**Bakersfield College**

**Comprehensive Program Review**

**I. Program Information:**

Program Name:

Program Type: X Instructional  Student Affairs  Administrative Service

***Bakersfield College Mission****:* Bakersfield College provides opportunities for students from diverse economic, cultural, and educational backgrounds to attain Associate and Baccalaureate degrees and certificates, workplace skills, and preparation for transfer. Our rigorous and supportive learning environment fosters students’ abilities to think critically, communicate effectively, and demonstrate competencies and skills in order to engage productively in their communities and the world.

Describe how the program supports the Bakersfield College Mission:

**The welding program is committed to student success in career development by becoming an exemplary model and implementing best practices established in the mission of Bakersfield College. The welding program increases student success by:**

* **Enhancing our students’ experience with online instruction.**
* **Developed Skills Certificates for students.**
* **Use embedded remedial skills in lecture and lab.**
* **Use technology to increase completion rates.**
* **Uses professional development opportunities to address retention.**

Program Mission Statement:

**The EIT faculty and staff strive to offer effective, up to date and student centered instruction, being sensitive to the diversity of our students, their educational needs, and their career goals. We provide relevant course and lab work geared toward day and night students seeking careers in EIT related fields, also meeting the needs of students seeking training for career advancement or skills updating. We use a multi-dimensional approach in preparing our students not only for their specific career goals, but also provide activities that assist them with meeting their personal, academic, and intellectual goals. Our faculty actively pursues professional development, program/facilities improvement, and college/community involvement, seeking partnerships and collective efforts.**

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| ***Instructional Programs only:***   1. List the degrees and Certificates of Achievement the program offers 2. If your program offers both an A.A. and an A.S. degree in the same subject, please explain the rationale for offering both. 3. If your program offers a local degree in addition to the ADT degree, please explain the rationale for offering both. |

**II. Progress on Program Goals, Future Goals, and Action Plans:**

1. List the program’s current goals. For each goal (minimum of 2 goals), discuss progress and changes. If the program is addressing more than two goals, please duplicate this section.

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| **Current Program Goals** | **Which institutional goals from the 2015-2018 Strategic Directions for Bakersfield College will be advanced upon completion of this goal? (select all that apply)** | **Progress on goal achievement**  **(choose one)** | **Comments** |
| 1. 1. Continue developing and conducting Welding classes at Delano/ RFK. | **X** 1: Student Learning  **X** 2: Student Progression and Completion  **X** 3: Facilities  4: Oversight and Accountability  5: Leadership and Engagement | Completed: \_\_\_\_\_\_\_\_\_\_ (Date)  Revised: \_\_\_\_\_\_\_\_\_\_ (Date)  **X** Ongoing: 9/2/2016 (Date) | **The welding program is committed to student success in career development by becoming an exemplary model and implementing best practices established in the mission of Bakersfield College. The welding program continues to increase enrollment and program visibility through community outreach and advertisement. Currently there are two sections being offered, down from six for the Spring 2016 semester due to lack of advertisement and promotion. Equipment was transferred to RFK creating a need to replace equipment at main campus.** |
| 2. **The need to address deficiencies in soft skills, reading, and trade arithmetic changed the overall focus of lecture, lessons, and lab work. The welding faculty embedded lecture that addressed these components and results will prove through assessment these needs are improving.** | **X** 1: Student Learning  **X** 2: Student Progression and Completion  **X** 3: Facilities  4: Oversight and Accountability  5: Leadership and Engagement | Completed: \_\_\_\_\_\_\_\_\_\_ (Date)  Revised: \_\_\_\_\_\_\_\_\_\_ (Date)  Ongoing: 9/2/2016 (Date) | **Embedded components that have been inserted into WELD B1B and WELD B1A with an emphasis on trade math, locating information, and writing have shown improvement in soft skills. Embedding basic skills into welding curriculum have been an ongoing process that began 6 years ago and continues to be a focus moving forward. In addition, discussions need to take place between welding faculty and High Schools attempting “Dual Enrollment” courses to insure soft skills are addressed. New components addressing goal #2 include “Work Keys” for WELD B1B and “Course Mate” for WELD 65AB, and WELD 54B.** |

1. List the program’s goals for the next three years. Ensure that stated goals are specific and measurable. State how each program goal supports the College’s strategic goals. Each program must include an action plan.

