

#15

COMPLETE

Collector: Email Invitation 1 (Email)
Started: Monday, February 11, 2019 11:13:20 AM
Last Modified: Monday, February 11, 2019 11:26:41 AM
Time Spent: 00:13:20
First Name: Brad
Last Name: McCombs
Email: brad.mcombs@gcccd.edu
Custom Data: Automotive Technology and Electronics Technology
IP Address: 160.227.129.237

Page 1: I. Program Overview and Update

Q1 Department(s) Reviewed:

Automotive Technology and Electronics

Q2 Lead Author and Collaborators:

Brad McCombs

Q3 Dean:

Larry McLemore

Instructional Program Review Annual Update

Q4 Program Update (Required): Please summarize the changes, additions, and achievements have occurred in your program since the last program review. To access last year's program review, visit the IPRPC Intranet Page, accessible here.

- a. We have hired two crucial full-time lab assistants. This allows assistant coverage of almost all laboratory hours with experienced personnel. We are requiring the lab assistant of be a support for adjunct faculty in the laboratory.
- b. The laboratory assistants comply with the contract job description enclosed. This has not been the historical practice. In the past, the lab assistant mainly handed tools to the students, but was not actively engaged with instructors to assist students. The lack of the ability to assist instruction was and environmental and management design problem, you can't be in two places at the same time. The resolution program changes will be discussed as part of our overall plan.
- c. Ford ASSET distance education is now approved and functioning. This gives our students more access. We are the pilot project for Ford Motor Company distance education. Please refer to the performance analysis enclosed.
- d. The Automotive Service Council of California (ASCCA degree) has been approved and is in place with increasing student and independent repair dealer support and interest. We have completed the policies and procedures documents enclosed. We have also completed a draft wire frame for a student, dealer, and college counselor website enclosed. The structure of this pathway will allow a student to complete 12 units of work experience classes and take general education classes designed to accomplish student goals and the business goals of the dealer sponsor.
- e. We have added two new hoists and have funded five additional hoists including one hoist within K-114 for distance education. This will allow more students to work in the laboratory, the hoist in the classroom will facilitate distance education instruction. The depart has 20 service bays but not enough hoists.
- f. We hired an interim GM ASEP instructor. This still leaves are department understaffed by one two full time faculty. One full time faculty has been shifted to ET 110 and does not teach automotive classes.
- g. We increased FTES for our ET 110 Electronics course. This was accomplished by looking at the waitlist, opening two additional full sections, and by assigning our full-time faculty full time load in our electronics classes.
- h. We continue to implement changes to our department based on adjunct faculty and distance education modality. We offer Introduction to Automotive Technology fully online. We have two certified distance education instructors and believe we can leverage these modalities to reach underserved students in prisons, far from campus, and students who are financially unable to attend classes on campus.
- i. We added standardized student ASE testing. This allows us to perform program review, and measure SLOs to the national testing standard.
- j. We are adding LCD monitors in the lab so that better instruction can take place by showing students what is happening. Students are not able to all see small lab top screens. The lap top information or camera images can be shared to LCDs using simple sharing communication software.

Page 2: IIB. Student and Program Learning Outcomes

Q5 Do you have an assessment plan on file with SLOAC? If you have not already done so, you can submit your program's assessment plan to SLO Coordinator, Tania Jabour, at tania.jabour@gcccd.edu. **No**

Q6 Please provide an analysis of your student learning outcomes (SLO) findings and what changes, if any, were made as a result.

Although we lack a formal plan, the department continually has made curricula changes as a result of common sense and observation. Course surveys from students has directed a more laboratory-based form of instruction. We have found students learn by foundational lecture or how things are supposed to be, learning by doing. Please see the curricula outlines enclosed.

Instructional Program Review Annual Update

Q7 Review your PLOs. Are the listed PLOs an accurate reflection of the program's current learning objectives? **No**

Q8 Are the PLOs mapped onto the course SLOs? **No**

Q9 Discuss your assessment plan for the PLOs.

