

Comprehensive Program Review Report



Program Review - Computer

Program Summary

2022-2023

Prepared by: Craig Arnold, Brian Bettencourt, Tara Bosma, Susan Mazzola

What are the strengths of your area?: Quality of Instructors: Within the Business Department, we currently have seven full-time instructors teaching computer courses. Seven instructors are certified to teach courses online. All instructors have a master's degree, many with years of teaching experience and/or real-world experience. Currently our instructors are serving 107.3 FTES with a success rate of 56.3%, a 15.7% decrease from the previous year.

A detailed look at the success rate with information coming from the PR dashboard (Tableau); Gender: female-55.9%, male-56.6%, and unknown-56.3%; Instructional Mode: Face-to-face-71.7%, Hybrid-54.0%, and Online-53.7%; Campus: Visalia-71.7%, Hanford-54.0%, Tulare-0% (due to class cancellations and none running during this period), and Online-53.7%; and race/ethnicity; African American-44.4%, American Native-*, Asian-79.2%, Filipino-*, Hispanic-54.0%, Multi Ethnicity-46.2%, Pacific Islander-*, White-61.5%, Unknown-*%.

Previously, in the 2020-2021 program review cycle, our success rates from the PR dashboard (Tableau) included; Gender: female-72%, male-70.6%, and unknown-*; Instructional Mode: Face-to-face-78.1%, Hybrid-66.1%, and Online-69.5%; Campus: Visalia-77.7%, Hanford-66.7%, Tulare-81.3%, and Online-69-0%; and race/ethnicity; African American-81.8%, American Native-*, Asian-93.3%, Filipino-60.0%, Hispanic-68.0%, Multi Ethnicity-66.0%, Pacific Islander-*, White-76.1%, Unknown-68.4%.

You will see based on both years of success rates, there is a consistent decrease of success among varying groups and sub categories from the current and past year cycles. This decrease correlated with the pandemic changes and instructional changes.

Internship Program: The Business Department currently places approximately 30 students per year in computer and business related internships with approximately 15 participating local businesses per semester. We feel comfortable with these numbers that have stayed consistent even in the aftermath of the Covid-19 pandemic regulations.

Technology Use: The current software being taught includes: Microsoft Office 2019, Microsoft Visual Studio 2019, javac.

Full-time Professors: The full-time faculty of the Business Department currently teach 100% of the computer courses. Currently, no adjunct faculty are teaching computer courses, because of class cancellations for low enrollment.

Internship Assistant: A part-time classified employee assists with the Internship program. The assistant, working with the Internship Coordinator, communicates with local businesses setting up internship opportunities, presents in many classes for program promotion, meets with students, manages student applications, pairs student with appropriate internships, monitors student progress, and facilitates student evaluations.

What improvements are needed?: Student Success: Many students still struggle with adequate computer and internet access, despite the laptop and hotspot checkout option through the college. The distribution of Chromebooks to computer students versus the necessary Windows laptops created confusion, frustration, and limitations to students. As a result, many students were not successful in their classes because they had Chromebooks, which were inadequate for class requirements.

The college needs to supply more Windows laptops for students to checkout so they can be successful in their computer courses.

Describe any external opportunities or challenges.: The challenge is to prepare students for computer-related positions. The program is unique in that many courses are geared for multiple types of career opportunities. Other courses are specific to train students in the work areas of computer programming and information systems.

Additionally, the challenges of adjusting to a new "norm" after the pandemic has created an even greater need for strong computer skills and ethics.

Overall SLO Achievement: The Student Learning Outcomes are currently being tracked and assessed in TracDat and are meeting or exceeding expectations. The overall reported student success rates meet the target goals. The majority of the computer classes have 80% or higher on success rates of SLOs.

Changes Based on SLO Achievement: As a result of students meeting or exceeding success goals, instructors have continued to adapt to new pedagogies to meet current student needs. One successful strategy that has proven to support student success is the use of Zoom office hours where the students have the ability to share their screens with the instructor, allowing for more instructor interaction and scaffolding. Some instructors in our Division have found that Zoom office hours actually help the students more than traditional office hours due to the ability to share their screen and actually problem solve.

Despite the high SLO success rates, we anticipate a change following the decrease of overall student success rates as outlined above. We hope to see greater access to the necessary hardware required for our courses and an overall increase in student success as a result.