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| **Future Goals** | **Which institutional goals from the 2015-2018 Strategic Directions for Bakersfield College will be advanced upon completion of this goal? (select all that apply)** | **Action Plan** | **Timeline for Completion** | **Lead person for this goal** |
| 1. To develop and conduct Welding classes in outline areas specifically at the Raleigh Center in the Delano area. | **X** 1: Student Learning  **X** 2: Student Progression and Completion  **X** 3: Facilities  4: Oversight and Accountability  5: Leadership and Engagement | The Raleigh site has been gifted to BC. Advanced welding courses that dovetail with Introductory “Dual Enrollment” courses could be taught at this location. However, funding would need to be secured to procure fume extraction, electrical, welding equipment, consumables, and staff. | TBD-Pending Funding | New Faculty Hire |
| 2. | 1: Student Learning  2: Student Progression and Completion  3: Facilities  4: Oversight and Accountability  5: Leadership and Engagement |  |  |  |

**III. Trend Data Analysis:**

Review the data provided by Institutional Research. Provide an analysis of program data throughout the last three years, including:

1. Changes in student demographics (gender, age and ethnicity).

Some categories saw minor fluctuations. A minor change occurred in the age category. Welding saw a significant increase in the 19 and younger group. Enrollment for this group increased from 27% in 2014-15 to 31% in 2016-16, increasing from 99 to 133. This is due to the addition of Welding classes at RFK in Delano and outreach at ROC and other local high schools. We expect this number to decrease unless resources are allocated for outreach/promotion at the high school level. We saw a significant increase in the number of SEP’s completed. This rose from 259 in 2014-15 to 307 completed in 2015-16. This highlights the continued effort of the welding faculty to encourage students to complete the Matriculation process. The ethnic breakdown remained static from 2014-15 to 2015-16, as well the age group range 20-29, 30-39, 40 & Older. We saw a slight decrease in female enrollment highlighting the need for counseling efforts directed toward boosting female enrollment.

1. Changes in enrollment (headcount, sections, course enrollment, and productivity).

After comparing the enrollment data, one significant change was discovered. Unduplicated Enrollment increased from 314 in 2014-15 to 433 in 2015-16 which yields a 19% increase. This increase is due to Dual Enrollment, and Delano welding sections at RFK. This increase highlights the need for additional faculty, including adjunct and one full time position. With administrations “Strategic Directive” to increase Dual Enrollment to other area high schools and additional RFK sections, enrollment could soon exceed 500. The burden on the existing faculty to mentor and evaluate adjunct, maintain BC/Delano lab facilities, participate in CCP2 Grant activities remains excessive. Coupled with the need to teach overload at the main campus an additional full time position or Welding/Manufacturing chair is desperately needed to insure quality courses, and maintain oversight during this expansion. The current FTES to Chair structure does not allow enough release time to cover this much needed position. Alternative ways to compensate an oversight position needs to be explored by administration.

1. Changes in achievement gap and disproportionate impact.

There were significant changes in regards to Success and Retention. Although AS degree awards stayed the same, a slight increase was discovered in Certificates. Certificates increased from 66 in 2014-15 to 74 in 2015-16. This highlights faculty’s continued effort to encourage students to complete Certificate programs of study. In addition, this displays the need for additional course offerings to allow students to complete Certificate programs.

1. Success and retention for face-to-face as well as online/distance courses.

The welding program has 93% retention compared to the College wide 85%. Also, the welding program has an 80% success rate compared to 68% College wide.

This is partly due to the successful implementation of embedded remediation. In addition, welding faculty continues to encourage students to complete Certificates and Degrees.

1. Degrees and certificates awarded (three-year trend data for each degree and/or certificate awarded).

Three-year trend data is listed below

Total Awards

2013-14 47

2014-15 69

2015-16 76

Increase highlights faculty’s continued effort to encourage students to complete Certificates and Degrees. In addition, the increase can be attributed to increased enrollment which highlights the need for new faculty.

1. Other program-specific data (please specify or attach).

None

1. List degrees and certificates awarded (three-year trend data for each degree and certificate awarded). Include targets (goal numbers) for the next three years.

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| Full Name of Degree or Certificate | 2011- 2012 | 2012- 2013 | 2013- 2014 | 2014- 2015 | 2015- 2016 | 2016- 2017 |
| AS Industrial Technology, Welding Option |  |  | 2 | 3 | 2 | 4 |
| JSC Blueprint Reading & Layout |  |  | 10 | 17 | 22 | 25 |
| JSC Gas/Tung/Flux Core Arc Welding |  |  | 10 | 19 | 22 | 25 |
| JSC Shielded Metal Arc Welding |  |  | 7 | 13 | 17 | 20 |
| COA Welding |  |  | 18 | 17 | 13 | 16 |

Additional faculty with added sections are necessary to achieve the goal of continued increases of Certificates and Degrees awarded.

