internship. Moving online will allow the instructor to see week to week where the students are at with their tasks. This will make it easier to work with the dealer to commit to getting students to the right areas in order for them to complete those tasks. Some students are not being exposed to the required tasks and getting the information sooner will assist the instructor to make sure that the students meet that requirement of the course work. The dealers asked if they had access and Ishmael said that it’s still new but was certain that they did not, it was asked that a report from the instructor or Department Chair be sent to the dealer as well so they are aware of it as well. Ish said that that could be done, but it was still in the early stages of being created right now. PCC is hoping to implement it fully by winter 2014 internship.

**ThinkBIG Budget and future purchases:**
Foundation budget report balance $361,388.38. Expenses since last meeting: Computers, Forklift, open house, BBQ’s, graduation items. Ish said that there are certain items that he would like seen as a permanent expenditures paid for out of the foundation. A list will be compiled and sent to the dealers. This action item will be tabled for vote. Ishmael reported that he will or has been getting bids for purchase of machines which will drastically reduce this account fall term. Ideally he would like to get a machine from each dealership but that may not be possible. The advisory stated that they wanted all three dealer stickers on the machines. Ish also stated that ThinkBIG is in need of a transmission test bench. Mace stated that a stop gap for that if one cannot be found or purchased
would be to have the students take a field trip to Peterson in Portland. Ish will email Misti and Mace to see about having one donated or shipped.

**Future Growth Ideas:**
Sander would like to see EPG (Electric Power Generation) as a side program for the future. Possibly having students take the course their last term. Cameron stated that it would be good to have it and could see it as a positive addition to industry. Mace stated that they have a program started but it is just in its initial stages, but agreed that it could be filled with industry people needing training. Ish stated that he would like to see the ThinkBIG program full and settled before moving in that direction.

**Other:**
- Western States announced that they partnered with the state’s FFA programs for recruiting.
- Mace said that with Peterson paying for the tuition for internships, this should relieve some of the financial strain on the students. This would be about a about a $1,150.00 dollar savings for the students. Question was raised as to if the Foundation account could be accessed to assist students when they find themselves in a financial hardship. It was discussed that the account was not initially set up for that purpose but perhaps emergency scholarship could be created. Dealers will go back to their dealerships for feedback. Irene noted that we need to stay within the guidelines of the MOU.
- ThinkBIG Orientation - September 20th, 2013. Cameron and Misti will represent.

**Action Items:**
- Gratia to send out info packet to Dealers
- Ish, Purchase of machines – mini excavator, skid loader need for more hands on equipment follow up with Steve Davies per Mace.
- Ish – Follow up with Misti/Mace about donation of transmission test bench.
- Dealers – Discussion of assisting students in financial hardship in order to stay in program.

**Tabled:**
- Vote on standard ongoing expenditure of items for ThinkBIG students. Complete list will be available at next meeting as an agenda item to be voted on.
Dates to remember:
- August 9, 2013 PCC Registration Begins
- September, 20, 2013 New Student Orientation
- September 23, 2013 PCC Classes begin
- November 2, 2013 ThinkBIG Open House 9-2
- March 1, 2014 ThinkBIG Open House 9-2

Next Meeting Date: TBA

Meeting adjourned: 4:16pm

Respectively submitted by: Chrissy Randall
Meeting called to order at 1:26 pm July 17, 2014 by Chair Mace Gjerman.

In Attendance:
Irene Giustini *Mace Gjerman Sally Haskin
*Cameron Pickett *Gratia Minor *Ishmael Rivas Kay Siira
Terry Sherman Sander Torgeson Misti Wall Geri Kinsfather

Guests:
Dr. Sandra Fowler-Hill

Approval of Minutes of July, 18, 2013 approved as written.

Introductions: Dr. Sandra Fowler-Hill Rock Creek Campus President.

Overall health of the program and Class of 2016 Student Numbers:
Mace/Ish with the economy picking up looks as if the program may be completely full for fall term. With some successful recruiting coming from Kay (NC Alaska) and Geri (Tractor & Equipment) those numbers have helped the Harnish group with their commitment to the program with 8 out of 10 seats being filled as of today. Ish stated that Misti (NC Washington) may be adding two more which would fulfill their commitment to the program. Cameron (Western States) said that he has completed his recruitment and all four seats are filled. Mace (Peterson) stated that he is in the interview stages of the process and looks to have about 8 students. He would like to see all 10 seats filled if possible. The idea of even bringing in an additional two was also discussed. Mace reminded everyone that the program is set up to allow 26 if the recruitments are successful enough. If a dealer to want to add two more to the existing program seat fulfillment of 24 from the Caterpillar Dealers it is possible to reach the 26. Gratia did pose a question about candidates that don’t meet the minimum qualifications if they would be allowed to enter the program or retain employment to Mace. He stated that no candidate that who doesn’t meet the prerequisite will be considered. Peterson is now offering tuition reimbursement along with the tuition for internships being paid and insurance. This is great for recruiting as well. Cameron stated that although they now have a program similar in their region that his students are applying too, so that they can stay local with family without the added expense of housing, he is still committed to filling his four seat commitment and will continue to keep future technicians coming out of ThinkBIG.