We believe the department should have standardized laboratory assessments and standardized summative assessments. We have implemented standardized summative assessment for program and student assessment using NATEF student tests, aligning our assessment to the national standard. We are still working on standardizing the laboratory assessments. This will be accomplished by using the NATEF standard competencies students are required to perform for NATEF accreditation. For example, our plan requires each instructor to receive a list of competencies each student is required to perform for PLO and SLO assessment. Each SLO is tied a competency to at least one PLO. We are developing job aides for each department vehicle which includes the competencies for each course. We have recognized this solution in our department plan, knowing adjunct faculty and students will achieve greater measurable success when there is more standardization and support from the department. Student tutors will assist in the laboratory and classroom helping students achieve specific competencies. Student mentors will assist students with work experience job placements, resume building, soft skills, and work directly with the work experience coordinator. Our research has demonstrated that students apply foundational concepts during work experience. The student record book journals each student competency performed during each course including work experience courses. Our plan is to grow our student work experience course enrollments. Our new ASCCA degree requires 12 units of work experience. Each competency is recorded in the work experience record book. We have developed a wire frame that can be used to upload competencies and the artifacts supporting each competency to each SLO and PLO.

DEPARTMENT HUMAN RESOURCE STRUCTURE

Tutors & Mentors

Curricula Changes to Support Laboratory Summative Hands-On Testing

Structural

Open Lab: We are proposing open laboratory classes that increases student learning by supporting the laboratory job description in the college lab assistant contract. We have accomplished the first stage by hiring one additional full-time lab assistant. The concept allows a student to register for laboratory classes that are tied to specific course competencies. The open lab is designed for adjunct faculty efficiency, which will split load between instructors who teach co-enrollment laboratory sections mostly managed by standardizing the laboratory assignments.

Tools: The tools will be placed in the laboratory in locked cases where the lab assistants are located and where instruction takes place. This will increase the efficiency of tool use and reduce movement. The argument, tool losses may occur if there is less security. We hope teaching student leadership using student group leaders, inventory before and after each class, other security measures; accompanied by laboratory assistant and instructor management will increase student learning. Furthermore, the losses would need to be significant to offset the cost of having dedicated tool room human resources. This can easily be measured by pilot testing checking on the existing tool box keys, which have already been relocated in the lab.

Machine Room: The machine room equipment will be surplus. Additional classroom space created for engine and transmission assembly and disassembly.

Hoists: Hoists will be added for increased laboratory capacity. K114 the distance education pilot project will allow broadcasting of

Instructional Program Review Annual Update

additional competencies providing a broader range of instruction and student interaction.

Engine Clean Room; Eliminate to expand K104. Surplus engine cleaning equipment.

Storage Room: Not needed. Eliminate to expand K104. Add hoist to K104.

K104; Redesign like K114 or distance education.

Website: Redesign using Form Stacks. We need students to be able to apply for programs online and submit their student information to the department without the need to wait for the career center. Businesses need to be able to request student interns using fillable forms so that we can collect the business contact information. College counselors and administrators need to be able to find the specific applications, pathways, and program information by referring to the department programs website.

Large Computer Monitors in Lab: We are using grant funding to place large LCD monitors in the laboratory. Student learning will increase by being able to see what other students, instructors, and lab assistants are doing. This will eliminate the need to crowd around a laptop. The laboratory will be better equipped to provide instruction.

Page 3: IIB. Student Achievement

Q10 How has the program's success rate changed over the past year?

1. How has the program's success rate across all courses changed over the past 5 years? Overall the program enrollments have remained stable and consistent with previous years, an inherited stability as a result of successful management. The degrees and certificates have declined 22%. Most student enroll in CTE programs for work skills. Our student wage earnings have increased 110%. Students employed with a living wage 56%. 73% of our students are employed after the fourth fiscal quarter exit. We have addressed out lower than normal certificate and graduation rates. One factor, both of our successful Ford and GM programs have high graduation rates but do not offer college certificate achievements. We propose changing both to certificate and degree programs. A second factor is our large credit hour requirement for our general program. We have proposed dividing the general program degrees into four separate degrees. For example, if a student can be trained to only work in one specialty area, why not provide a pathway for that specialization additionally with a certificate. 73% of our students are less than full time. Our program design must include planning for part time students using faster more efficient teaching, and recognizing work experience for competency, credit by exam, and courses designed to recognize prior learning and experience.