Overall PLO Achievement: The Program for Information Systems has 3 PLOs that were assessed in the Spring 2020 semester (for the Certificate and Degree).

All three PLOs increased in success: two achieving 100% success and one achieving 93% success. We just started the new cycle for an updated evaluation of this Program and by the next Program Review, a new set of data should be available. It is not due yet.

The Computer Applications Certificate is due for evaluation this year.

Changes Based on PLO Achievement: No changes occurred this year. The PLO with 93% success during the most recent evaluation was up significantly due to a change in evaluation method.

Outcome cycle evaluation: Each year several courses are slated for review of outcome assessments base on their three year cycle. The Business Division faculty meet to discuss the TracDat assessments and recommend changes according to student needs and changing environment.

Action: New Faculty Hire for Computer/Business Courses

Meet student demand for both computer and business course offerings in the Business Division to increase the number of students who earn a degree/certificate or transfer to a UC/CSU.

Leave Blank:

Implementation Timeline: 2021 - 2022, 2022 - 2023

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Identify related course/program outcomes: District Objective 1.1 - The District will increase FTES 2% from 2021 to 2025.

District Objective 2.1 - Increase the number of students who earn an associate degree or certificate (CTE and non-CTE) by 5% from 2021-2025.

Person(s) Responsible (Name and Position): Brian Bettencourt, Division Chair

Rationale (With supporting data): Due to the pandemic and a decline in campus enrollment, we postponed the new hire until 2022-2023.

Since full-time faculty will not be able to cover the retiree's units, we would need to attempt to staff these courses with qualified adjunct instructors who are also certified to teach distance education courses. The Business Division has difficulty in recruiting qualified adjunct instructors who can teach in the mornings and afternoons when the vast majority of our courses are scheduled. Many of our current Business Department adjuncts are teaching maximum unit loads, so the Division will not be able to sustain the current level of course offerings.

In order for the Business Division to effectively serve our students transferring to a CSU with a degree in Business Administration Associate in Science Transfer degree (AST), we need to hire a full-time instructor who can teach business and computer courses.

Priority: High

Safety Issue: No

External Mandate: No

Program Review - Computer

Safety/Mandate Explanation:

Update on Action

Updates

Update Year: 2022 - 2023

10/13/2022

Status: Continue Action Next Year

We are currently in the process of recruitment and the position is live and posted on the COS Human Resources website. Currently, the committee has been formed with confirmed members and we are in the gathering process and plan to meet following the January 31, 2023 application deadline to review potential candidates. The goal is to officially hire a new faculty member by no later than May 2023.

Impact on District Objectives/Unit Outcomes (Not Required):

Resources Description

Personnel - Faculty - Personnel/Faculty--New/Replacement. The Business Division would like to replace a full-time faculty member who has retired. (Active)

Why is this resource required for this action?: Most of the 11 full-time faculty members in the Business Division are teaching overloads.

Since full-time faculty will not be able to cover the retiree's units, we would need to attempt to staff these courses with qualified adjunct instructors who are also certified to teach distance education courses. The Business Division has difficulty in recruiting qualified adjunct instructors who can teach in the mornings and afternoons when the vast majority of our courses are scheduled. Many of our current Business Department adjuncts are teaching maximum unit loads, so the Division will not be able to sustain the current level of course offerings.

In order for the Business Division to effectively serve our students transferring to a CSU with a degree in Business Administration Associate in Science Transfer degree (AST), we need to hire a full-time instructor who can teach business and computer courses.

Notes (optional):

Cost of Request (Nothing will be funded over the amount listed.): 100000

Link Actions to District Objectives

District Objectives: 2018-2021

District Objective 1.1 - The District will increase FTES by 1.75% over the three years

District Objective 2.1 - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years

District Objectives: 2021-2025

District Objective 1.1 - The District will increase FTES 2% from 2021 to 2025.

District Objective 2.1 - Increase the number of students who earn an associate degree or certificate (CTE and non-CTE) by 5% from 2021-2025.

Action: Student Success Rates

Maintain student success at or above 63%.

Leave Blank:

Implementation Timeline: 2020 - 2021, 2021 - 2022, 2022 - 2023

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Identify related course/program outcomes: At the end of their program, students will be able to demonstrate competency in

Program Review - Computer

Word processing, spreadsheets, databases, and/or web development.