AED Testing
Ish handed out the AED test results. He shared and compared 2013 and 2014 results. A 3% drop as noticed across the board. All subject areas were above the benchmarks marks with the exception of Safety/Administrative. Ish expressed his concern of how to know what subject areas need more attention if you don’t have access to what areas the students were low in. Understanding that this keeps instructors from “teaching to the test” he finds it difficult to know where to focus on to bring those scores back up. Cameron asked for the entry results so that he could compare those. Ish said that he would send them to him. Some discussion about additional assessment tools should be explored so that better assessment of growth can be reviewed. Benchmarks should be updated next year, giving better numbers to compare. Ish would like to see a better way to assess engines since some students come in so strong meeting or exceeding the bench marks is too easy. Incorporating DLMS/DPC into the program to help with the Safety component was discussed. Ish said adding DLMS certification to the program is an option that is
being considered. Mace stated that is has been incorporated at his institution and students do much better. Mace/Cameron said that they could arrange to have someone come out to do DPC the first week of class to cover safety. Ish will coordinate with the dealers on this. Ish shared Job Hazard Assessment form as an example of what to cover for safety. Cameron stated that he could send Western State’s safety videos to use as well. Ish said that he will phase all these ideas in fall term. The purchase of Safety Suite was approved by the advisory to incorporate into the course. Ish asked that call coveralls be here before school starts. Would like to have all students wearing them from day one and have enough to get them through the entire program.

**Class of 2017 Recruitment Opportunities:**
Friday May 1st, 2015 PCC Diesel Day  
Saturday January 24th, 2015  
Saturday May 2nd 2015 ThinkBIG Open house

**ThinkBIG purchases:**
Mini Excavator and Compact Tract Loader were purchased spring term.  
New items to consider purchasing for the 14/15 year: Backhoe, flow meter, test bench.

**Other:**
• Cameron inquired about the online courses noting the failure of students and asking if students can return to the face to face instruction for Gen Ed. Ish said that he will look at the schedule and try to move it back. Another concern was that students taking online courses while on internship were finding it difficult to manage their time when working so many hours. The instructor required a phone call which could not be made during work hours. Ish noted that some deadlines were address and has since starting working with another instructor who is not located on the east coast.  
• Ish asked for feedback from the Dealers on anything they feel that would like added to the program that they feel is not being covered.  
• Cameron also asked about participation in Skills USA for next year. Ish said that PCC will definitely be participating and may be hosting the event if there isn’t a host for our area. He will follow up with the other Department Chair over Diesel to confirm if they will be hosting or if ThinkBIG will need too.  
• Dr. Sandra Fowler-Hill stated that she is happy to hear about the industry picking up and the programs health making a comeback. She also stated that this program is successful because of the commitment that the Caterpillar Dealerships have made. The financial commitment is huge and PCC could not do it without that commitment.

**Action Items:**
• Ish send entry AED results to Cameron.  
• Ish send Brochures when completed to Cameron by September.  
• Ish follow up on Skills USA event  
• Mace – contact someone to cover DPC first week of term for Oregon ThinkBIG.  
• Cameron share check off list that you send to parents to Advisory Group.  
• Cameron send Western States Safety Videos to Ish.  
• Cameron send Ish name of Contact for Boise School for potential articulation for BS degree.

**Dates to remember:**
• August 8, 2014 PCC Registration Begins for new students  
• September 8, 2014 Payment for Classes deadline
• September 22, 2014 PCC Classes begin
• January 24, 2015 ThinkBIG Open House 9-2 PCC Rock Creek Campus
• May 2, 2015 ThinkBIG Open House 9-2 PCC Rock Creek Campus

Next Meeting Date: TBA
Meeting adjourned: 3:50pm
Attachments: Assessment results 2014
Assessment results 2013
Job Hazard Analysis work order

Respectively submitted by: Chrissy Randall
DST Class of 2014 and 2015 AED Test Results