Q11 The College has set a 2024 goal of reaching a 77% course success rate (students passing with a grade of A, B, C, or P out of those enrolled at census) for the College as a whole. Consider how your will program help the College reach its long-term goal of increasing the course success rate to 77%. This is intended to provide a goal for improvement only; programs will not be penalized for not meeting the goal. What is your program's one-year goal for success rate across all courses in the program?

77%

2. The College has set a 2024 goal of reaching a 77% course success rate (students passing with a grade of A, B, C, or P out of those enrolled at census) for the College as a whole. Consider how your will program help the College reach its long-term goal of increasing the course success rate to 77%. What is your program's one-year (2019/20) goal for success rate across all courses in the program? Our course achievement rate is 75%. We hope to increase our student success rate to 77%. The best way to achieve better success rates is to manage the department and instruction, student retention, and learning more efficiently.

Q12 Which specific groups (by gender and ethnicity) have success rates lower than that of the program overall?

Our African American student have the lowest student success rates, and typically have lower than average employment rates. An average student population of 5 – 7%. We believe student virtual tours will help us reach diverse student populations. It will require direct marketing to the target population. We are also interested in participating in the new grant for the incarcerated. We think our distance education technologies might be able to allow a student to attend our programs virtually, but tools and equipment, and cars would have to be drop shipped to the facility. Our female student population has increased 44%. We have been using female students in all of our marketing campaigns. We will continue to attempt to use disadvantage students in our advertising. However, to realize significant gains, we would need to invest in community outreach programs.

Instructional Program Review Annual Update

Q13 What program (or institutional) factors may be contributing to these lower rates of success for these groups of students?

The location of our college is in a lower tax base compared to the more affluent regions within the county. Our institution is based on adjunct faculty for most of our student population, and adjunct faculty do not have the same resources and training opportunities as full-time faculty. Expecting student equity, when faculty are not treated equitably is a juxtaposition combining inequity with equity. Our college management team must consider that one full-time faculty is managing all of the programs, which is an impossible situation. Reassign time should be considered to adjunct faculty if we expect a reasonable improvement in student success and work experience placements.

Q14 What specific steps will the program take to address these equity gaps in the 2019/20 academic year?

- A. Assign/reassign time to part-time faculty to help us manage our department.
 - B. Replace at least one full-time faculty position of the two that have been lost over the past four years.
 - C. All advertising should graphically market to underserved student populations.
 - D. Send an email to all high schools in the region offering virtual tours of our department with the goal of providing at least five virtual tours.
-

Q15 How do these activities align with the goals set forth in your last comprehensive program review?

The human resource problem must be solved by management, if not we can expect more of the same statistics. The department redesign should have a significant impact on student success and increased student employment rates. The curricula design will allow more student access to the department. The certificates and degrees should increase. We will need continued support from administration to help us market the Ford ASSET program. There is no reason why we shouldn't have at least 50 students in Ford ASSET by 2021.

Q16 OPTIONAL: If you would like to attach any charts or additional documentation (aside from the program review report prepared by the IESE Office), please upload it using the button below. You can upload PDF, Word, and image files.

FINAL-Instructional-Annual-PR1819.pdf (302.4KB)

Page 4: Distance Education

Q17 Does your program offer any courses via distance education (online)? **Yes**

Page 5: Distance Education Course Success

Q18 Are there differences in success rates for distance education (online) versus in-person sections? **Yes**

Instructional Program Review Annual Update

Q19 If there are differences in success rates for distance education (online) versus in person sections, what will the program do to address these disparities?

The is a small difference, mostly due to the more rigorous online homework requirements. We will create a survey for our distance education students.

