

Comprehensive Program Review Report



Program Review - Computer

Program Summary

2023-2024

Prepared by: Craig Arnold, Brian Bettencourt, Tara Bosma

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. One of the seven full-time instructors was recently hired as a replacement. All instructors have a master's degree, many with years of teaching experience and/or real-world experience. Currently our instructors are serving 108.2 FTES with a success rate of 57.6%, a 1.2% increase from the previous year, which was a positive move after last year's decrease.

Below is a detailed look at the success rates with information coming from the Program Review (PR) dashboard (Tableau) compared to the previous 2022-2023 program review cycle (data also from the PR dashboard - Tableau) in table form;

Gender

	Female	Male	Unknown	
2023-2024	52.0%	60.7%	52.4%	
2022-2023	55.9%	56.6%	56.3%	

Instructional Mode

	Face-to-Face	Hybrid	Online	Campus		
				Visalia	Hanford	Tulare
Online						
2023-2024	70.9%	49.1%	54.5%	72.5%	49.1%	0% (due to class cancellations and none during this period)
2022-2023	71.7%	54.0%	53.7%	71.7%	54.0%	0% (due to class cancellations and none during this period)
	54.5%					
	53.7%					

Race/Ethnicity

	White	African American	American Native	Asian	Filipino	Hispanic	Multi Ethnicity	Pacific Islander
2023-2024	60.9%	26.7%	-*%	71.0%	-*%	56.5%	65.5%	-*%
2022-2023	61.5%	44.4%	-*%	79.2%	-*%	54.0%	46.2%	-*%

After decreases in the past two cycles, we are now seeing some increases across varying groups. Even though a few groups slightly decreased, success increased overall, showing improvement, especially in the online format/campus overall and the Visalia campus.

Internship Program: The Business Department currently placed approximately 29 students this past academic year in computer and business related internships with approximately 15 participating local businesses per semester. In addition, a new Work Experience Coordinator was hired and placed within the Business Division to continue efforts with connecting students to real-world work experiences and internship opportunities.

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

Full-time Professors: The full-time faculty of the Business Department currently teach 95% of the computer courses. In the last academic year, one adjunct professor taught 2 of the computer courses.

What improvements are needed?: Continued Student Success: Many students still struggle with obtaining adequate computer and/or internet access, despite the laptop and hotspot checkout option through the college. Hotspots were already gone within the first two weeks of the semester. Many students were still receiving Chromebooks when checking out laptops versus the necessary Windows laptops. This 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. It would be helpful if students had to indicate which courses required Windows computers to assist the COS employees who are checking out and distributing laptops to assign the correct laptops from the start.

Additionally, more and more students have been unable to purchase online/access code text materials (despite 2-week free trials in many cases) due to a long wait on financial aid, inhibiting them from completing required assignments. Students not on financial aid were also delayed due to personal finance issues as a result of the present economy. We also noticed a significant increase in textbook prices within the new bookstore.

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 finances to purchases materials has become more prominent. Specifically, it has been a challenge when students do have book vouchers because they can only use them in the campus bookstore, which charges extreme amounts, versus the option to buy online/cheaper versions directly from the publishers. Their voucher funds do not spread as far.

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 continue to 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. Students seem to have adapted more to the online environment, which has show to positively impact online success rates. Meeting that demand has proven beneficial for students, especially given the high enrollment rates. In addition, it has accommodated students who have financial burdens due to the high cost of fuel and living expenses.

We also designed and distributed a Division Technology Essentials job aid physically (classrooms/bulletin boards) and digitally to help students better understand essential hardware and internet access they will need for success in their computer courses.

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.

The Computer Applications Certificate has been updated and approved in CourseLeaf. We are actively working on adding PLO assessment results to the program 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: Increase Student Access to Business/Computer 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: 2023 - 2024

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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): With several full-time faculty slated to retire in the next 2 years, we need to staff these courses with qualified instructors who are also certified to teach distance education courses. This is also vital to maintain our full-time/part-time faculty ratio. Generally, 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.

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.

Additionally, our division needs to replace a recently retired Business/Accounting Full-Time instructor, so one of these two hire requests are necessary.

Priority: High

Safety Issue: No

External Mandate: No

Safety/Mandate Explanation:

Resources Description

Personnel - Faculty - Personnel/Faculty--New/Replacement. (Active)

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

See action rationale.

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 and/or accounting courses as an alternative hire. One of the two is necessary.