<table>
<thead>
<tr>
<th></th>
<th>Pre test Class of 2014</th>
<th>Final Test Class of 2014</th>
<th>%Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>76.67%</td>
<td>79.23%</td>
<td>2.56%</td>
</tr>
<tr>
<td>Electrical</td>
<td>47.14%</td>
<td>74.51%</td>
<td>27.37%</td>
</tr>
<tr>
<td>Hydraulics</td>
<td>42.75%</td>
<td>73.29%</td>
<td>30.54%</td>
</tr>
<tr>
<td>PowerTrain</td>
<td>49.85%</td>
<td>73.29%</td>
<td>23.44%</td>
</tr>
<tr>
<td>Diesel engine</td>
<td>65.87%</td>
<td>87.64%</td>
<td>21.77%</td>
</tr>
<tr>
<td>Air Conditioning</td>
<td>48.89%</td>
<td>79.49%</td>
<td>30.60%</td>
</tr>
<tr>
<td>Overall</td>
<td>52.05%</td>
<td>77.02%</td>
<td>24.97%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Pre test Class of 2015</th>
<th>Final Test Class of 2015</th>
<th>%Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>76.25%</td>
<td>81.25%</td>
<td>5.00%</td>
</tr>
<tr>
<td>Electrical</td>
<td>44.29%</td>
<td>68.75%</td>
<td>24.46%</td>
</tr>
<tr>
<td>Hydraulics</td>
<td>40.97%</td>
<td>71.18%</td>
<td>30.21%</td>
</tr>
<tr>
<td>PowerTrain</td>
<td>40.97%</td>
<td>72.40%</td>
<td>31.43%</td>
</tr>
<tr>
<td>Diesel engine</td>
<td>69.20%</td>
<td>84.82%</td>
<td>15.62%</td>
</tr>
<tr>
<td>Air Conditioning</td>
<td>39.58%</td>
<td>73.75%</td>
<td>34.17%</td>
</tr>
<tr>
<td>Overall</td>
<td>48.71%</td>
<td>74.18%</td>
<td>25.47%</td>
</tr>
</tbody>
</table>
Subject Area Committee Name: DST

Contact Person

<table>
<thead>
<tr>
<th>Name</th>
<th>e-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ishmael Rivas</td>
<td><a href="mailto:ish.rivas@pcc.edu">ish.rivas@pcc.edu</a></td>
</tr>
</tbody>
</table>

Use this form to report the results for this year’s assessments of the degree/certificate outcomes identified for the current year in your Multi-Year Plan (originally submitted 2013-2014). The Multi-Year Plan can be found at [http://www.pcc.edu/resources/academic/degree-outcome/CTEPlansandReports.html](http://www.pcc.edu/resources/academic/degree-outcome/CTEPlansandReports.html). CTE SACs are charged with documenting that their students are attaining the published degree and certificate outcomes. This form is for the summary reporting of this evidence.

Note: This form is **not** for:

- TSA reporting - SACs who submit TSA data to the state do not need to submit the results again.
- Focal Outcome Assessment Projects – use the LAC Focal Outcome Assessment Report Form CTE. Each CTE SAC will complete two focal outcome assessment projects each year. These reports document the SAC’s assessments that focus on specific areas of interest or concern: areas where SACs suspect there are opportunities to better support student learning.

**Information and Reminders: Information and Reminders:**

- Please attach any appropriate, supporting documentation for the summary information you report in this form (e.g., spreadsheets, other reports, etc).
- If you have trouble completing this form, contact Michele Marden to arrange for coaching assistance.
- **Due: June 19, 2015;** Send to Learning Assessment Council: learningassessment@pcc.edu
- **Subject Line of Email:** Summary Data Report (or SDR) for <your SAC name> (Example: SDR for NRS)
- **File name:** SACInitials_SDR_2015 (Example: NRS_SDR_2015)
- Information from this report may be inserted into or summarized in the Program Review Outline.

SACs are encouraged to share this report with their LAC coach for feedback before submitting.
Summary Data for Degree/Certificate Outcomes

A. What type(s) of assessment were conducted for your overall degree/certificate outcomes (those identified for assessment in this academic year on the Multi-Year Plan)?

Check all that apply:

☑ State required Technical Skills Attainment (TSA)
☐ External exams/assessments
☐ Internal exams/assessments
☐ Employer assessments
☐ Other: Briefly describe:

B. Attach the summary data for these assessments.
Note: TSA data does not need to be resubmitted.

Results attached?
☑ Yes ☐ No

C. Give a very brief summary of the notable results from this year’s assessments (do not include your Focal Outcome Assessment Report information here).

It was noted that our 2015 cohort had scored lower overall when compared to the 2014 cohort. Areas where as a program we had hoped to see improvement actually declined at the same percent as the other subject areas.

D. Please comment briefly on any changes or planned changes to your courses, assessments, program, etc. that resulted from these assessments:

We have already begun to increase our recruiting efforts throughout the North West. We saw a direct correlation between our incoming benchmark scores and our outgoing scores.

E. Please comment briefly on any changes to your assessment process that would lead to more meaningful results if these assessments were to be repeated (or adapted to another situation). If the assessment process worked well, please indicate this.