Page 6: IV. Previous Goals: Update (If Applicable)

Q20 Would you like to provide an update for your previous program review goal(s)? **No**

Page 7: Previous Goal 1

Q21 Previous Goal 1: **Respondent skipped this question**

Q22 Link to College Strategic Goal(s): **Respondent skipped this question**

Q23 Goal Status **Respondent skipped this question**

Q24 How was the goal evaluated? If the goal is "in progress," how will it be evaluated? **Respondent skipped this question**

Q25 Please provide the rationale for this goal: **Respondent skipped this question**

Q26 Please provide the goal action steps for the year (previously "Activities"): **Respondent skipped this question**

Q27 Do you have another goal to update? **Respondent skipped this question**

Page 8: Previous Goal 2

Q28 Previous Goal 2: **Respondent skipped this question**

Q29 Link to College Strategic Goal(s): **Respondent skipped this question**

Q30 Goal Status **Respondent skipped this question**

Q31 How was the goal evaluated? If the goal is "in progress," how will it be evaluated? **Respondent skipped this question**

Instructional Program Review Annual Update

Q32 Please provide the rationale for this goal: Respondent skipped this question

Q33 Please provide the goal action steps for the year (previously "Activities"): Respondent skipped this question

Q34 Do you have another goal to update? Respondent skipped this question

Page 9: Previous Goal 3

Q35 Previous Goal 3: Respondent skipped this question

Q36 Link to College Strategic Goal(s): Respondent skipped this question

Q37 Goal Status Respondent skipped this question

Q38 How was the goal evaluated? If the goal is "in progress," how will it be evaluated? Respondent skipped this question

Q39 Please provide the rationale for this goal: Respondent skipped this question

Q40 Please provide the goal action steps for the year (previously "Activities"): Respondent skipped this question

Q41 Do you have another goal to update? Respondent skipped this question

Page 10: Previous Goal 4

Q42 Previous Goal 4: Respondent skipped this question

Q43 Link to College Strategic Goal(s): Respondent skipped this question

Q44 Goal Status Respondent skipped this question

Q45 How was the goal evaluated? If the goal is "in progress," how will it be evaluated? Respondent skipped this question

Q46 Please provide the rationale for this goal: Respondent skipped this question

Instructional Program Review Annual Update

Q47 Please provide the goal action steps for the year (previously "Activities"):

Respondent skipped this question

Page 11: V. New Goals (If Applicable)

Q48 Would you like to propose any new goal(s)?

Yes

Page 12: New Goal 1

Q49 New Goal 1:

1. We believe we are missing an opportunity to collaborate with our engineering department and expand our Electronics Technologies. We have EVs electric vehicles and believe there is a market to teach students comprehensive from source to car electronics. We can train students using industry partners to attain job in solar, wind, turbine, and expand our laboratory to include large scale generators and the electronic transfer components that are expanding in the east county. This requires high level meetings that are above beyond our ability to perform due to human resource constraints. We need to evaluate our big bets and apply them to industry needs by survey and discussion with our large manufacturing partners. For example, Solar Turbines requested 30 of our students to help them manufacture turbines. We are missing opportunities to expand our instruction. The goal: Create an applied electronics certificate or degree to support job placement instruction for energy supply companies teaching students how to work on low and high voltage systems including turbines, solar panels, wind generators, to support green energies.

Q50 Link to College Strategic Goal(s):

Guided Student Pathways,
Student Validation and Engagement

Q51 Please provide the rationale for this goal:

1. We believe we are missing an opportunity to collaborate with our engineering department and expand our Electronics Technologies. We have EVs electric vehicles and believe there is a market to teach students comprehensive from source to car electronics. We can train students using industry partners to attain job in solar, wind, turbine, and expand our laboratory to include large scale generators and the electronic transfer components that are expanding in the east county. This requires high level meetings that are above beyond our ability to perform due to human resource constraints. We need to evaluate our big bets and apply them to industry needs by survey and discussion with our large manufacturing partners. For example, Solar Turbines requested 30 of our students to help them manufacture turbines. We are missing opportunities to expand our instruction.

Q52 Please provide the goal action steps for the year (previously "Activities"):

Survey industry partners

Q53 How will the goal be evaluated?