Person(s) Responsible (Name and Position): Brian Bettencourt, Division Chair (and Computer Instructors: Susan Mazzola, Craig Arnold, Tara Bosma)

Rationale (With supporting data): Overall student success during 2021-22 was 56.3%. This was a significant decrease of 15.7% from the year before. We hope to see the rates are restored back to their original pre-pandemic numbers of success rate at or above 63%.

Priority: High

Safety Issue: No

External Mandate: No

Safety/Mandate Explanation:

Update on Action

Updates

Update Year: 2022 - 2023

10/13/2022

Status: Continue Action Next Year

As mentioned, the overall student success rate for 2021-2022 was 56.3%, which was a 15.7% decrease from the previous year. We have high hopes and expectations that this number will rise back to its original pre-pandemic average or above average rate of 63% or higher. The impact of the online transition, low face-to-face contact, proper hardware/technology access, withdrawal changes, etc. were abnormal hurdles compared to years past.

Impact on District Objectives/Unit Outcomes (Not Required):

Update Year: 2021-2022

09/13/2021

Status: Continue Action Next Year

Student success is even better than last year now 71.1% with a 4.8% increase further exceeding our 63% goal.

Impact on District Objectives/Unit Outcomes (Not Required):

Link Actions to District Objectives

District Objectives: 2018-2021

District Objective 2.1 - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years

District Objective 2.4 - By 2021, Increase the percentage of CTE students who achieve their employment objectives by 5 percentage points

District Objectives: 2013-2015

2013-2015: District Objective #1 - District Objective #1 for 2013-2015: Provide effective academic support services as measured by an increase in the rate at which students successfully complete courses.

District Objectives: 2015-2018

District Objectives - 2.4 - Increase Career Technical Education course success rates and program completion annually.

District Objectives: 2021-2025

District Objective 2.1 - Increase the number of students who earn an associate degree or certificate (CTE and non-CTE) by 5% from 2021-2025.

District Objective 2.4 - Increase the percentage of CTE students who achieve their employment objectives by five percentage points (job closely related to field of study and attainment of a livable wage) and the number of CTE students who successfully complete 9+ CTE units in a single year by 10% from 2021-2025.

District Objective 3.2 - Increase the course success rate by 10% for each disproportionately impacted student group in their transfer level Quantitative Reasoning and English courses by the end of their first year from 2021-2025.

Program Review - Computer

Action: Improve and maintain all Business lab technologies

Ensure all Business division labs are updated with the current/appropriate software.

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Implementation Timeline: 2022 - 2023

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Identify related course/program outcomes: At the end of this program, students will be able to manage various computer applications and programming techniques.

Person(s) Responsible (Name and Position): Craig Arnold, Instructor

Rationale (With supporting data): Students need access to the current hardware and software. In addition, students need to remain current with industry technology in order to remain competitive and relevant for employment opportunities.

Priority: High

Safety Issue: No

External Mandate: No

Safety/Mandate Explanation:

Update on Action

Updates

Update Year: 2022 - 2023

10/13/2022

Status: Continue Action Next Year

Microsoft Office 2019 has been the latest technology to be installed in all Business Division classrooms and labs (relevant to all Computer curriculum), but there are some faculty office computers that have yet to be updated (awaiting completion from Technology Services). We are also awaiting the Softlink software to be installed after 5 years to allow instructors to view all lab classroom computer terminal activity from the instructor computer.

Impact on District Objectives/Unit Outcomes (Not Required):

Update Year: 2021-2022

09/13/2021

Status: Continue Action Next Year

Microsoft Office 2019 is now installed in all Business Division classrooms and lab.

Impact on District Objectives/Unit Outcomes (Not Required):

Link Actions to District Objectives

District Objectives: 2018-2021

District Objective 2.4 - By 2021, Increase the percentage of CTE students who achieve their employment objectives by 5 percentage points

District Objectives: 2013-2015

2013-2015: District Objective #1 - District Objective #1 for 2013-2015: Provide effective academic support services as measured by an increase in the rate at which students successfully complete courses.

District Objectives: 2015-2018

District Objectives - 4.2 -Improve the efficiency, effectiveness and communication of human, physical, technological, and financial resources to advance the District Mission.

District Objectives: 2021-2025

District Objective 2.4 - Increase the percentage of CTE students who achieve their employment objectives by five percentage points (job closely related to field of study and attainment of a livable wage) and the number of CTE students who successfully complete 9+ CTE units in a single year by 10%

Program Review - Computer

from 2021-2025.