The process worked well but we could do a lot better with an in depth after graduation success statistic which is currently in the process of being completed.
Subject Area Committee Name: Dealer Service Technology

Contact Person

<table>
<thead>
<tr>
<th>Name</th>
<th>e-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ishmael Rivas</td>
<td><a href="mailto:ish.rivas@pcc.edu">ish.rivas@pcc.edu</a></td>
</tr>
</tbody>
</table>

Use this form if your assessment project is a follow-up reassessment of a previously completed initial assessment. The basic model we use for core outcome assessment at PCC is an “assess – address – reassess” model.

The primary purpose for yearly assessment is to improve student learning. We do this by seeking out areas of concern, making changes, reassessing to see if the changes helped.

Document your plan for this year’s focal outcome reassessment report(s) in the first sections of this form. This plan should be consistent with the Multi-Year Plan you have submitted to the LAC. If your SAC is using an assessment design that captures two focal outcomes, use a separate reporting form for each outcome, even if you are assessing both in a single project. Complete
each section of each form. In some cases, all of the information needed to complete the section may not be available at the time the report is being written. In those cases, include the missing information when submitting the completed report at the end of the year.

- Use separate report forms for each outcome your SAC is assessing.
- Refer to the help document for guidance in filling-out this report. If this document does not address your question/concern, contact Michele Marden to arrange for coaching assistance.
- Please attach all rubrics/assignments/etc. to your report submissions.
- **Subject Line of Email:** Ressessment Report Form (or RRF) for <your SAC name> (Example: RRF for NRS)
- **File name:** SACInitials_RRF_2015 (Example: NRS_RRF_2015)
- SACs are encouraged to share this report with their LAC coach for feedback before submitting.
- Make all submissions to learningassessment@pcc.edu.

**Due Dates:**
- **Planning Sections of LAC Assessment or Reassessment Reports:** November 7th, 2014
- **Changes to Multi-Year Plan submitted last year:** November 7th, 2014
- **Completed LAC Assessment or Reassessment Reports:** June 19th, 2015

**Please Verify These Before Beginning this Report:**

- This project is in the second stage of the assess/re-assess process *(if this is an initial assessment, use the LAC Assessment Report Form LDC. Available at: http://www.pcc.edu/resources/academic/learning-assessment/LDC-2013-2014-Info-Templates.html)*

- This project is aligned with the SAC’s Multi-Year Plan. Available for review at: http://www.pcc.edu/resources/academic/degree-outcome/AssessmentPlansFall2010.html. If there are changes, Multi-Year Plans can be altered and resubmitted to meet the current needs of the SAC.

*Initial Assessment Project Summary (previously completed assessment project)*
**Briefly summarize the main findings of your initial assessment. Include either 1) the frequencies (counts) of students who attained your benchmarks and those who did not, or 2) the percentage of students who attained your benchmark(s) and the size of the sample you measured:**

ThinkBIG is a partnership between Caterpillar Inc. and is required to test all of our students before graduation. We have all of our students complete the AED Assessment the day before graduation and they are expected to score above a 60% benchmark. In 2014 and 2015 all of our students except one scored above this benchmark. Two areas that we focused on are Safety, and Diesel Engines. Although are scores were acceptable to Caterpillar these are areas that we would like our students to be excellent in. We set our goal to improve our scores and strive for excellence.

<table>
<thead>
<tr>
<th>Year</th>
<th>Benchmark</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>100%</td>
<td>13</td>
</tr>
<tr>
<td>2015</td>
<td>93.75%</td>
<td>16</td>
</tr>
</tbody>
</table>

**Briefly summarize the changes to instruction, assignments, texts, lectures, etc. that you have made to address your initial findings:**

We added refresher assignments on safety into courses throughout the program and required the students to complete more in depth machine walk arounds before operation or testing of the machines.

Included additional homework assignments explaining the Diesel engine and its operation from none Caterpillar authors to give the students a different style.

**If you initially assessed students in courses, which courses did you assess:**

We perform an entry and exit exam for all of our students. We have all of the students complete the AED Assessment on their first day of Orientation in the Fall two years before they will graduate. This is possible because our students move as a cohort throughout the program. They will then complete the the same AED Assessment the week before they graduate.

**If you made changes to your assessment tools or processes for this reassessment, briefly describe those changes here:**

One change we have adopted is to make sure the test is administered to the students before they have any classes within our program. This is only a logistical change but it gives us the benefit of seeing what knowledge the students start the program with.
1. Outcome Chosen for Focal Analysis

1A. Briefly describe what and why this focal outcome is being investigated: (e.g., “First term students do not seem to be able to transfer the knowledge from their math class to our program class. We wish to investigate student understanding of the needed math concepts upon entry into our course. If students do have the theoretical understanding, we will investigate ways we can help students apply their knowledge in a concrete application.” A second example is: “Anecdotally, it seems that our first year students are not retaining critical information between Winter and Spring Quarters.” We will measure student benchmark attainment in Winter Quarter.