Survey,

Instructional Program Review Annual Update

Q54 Do you have another new goal? **Yes**

Page 13: New Goal 2

Q55 New Goal 2:

2. Create a service Management Degree and/or Certificate: Industry has been asking for this during our advisory meetings. We have met with the business department and will write a 4 unit class that can be attached to existing business pathway.

Q56 Link to College Strategic Goal(s): **Guided Student Pathways**

Q57 Please provide the rationale for this goal:

Advisory meetings suggest industry need for rigorous student preparation.

Q58 Please provide the goal action steps for the year (previously "Activities"):

Curriculum development

Q59 How will the goal be evaluated?

Enrollments, employment, FTES.

Q60 Do you have another new goal? **No**

Page 14: New Goal 3

Q61 New Goal 3: **Respondent skipped this question**

Q62 Link to College Strategic Goal(s): **Respondent skipped this question**

Q63 Please provide the rationale for this goal: **Respondent skipped this question**

Q64 Please provide the goal action steps for the year (previously "Activities"): **Respondent skipped this question**

Q65 How will the goal be evaluated? **Respondent skipped this question**

Instructional Program Review Annual Update

Q66 Do you have another new goal?

Respondent skipped this question

Page 15: New Goal 4

Q67 New Goal 4:

Respondent skipped this question

Q68 Link to College Strategic Goal(s):

Respondent skipped this question

Q69 Please provide the rationale for this goal:

Respondent skipped this question

Q70 Please provide the goal action steps for the year (previously "Activities"):

Respondent skipped this question

Q71 How will the goal be evaluated?

Respondent skipped this question

Page 16: VI. Resources Needed to Fully Achieve Goal(s)

Q72 Is the program requesting resources this year to achieve this goal?

No

Page 17: V. Faculty Resource Needs

Q73 Are you requesting one or more faculty positions to achieve this goal?

Respondent skipped this question

Page 18: Faculty Position Request(s)

Q74 Please remember to complete the Faculty Position Request Form (accessible [here](#), under Staffing Request Information) for this position that you are requesting and upload it using the button below. The Faculty Position Request Form (In Word) can be located [here](#) (under Staffing Request Information). Brief Description of the Position Requested:

Respondent skipped this question

Q75 Faculty Position Request 1 - Related Program Goal(s):

Respondent skipped this question

Instructional Program Review Annual Update

Q76 Faculty Position Request Upload 1: Please upload the completed faculty request form for the above position using the button below. You can access the Word version of the Faculty Position Request Form here (under Staffing Request Information). **Respondent skipped this question**

Q77 Faculty Position Request 2 (if applicable): Please remember to complete the Faculty Position Request Form (accessible here, under Staffing Request Information) for this position that you are requesting and upload it using the button below. The Faculty Position Request Form (In Word) can be located here (under Staffing Request Information). Brief Description of Position Requested: **Respondent skipped this question**

Q78 Faculty Position Request 2 - Related Program Goal(s): **Respondent skipped this question**

Q79 Faculty Position Request Upload 2: Please upload the completed faculty request form for the above position using the button below. You can access the Word version of the Faculty Position Request Form here. **Respondent skipped this question**

Page 19: VI. Classified Staff Resource Needs

Q80 Are you requesting one or more classified positions to achieve this goal? **Respondent skipped this question**

Page 20: Classified Staff Position Request(s)

Q81 Classified Staff Position Request 1: Please remember to complete the Classified Staff Position Request Form (accessible here, under Staffing Request Information) for this position you are requesting. Brief Description of Position Requested: **Respondent skipped this question**

Q82 Classified Staff Position 1 Related Program Goal(s): **Respondent skipped this question**

Q83 Classified Staff Position 1 Request Upload: Please upload a completed Classified Position Request Form for this request using the button below. You can access the Word version of the Classified Position Request Form here. **Respondent skipped this question**

Instructional Program Review Annual Update

Q84 ***OPTIONAL*** Please use the button below to upload the position classification description (obtained from HR).