**IV. Program Assessment:**

Use attached **Assessment Report Form Comprehensive Tab**

See Attached

**V. Resource Analysis:** To request resources (staff, faculty, technology, equipment, budget, and facilities), please fill out the appropriate form. <https://committees.kccd.edu/bc/committee/programreview>

1. Human Resources and Professional Development: Replacement faculty needed to insure existing number of sections can be offered after Mike Komin retires 6/30/2017. An additional position is also needed to support Rural area expansion including Delano, Raleigh, Wasco, Shafter, and Arvin.
2. Professional Development:
3. Describe briefly the effectiveness of the professional development your program has been engaged in (either providing or attending) during the last year, focusing on how it contributed to student success.
4. What professional development opportunities and contributions can your program make to the college in the future?
5. Facilities:
6. How have facilities’ maintenance, repair or updating affected your program in the past year as it relates to student success?

**All maintenance activities including repair have excessively long wait times. Vertical bandsaw/Lighting work orders were submitted two years ago.**

1. How will your Facilities Request for next year contribute to student success?

**We have requested new lighting for the welding booths. Poor lighting continues to be an issue for students inside welding booths. Increasing the amount of light in the welding booth will translate into increased skill attainment for all welding classes. Students will no longer struggle with low light conditions that provide a barrier to learning.**

C. Technology and Equipment:

1. Understanding that some programs teach in multiple classrooms, how has new, repurposed or existing technology or equipment affected your program in the past year as it relates to student success?

**No new technology received during past year.**

1. How will your new or repurposed classroom, office technology and/or equipment request contribute to student success?

**Student success related to welding skill attainment will be increased. Many studies, including one completed by the University of Iowa show that when welding simulators are used for basic Introductory courses skill attainment drastically increases when students enter welding lab area. The welding department has one simulator. However, it is difficult for a class of 21 students to engage simulation exercises with only one unit. “Reality Works” has entered the simulation market and are producing a table top simulator for a reasonable price of $4500.00 per unit.**

1. Discuss the effectiveness of technology used in your area to meet college strategic goals.

**Through the acquisition of simulators and creation of a “Welding Sim Lab” students can meet strategic goals of the welding department in a shorter period of time. These skills include actual welding skill, but also include enhanced computer skills, understanding of advanced welding equipment, and critical thinking skills engaged in the simulated environment.**

D. Budget: Explain how your budget justifications will contribute to increased student success for your program.

**Budget dollars spent on simulators will increase skill attainment resulting in reinforcement of technical skills.**

**VII. Faculty and Staff Engagement:**

1. Discuss how program members have engaged in institutional efforts such as college committees, presentations, and departmental activities.

**Ron Grays-Academic Senate keeps staff informed on issues that affect the department.**

**Josh Ralls/Mike Komin/Jeremy Staat-CCPT2 Dual Enrollment which align high school welding courses with BC courses. BC faculty working directly with high school faculty through meetings and site visit to insure facilities meet or exceed BC welding’s facilities.**

1. Instruction Only: Discuss how adjunct faculty are included in departmental training, discussions and decision-making.

**No adjunct at this time, but actively seeking qualified adjunct.**

**VIII. Conclusions and Findings:**

**The welding program is in a significant growth trend. Many factors such as “Dual Enrollment”, Delano Campus expansion, and increased enrollment at the Main Campus have contributed. This expansion has dramatically increased the existing faculty workload and made it difficult to develop and implement any “Strategic Directive” ideas. Below are some ideas presented by welding faculty that would be very difficult to move forward under the current workload/department structure. • “Welding Simulation Lab”-funded through CCPT2 funds. • CTE Courtyard improvement plan. • “Industry Environment” simulation lab • “Work Keys” Certificate program. • Create and write curriculum for an Advanced GTAW welding course. 80% of students polled responded they would enroll in Advanced GTAW course. One idea that has circulated is to combine Welding/Manufacturing together in a single department and create a Department Chair position. This would create enough FTF to allow release time to be provided for the Chair position. The release time could be utilized to manage the expansion under CCPT2 directives, and begin advancing “Strategic Directives” within welding/manufacturing department.**