We chose safety because it is a top priority for us as a school and to our dealer partners in industry. Diesel Engines are in over 95% of the machines in our industry and are common to all of our graduating students no matter the branch or shop they end up in. The goal of the program is to set our students apart from all others and these areas seemed like a good places to start.

1B. If the assessment project relates to any of the following, check all that apply:

- Degree/Certificate Outcome – if yes, include here: DST AAS- Attain the employability skills to become a reliable employee in a Caterpillar dealership.
- PCC Core Outcome – if yes, which one: Professional Competence, Communication, Critical Thinking and Problem Solving.
- Course Outcome – if yes, which one: DST 111, DST 110

2. Project Description

2A. Assessment Context

Check all the applicable items:

- Course based assessment.
  
  Course names and number(s):
  Expected number of sections offered in the term when the assessment project will be conducted:
  Number of these sections taught by full-time instructors:
  Number of these sections taught by part-time instructors:
  Number of distance learning/hybrid sections included:
  Type of assessment (e.g., essay, exam, speech, project, etc.):
Are there course outcomes that align with this aspect of the core outcome being investigated?  □ Yes  □ No
If yes, include the course outcome(s) from the relevant CCOG(s):

□ **Common/embedded assignment in all relevant course sections.** An embedded assignment is one that is already included as an element in the course as usually taught. Please attach the activity in an appendix. If the activity cannot be shared, indicate the type of assignment (e.g., essay, exam, speech, project, etc.):

□ **Common – but not embedded - assignment used in all relevant course sections.** Please attach the activity in an appendix. If the activity cannot be shared, indicate the type of assignment (e.g., essay, exam, speech, project, etc.):

□ **Practicum/Clinical work.** Please attach the activity/checklist/etc. in an appendix. If this cannot be shared, indicate the type of assessment (e.g., supervisor checklist, interview, essay, exam, speech, project, etc.):

□ **External certification exam.** Please attach sample questions for the relevant portions of the exam in an appendix (provided that publically revealing this information will not compromise test security). Also, briefly describe how the results of this exam are broken down in a way that leads to nuanced information about the aspect of the core outcome that is being investigated.

□ **SAC-created, non-course assessment.** Please attach the assessment in an appendix. If the assessment cannot be shared, indicate the type of assignment (e.g., essay, exam, speech, project, etc.):

□ **Portfolio.** Please attach sample instructions/activities/etc. for the relevant portions of the portfolio submission in an appendix. Briefly describe how the results of this assessment are broken down in a way that leads to nuanced information about the aspect of the core outcome that is being investigated:

□ **TSA.** Please attach the relevant portions of the assessment in an appendix. If the assessment cannot be shared, indicate the type of assessment (e.g., essay, exam, speech, project, etc.):

*For the assessment our students are required to complete the AED Assessment the week before graduation. This is administered by an outside company checking the quality of instruction given by the DST Faculty. The DST Faculty are not allowed to proctor or see the test at any time.*

□ **Survey**
□ **Interview**
□ **Other.** Please attach the activity/assessment in an appendix. If the activity cannot be shared, please briefly describe:
In the event publically sharing your assessment documents will compromise future assessments or uses of the assignment, do not attach the actual assignment/document. Instead, please give as much detail about the activity as possible in an appendix.

### 2B. How will you score/measure/quantify student performance?

- [ ] **Rubric** (used when student performance is on a continuum - if available, attach as an appendix – if in development - attach to the completed report that is submitted in June)
- [ ] **Checklist** (used when presence/absence rather than quality is being evaluated - if available, attach as an appendix – if in development - attach to the completed report that is submitted in June)
- [ ] **Trend Analysis** (often used to understand the ways in which students are, and are not, meeting expectations; trend analysis can complement rubrics and checklist)
- [x] **Objective Scoring** (e.g., Scantron scored examinations)
- [ ] **Other** – briefly describe:

### 2C. Type of assessment (select one per column)

- [x] **Quantitative**
- [ ] **Qualitative**
- [x] **Direct Assessment**
- [ ] **Indirect Assessment**

If you selected ‘Indirect Assessment’, please share your rationale:

**Qualitative Measures**: projects that analyze in-depth, non-numerical data via observer impression rather than via quantitative analysis. Generally, qualitative measures are used in exploratory, pilot projects rather than in true assessments of student attainment. Indirect assessments (e.g., surveys, focus groups, etc.) do not use measures of direct student work output. These types of assessments are also not able to truly document student attainment.

### 2D. Check any of the following that were used by your SAC to create or select the assessment/scoring criteria/instruments used in this project:

- [ ] Committee or subcommittee of the SAC collaborated in its creation
- [x] Standardized assessment
- [ ] Collaboration with external stakeholders (e.g., advisory board, transfer institution/program)
- [ ] Theoretical Model (e.g., Bloom’s Taxonomy)
- [ ] Aligned the assessment with standards from a professional body (for example, The American Psychological Association Undergraduate Guidelines, etc.)
- [ ] Aligned the benchmark with the Associate’s Degree level expectations of the Degree Qualifications Profile
2E. In which quarter will student artifacts (examples of student work) be collected? If student artifacts will be collected in more than one term, check all that apply.