Action: Reinstate Comp 130 in the GE Pattern, Area: A-2 Oral Communication and Analytical Thinking (PENDING)

All necessary Comp 130 proposal documentation was submitted to the GE Committee for GE Pattern course approval in October 2021. We have reached out numerous times for confirmation or denial, and if denial, a reasoning for denial, but have heard no response either way.

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Implementation Timeline: 2021 - 2022, 2022 - 2023

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Identify related course/program outcomes:

Person(s) Responsible (Name and Position): Tara Bosma

Rationale (With supporting data): This is a top priority for student success, especially after the drop in success rates this past year. Without the inclusion of Comp 130 in the GE Pattern students only have one introduction computer course where often times their abilities are mismatched with the pace of Comp 005. In addition they are often unaware of an alternative introductory course (Comp 130). Therefore, to promote student success and increase transfer rates, Comp 130 needs to be reinstated as a GE Pattern course.

Priority: High

Safety Issue: No

External Mandate: No

Safety/Mandate Explanation:

Update on Action

Updates

Update Year: 2022 - 2023

10/13/2022

Status: Continue Action Next Year

Comp 130 GE proposal documentation was completed on time and sent to the necessary contact/s in October 2021. We continued to reach out via email and in person with the Dean and are awaiting any formal decision result and confirmation of any decision, along with rationale if appropriate. This continues to be a prioritized goal to promote student success given the varying student abilities and needs that it could accommodate as an alternative to Comp005.

Impact on District Objectives/Unit Outcomes (Not Required): This will directly impact District Objective 2.4 - Increase the percentage of CTE students who achieve their employment objectives by five percentage points (job closely related to field of study and attainment of a livable wage) and the number of CTE students who successfully complete 9+ CTE units in a single year by 10% from 2021-2025. We feel strongly that by allowing students to be more properly matched with a class that accommodates their abilities, the overall success rates of course completion for both Comp005 and Comp130 courses will increase.

Link Actions to District Objectives

District Objectives: 2018-2021

District Objective 1.1 - The District will increase FTES by 1.75% over the three years

District Objective 2.4 - By 2021, Increase the percentage of CTE students who achieve their employment objectives by 5 percentage points

District Objectives: 2021-2025

District Objective 1.1 - The District will increase FTES 2% from 2021 to 2025.

District Objective 2.4 - Increase the percentage of CTE students who achieve their employment objectives by five percentage points (job closely related to field of study and

Program Review - Computer

attainment of a livable wage) and the number of CTE students who successfully complete 9+ CTE units in a single year by 10% from 2021-2025.

Action: Business Department Student Guide to Computer Resources

Provide departmental-level course specific document to share information on the computer resources available to the students through COS.

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Implementation Timeline: 2020 - 2021, 2021 - 2022

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Identify related course/program outcomes: 2.4 Increase career technical education course success rates and program completion annually.

Person(s) Responsible (Name and Position): Brian Bettencourt, Tara Bosma

Rationale (With supporting data): Providing students access to information on the available technologies would improve the success for many of our students who have traditionally had limited technology at home and difficulty finding support information. Students are checking out and/or purchasing inadequate computers for their specific courses.

Priority: Medium

Safety Issue: No

External Mandate: No

Safety/Mandate Explanation:

Update on Action

Updates

Update Year: 2021-2022

09/13/2021

Status: Action Completed

Because COS marketing distributed a student guide in fall 2020 we held off distributing a Business Department guide. Our students are still in need of a class specific resource guide to ensure they have the proper computer equipment with relevant software to be successful.

Impact on District Objectives/Unit Outcomes (Not Required): In regard to District Objective 4.2, this document/guide has provided another means of communication and visual aid to assist students in fulfilling their computer course requirements.

Link Actions to District Objectives

District Objectives: 2018-2021

District Objective 2.1 - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years

District Objectives: 2021-2025

District Objective 2.1 - Increase the number of students who earn an associate degree or certificate (CTE and non-CTE) by 5% from 2021-2025.

District Objective 2.4 - Increase the percentage of CTE students who achieve their employment objectives by five percentage points (job closely related to field of study and attainment of a livable wage) and the number of CTE students who successfully complete 9+ CTE units in a single year by 10% from 2021-2025.

District Objective 4.2 - Improve communication practices needed to support organizational effectiveness and continuous improvement across all District units and constituents from 2021-2025.