Respondent skipped this question

Q85 Classified Staff Position Request 2: Please remember to complete the Classified Staff Position Request Form (accessible here, under Staffing Request Information) for each position you are requesting. Brief Description of Position Requested:

Respondent skipped this question

Q86 Classified Staff Position 2 Related Program Goal(s):

Respondent skipped this question

Q87 Classified Staff Position Request 2 Upload: Please upload a completed Classified Position Request Form for this request using the button below. You can access the Word version of the Classified Position Request Form here (under Staffing Request Information).

Respondent skipped this question

Q88 ***OPTIONAL*** Please use the button below to upload the position classification description (obtained from HR).

Respondent skipped this question

Page 21: VII. Technology Resource Needs

Q89 Are you requesting technology resources to achieve this goal?

Respondent skipped this question

Page 22: Technology Request(s)

Q90 Technology Request 1: Please remember to complete a Technology Request Form for each request you are submitting. You can access the online Technology Request Form here: Technology Request Form

Respondent skipped this question

Q91 Technology Request 2: Please remember to complete a Technology Request Form for each request you are submitting. You can access the online Technology Request Form here: Technology Request Form

Respondent skipped this question

Page 23: VIII. Perkins and Strong Workforce Resource Needs

Q92 Are you requesting Perkins and/or Strong Workforce resources to achieve this goal?

Respondent skipped this question

Page 24: Perkins Request and Strong Workforce

Q93 Perkins Request and Strong Workforce 1: Please remember to complete the Perkins Request Form and submit it via the annual Perkins/Strong Workforce request process/cycle.

Respondent skipped this question

Q94 Perkins Request and Strong Workforce 2: Please remember to complete the Perkins Request Form and submit it via the annual Perkins/Strong Workforce request process/cycle.

Respondent skipped this question

Page 25: IX. Supplies/Equipment Resource Needs

Q95 Are you requesting supplies and/or equipment resources to achieve this goal?

Respondent skipped this question

Page 26: Supplies/Equipment Request(s)

Q96 Supplies/Equipment Request 1: In the boxes below please provide information on your request. Supplies/Equipment requests will be considered on a one-time funding basis.

Respondent skipped this question

Q97 Supplies/Equipment Documentation 1: Please upload any supplies/equipment quotes or additional documentation for this request.

Respondent skipped this question

Q98 Supplies/Equipment Request 2: In the boxes below please provide information on your request. Supplies/Equipment requests will be considered on a one-time funding basis.

Respondent skipped this question

Q99 Supplies/Equipment Documentation 2 : Please upload any supplies/equipment quotes or additional documentation for this request.

Respondent skipped this question

Page 27: X. Facilities Resource Needs

Q100 Are you requesting facilities resources to achieve this goal?

Respondent skipped this question

Page 28: Facilities Request

Instructional Program Review Annual Update

Q101 Facilities Request 1: Please provide the information below and remember to complete a Facilities Request Form accessible here: [Facilities Request Form](#)

Respondent skipped this question

Q102 Facilities Request 2: Please provide the information below and remember to complete a Facilities Request Form, accessible here: [Facilities Request Form](#)

Respondent skipped this question

Page 29: XI. Professional Development Resource Needs

Q103 Are you requesting professional development resources to achieve this goal?

Respondent skipped this question

Page 30: Professional Development Request

Q104 Professional Development Request 1: Please provide the information identified below and follow the process for requesting professional development funds, outlined here.

Respondent skipped this question

Q105 Professional Development Request 2: Please provide the information identified below and follow the process for requesting professional development funds, outlined here.

Respondent skipped this question

Page 31: XII. Other Resource Needs

Q106 Are you requesting any other resources to achieve this goal?

Respondent skipped this question

Page 32: Other Resource Requests

Q107 Other Resource Requests 1: Other resource requests will be considered on a one-time funding basis. Please fill in the information below.

Respondent skipped this question

Q108 Other Resource Requests 2: Other resource requests will be considered on a one-time funding basis. Please fill in the information below.

Respondent skipped this question

Page 33

Instructional Program Review Annual Update

Q109 Are you ready to submit your program review? If you click "No," you will be redirected to the start of the program review module.

Respondent skipped this question