- Fall
- Winter
- Spring
- Other (e.g., if work is collected between terms)

2F. When during the term will it be collected? If student artifacts will be collected more than once in a term, check all that apply.

- Early
- Mid-term
- Late
- n/a

2G. What student group do you want to generalize the results of your assessment to? For example, if you are assessing performance in a course, the student group you want to generalize to is ‘all students taking this course.’

All graduating students.

2H. There is no single, recommended assessment strategy. Each SAC is tasked with choosing appropriate methods for their purposes. Which best describes the purpose of this project?

- To measure established outcomes and/or drive programmatic change (proceed to section H below)
- To participate in the Multi-State Collaborative for Learning Outcomes Assessment
- Preliminary/Exploratory investigation (consult with an LAC coach prior to making this selection since most assessment projects should not qualify as preliminary/exploratory)

If you selected ‘Preliminary/Exploratory’, briefly describe your rationale for selecting your sample of interest (skip section H below). For example: “The SAC intends to add a Cultural Awareness related outcome to this course in the upcoming year. 2 full-time faculty and 1 part-time faculty member will field-test 3 different activities/assessments intended to measure student attainment of this proposed course outcome. The 3 will be compared to see which work best.”

2I. Which will you measure?

- the population (all relevant students – e.g., all students enrolled in all currently offered sections of the course)
- a sample (a subset of students)
If you are using a sample, select all of the following that describe your sample/sampling strategy (refer to the Help Guide for assistance):

- Random Sample (student work selected completely randomly from all relevant students)
- Systematic Sample (student work selected through an arbitrary pattern, e.g., ‘start at student 7 on the roster and then select every 5th student following’; repeating this in all relevant course sections)
- Stratified Sample (more complex, consult with an LAC coach if you need assistance)
- Cluster Sample (students are selected randomly from meaningful, naturally occurring groupings (e.g., SES, placement exam scores, etc.))
- Voluntary Response Sample (students submit their work/responses through voluntary submission, e.g., via a survey)
- Opportunity/Convenience Sample (only some of the relevant instructors are participating)

The last three options in bolded red have a high risk of introducing bias. If your SAC is using one or more of these sample/sampling strategies, please share your rationale:

2J. Briefly describe the procedure you will use to select your sample (including a description of the procedures used to ensure student and instructor anonymity). For example:

“We chose to use a random sample. We asked our administrative assistant to assist us in this process and she was willing. All instructors teaching course XXX will turn-in all student work to her by the 9th week of Winter Quarter. She will check that instructor and student identifying information has been removed. Our SAC decided we wanted to see our students’ overall performance with the rubric criteria. Our administrative assistant will code the work for each section so that the scored work can be returned to the instructors (but only she will know which sections belong to which instructor). Once all this is done, I will number the submitted work (e.g., 1-300) and use a random number generator to select 56 samples (which is the sample size given by the Raosoft sample size calculator for 300 pieces of student work). After the work is scored, the administrative assistant will return the student work to individual faculty members. After this, we will set up a face-to-face meeting for all of the SAC to discuss the aggregated results.”
2K. Follow this link to determine how many artifacts (samples of student work) you should include in your assessment: [http://www.raosoft.com/samplesize.html](http://www.raosoft.com/samplesize.html) (see screenshot below). Estimate the size of the group you will be measuring (either your sample or your population size [when you are measuring all relevant students]). Often, this can be based on recent enrollment information (last year, this term, etc.).

![Sample size calculator](image)

3. Project Mechanics

3A. Does your project utilize a rubric for scoring?  
☐ Yes  ☒ No

If ‘No’, proceed to section B. If ‘Yes’, complete the following.
Whenever possible, multiple raters should always be used in SAC assessment projects that utilize rubrics or checklists. SACs have several options for ensuring that ratings are similar across each rater. The most time-consuming option is for all raters to collectively rate and discuss each artifact until they reach 100% agreement on each score (this is called consensus). In most cases, SACs should consider a more efficient strategy that divides the work (a norming or calibrating session). During a norming session, all raters participate in a training where the raters individually score pre-selected student work and then discuss their reasons for giving the scores they chose. Disagreements are resolved and the process is repeated. When the participants feel they are all rating student work consistently, they then independently score additional examples of student work in the norming session (often 4-6 artifacts). The ratings for these additional artifacts are checked to see what percentage of the scores are in agreement (the standard is 70% agreement or higher). When this standard is reached in the norming session, the raters can then divide-up the student work and rate it independently. If your SAC is unfamiliar with norming procedures, see the contact Michele Marden to arrange for coaching help for your SAC’s norming session.

Which method of ensuring consistent scoring (inter-rater reliability) will your SAC use for this project?

- **Agreement** – the percentage of raters giving each artifact the same/similar score in a norming session
  
  If you are using agreement, describe your plan for conducting the “norming” or “calibrating” session:

- **Consensus** – all raters score all artifacts and reach agreement on each score

  Though rarely used at PCC, some SACs might occasionally use the consistency measure for determining the similarity of their ratings. Consistency is generally only recommended when measuring student improvement – not for showing outcome attainment (which explains its rarity). See the Help Guide for more information. Check here if you will be using consistency calculations in this assessment.

- **Consistency*** – raters’ scores are correlated: this captures relative standing of the performance ratings - but not precise agreement – and then briefly describe your plan:

3B. Have performance benchmarks been specified?

The fundamental measure in educational assessment is the number of students who complete the work at the expected/required level. We are calling this SAC-determined performance expectation the ‘benchmark.’

- **Yes** (determined by faculty consensus – all instructors who currently teach the course)
Yes (determined by only some of the instructors who currently teach the course)

Yes (determined by alignment with an external standard: e.g., standards published by the discipline's professional organization)

Yes (determined by post-requisite course expectations within PCC)

Yes (determined by post-requisite course expectations for transfer institution)

Yes (other). Describe briefly:

No

If yes, briefly describe your performance benchmarks, being as specific as possible (if needed, attach as an appendix):

If no, what is the purpose of this assessment (for example, this assessment will provide information that will lead to developing benchmarks in the future; or, this assessment will lead to areas for more detailed study; etc.)?

We are not having any issues falling within our industry benchmark but would like to improve each year using our previous scores as the new benchmark.

### 3C. The purpose of this assessment is to have SAC-wide evaluation of student work, not to evaluate a particular instructor or student. Before evaluation, remove identifying student information (and, when possible remove instructor identifying information). If the SAC wishes to return instructor-specific results, see the Help Guide for suggestions on how to code and collate. Please share your process for ensuring that all identifying information has been removed.

I have only attached documentation that is pre-summarized removing student information.

### 3D. Will you be coding your data/artifacts in order to compare student sub-groups? Yes No

If yes, select one of the boxes below:

- student’s total earned hours
- previous coursework completed
- ethnicity
- other

Briefly describe your coding plan and rationale (and if you selected ‘other’, identify the sub-groups you will be coding for):

### 3E. Ideally, student work is evaluated by both full-time and adjunct faculty, even if students being assessed are taught by only full-time and/or adjunct faculty. Further, more than one rater is needed to ensure inter-rater
reliability. If you feel only one rater is feasible for your SAC, please consult with an LAC coach prior to submitting your plan/conducting your assessment.

Other groups may be appropriate depending on the assessment. Check all that apply.

☐ PCC Adjunct Faculty within the program/discipline
☐ PCC FT Faculty within the program/discipline
☐ PCC Faculty outside the program/discipline
☐ Program Advisory Board Members
☐ Non-PCC Faculty
☐ External Supervisors
☐ Other: The test is proctered by the testing center and is evaluated by the AED foundation. Faculty are not allowed to see or administer the test.

End of Planning Section – Complete the remainder of this report after your assessment project is complete.
Beginning of End of Year Reporting Section – complete the following sections after your assessment project is complete.

4. Changes to the Assessment Plan

Have there been changes to your project since you submitted the planning section of this report?  

- Yes
- No

If so, note the changes in the planning section above.

5. Results of the Analysis of Assessment Project Data

5A. Quantitative Summary of Sample/Population

How many students were enrolled in all sections of the course(s) you assessed this year?  29
If you did not assess in a course, report the number of students that are in the group you intend to generalize your results to.

How many students did you actually assessed in this project?  29
Did you use a recommended sample size (see the Sample Size Calculator linked to above)?  

- Yes
- No

If you did not use a recommended sample size in your assessment, briefly explain why:

5B. Did your project utilize a rubric for scoring?  

- Yes
- No

If ‘No’, proceed to section C.  If ‘Yes’, complete the following.

How was inter-rater reliability assured?

- Agreement – the percentage of raters giving each artifact the same/similar score in a norming session
Consensus - all raters score all artifacts and reach agreement on each score
Consistency – raters’ scores are correlated: this captures relative standing of the performance ratings - but not precise agreement
Inter-rater reliability was not assured.

If you utilized agreement or consistency measures of inter-rater reliability, report the level here:

5C. Brief Summary of Your Results

In most cases, report the numbers of students who attain your benchmark level and the numbers who do not. **Do not average these numbers or combine dissimilar categories (e.g., do not combine ratings for communication and critical thinking together)**. If your project measures how many students attain the overall benchmark level of performance, report the summary numbers below (choose one):

1. If you used frequencies (the actual number who attained the desired level(s) and the actual number who did not), report those here for each of your criteria for this learning outcome. For example, “54 students attained the benchmark level over-all in written communication and 7 did not. Our SAC used 5 criteria within this rubric: 58 student achieved the benchmark level in idea expression (4 did not); 54 achieved the benchmark level for use of standard English (10 did not); etc.”

2. If your project used percentages of the total to identify the degree of benchmark attainment in this project, report those here for each of your criteria for this learning outcome. For example, “89% of 61 students attained the benchmark level over-all in written communication. Our SAC used 5 criteria within this rubric: 94% of students achieved the benchmark level in idea expression; 89% achieved the benchmark level for use of standard English; etc.”

100% of the 29 students achieved the benchmark in Diesel Engines (class of 2014 and 2015)
100% of the 29 students achieved the benchmark in Safety (Class of 2014 and 2015)
3. Compare your students’ attainment of your expectations/benchmarks in this reassessment with their attainment in the initial assessment. Briefly summarize your conclusions.

Our students showed no improvement in their overall scores in Diesel Engines we actually showed a small decline in their scores overall when compared to the class of 2014.
We did however see an improvement in the class of 2015 Safety scores when compared to the class of 2014.
The pretesting of the students did show that the class of 2015 scored lower than the class of 2014 but that their overall percentage increase was almost exactly the same.

5D. Attach a more detailed description or analysis of your results (e.g., rubric scores, trend analyses, etc.) as an appendix to this document. Appendix attached?  ☒ Yes  ☐ No

5E. What did the SAC learn about your students’ attainment of your important benchmarks from this reassessment? For example, “We are pleased that most of our students are using standard English in their writing, and want to improve our students’ ability to express ideas clearly. We found significant improvements in the reassessment as a result of the changes in instruction and assignments that we made this year....”

We are pleased that are students continue to score well on their assessments and we hope to continue our work offering the students every opportunity to learn and retain the information needed in their careers. We saw improvements with even the small changes made in regards to safety and we hope to see the trend continue as we add more opportunities for a deeper understanding through repetition and mixed assignments. As we continue to compare our classes to former classes we will be able to see more trends and have a better idea of how to best serve our students going forward.

5F. Do the results of this project suggest that additional academic changes might be beneficial to your students (changes in curriculum, content, materials, instruction, pedagogy etc.)?  ☒ Yes  ☐ No

If you answered ‘Yes,’ briefly describe the changes to improve student learning below. If you answered ‘No’, detail why no changes are called for.

We will continue to add more safety related information throughout the program. We will not only rely on the students to remember everything they were taught in terms one and two but have refresher homework and assignments to keep them up to date.
More work will be done in our recruiting process to recruit high level candidates who know the rigors of the program.

If you are planning changes, when will these changes be fully implemented?
These changes will continue to be implemented throughout the degrees core classes. We will continue to add questions and tasks to current assignments helping to focus the students attention towards safety.

5G. Has all identifying information been removed from your documents? (Information includes student/instructor/supervisor names/identification numbers, names of external placement sites, etc.)  
- Yes [ ]  
- No [X]  

6. SAC Response to the Assessment Project Results

6A. Assessment Tools & Processes: Indicate how well each of the following worked for your assessment:

Tools (rubrics, test items, questionnaires, etc.):
- very well [X]  
- some small problems/limitations to fix [ ]  
- notable problems/limitations to fix [ ]  
- tools completely inadequate/failure [ ]

Please comment briefly on any changes to assessment tools that would lead to more meaningful results if this assessment were to be repeated (or adapted to another outcome).

Processes (faculty involvement, sampling, norming, inter-rater reliability, etc.):
- very well [X]  
- some small problems/limitations to fix [ ]  
- notable problems/limitations to fix [ ]  
- tools completely inadequate/failure [ ]

Please comment briefly on any changes to assessment process that would lead to more meaningful results if this assessment were to be repeated (or adapted to another outcome).

7. Follow-Up Plan

7A. How will the changes detailed in this report be shared with all FT/PT faculty in your SAC? (select all that apply)
7B. Is further collaboration/training required to properly implement the identified changes?  ☒ No

If ‘Yes,’ briefly detail your plan/schedule below.

7C. Sometimes reassessment projects call for additional reassessments. These can be formal or informal. How will you assess the effectiveness of the changes you plan to make?

- follow-up project in next year’s annual report
- on-going informal assessment
- in a future assessment project
- other

If ‘other,’ please describe briefly below.

7D. SACs are learning how to create and manage meaningful assessments in their courses. This development may require SAC discussion to support the assessment process (e.g., awareness, buy-in, communication, etc.). Please briefly describe any successful developments within your SAC that support the quality assessment of student learning. If challenges remain, these can also be shared.