Notes (optional):

Cost of Request (Nothing will be funded over the amount listed.): 155560

Link Actions to District Objectives

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: New Faculty Hire for Business/Computer 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

Leave Blank:

Leave Blank:

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

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Priority: High

Safety Issue: No

External Mandate: No

Safety/Mandate Explanation:

Update on Action	
<i>Updates</i>	
Update Year: 2023 - 2024 Status: Action Completed Jessica Gutierrez was hired as a full-time replacement for Business/Computer courses. She began Fall 2023. Impact on District Objectives/Unit Outcomes (Not Required):	09/08/2023
Update Year: 2022 - 2023 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):	10/13/2022

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: Update all computer labs, classroom computers, and office computers to Microsoft 2022

In the next academic year, our division plans to upgrade all Microsoft Suite software from Microsoft 2019 to Microsoft 2022 (with the assistance of Technology Services) in order to keep software current and up to industry standard.

Leave Blank:

Implementation Timeline: 2023 - 2024

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Identify related course/program outcomes: At the end of their program, students will be able to demonstrate competency in Word processing, spreadsheets, databases, and/or web development.

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

Rationale (With supporting data): According to Earthweb, "As of 2022, there are approximately 1.4 billion people and businesses using Microsoft products or services". Microsoft remains one of the most competitive and relative software suites in the business sector and beyond. To stay current with industry demand and ensure our students are receiving up-to-date, competitive skills, we find it essential to continue improving and updating the specific software to a newer version.

Priority: High

Safety Issue: No

External Mandate: No

Safety/Mandate Explanation:

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: 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.

Action: Upgrade and Improve Lab Technologies with Softlink Software

Ensure labs are updated with current technology to meet latest industry developments and trends. We have been awaiting the Softlink software to be installed after 6 years to allow instructors to view all lab classroom computer terminal activity from the instructor computer. This is still not being implemented after many requests to IT. Currently, the Hanford campus has this technology available, but Visalia does not, inhibiting instructors from using the assistive tool to keep students accountable.

Leave Blank:

Implementation Timeline: 2023 - 2024

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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): While teaching in computer labs, students have a screen in front of them at all times during class, allowing for various distractions. As a computer instructor, one can only roam the room so often to ensure students are on track and focused on their screens. The Softlink software would allow the instructor a view of all student screens/monitors in real time to allow for progress checking, staying on track, and ensuring students are following the lesson at a reasonable pace. This would greatly increase the ability to support students during the learning process, especially if they do not feel comfortable speaking up, because the instructor could pick out those needing assistance in seconds and assist accordingly. It is an essential software for computer lab classroom management and scaffolding.

At this point, we are at the mercy of IT specialists to upload the software to all Kern labs.

Priority: High

Safety Issue: No

External Mandate: No

Safety/Mandate Explanation:

Link Actions to District Objectives

Program Review - Computer

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% from 2021-2025.

District Objective 3.1 - Reduce equity gaps in course success rates across all departments by 40% from 2021-2025.

Action: Student Success Rates

Maintain student success at or above 63%.

Leave Blank:

Implementation Timeline: 2020 - 2021, 2021 - 2022, 2022 - 2023, 2023 - 2024

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Identify related course/program outcomes: At the end of their program, students will be able to demonstrate competency in Word processing, spreadsheets, databases, and/or web development.

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

Rationale (With supporting data): Overall student success during 2022-23 was 57.6%. This was a slight increase of 1.2%, which was encouraging after a steep decrease the cycle prior due to pandemic recovery. We are hopeful these rates will continue to be 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: 2023 - 2024

09/08/2023

Status: Continue Action Next Year

After a discouraging year of a steep decrease, we saw a positive increase of 1.2% and are hopeful this will continue upwards in the year to come.

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

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):

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

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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.

Action: Improve and maintain all Business lab technologies

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

Leave Blank:

Implementation Timeline: 2022 - 2023

Leave Blank:

Leave Blank:

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.

This is essential to keep as a consistent action due to rapid technological advancements and industry standards to ensure our students have competitive, up-to-date skills for the workplace and beyond.

Priority: High

Safety Issue: No

External Mandate: No

Safety/Mandate Explanation:

Update on Action

Updates

Update Year: 2023 - 2024

09/08/2023

Status: Action Discontinued

As shown in the explanations below, we continue to evaluate our lab technologies to ensure they are updated and meeting industry standards. That said, we are discontinuing this more general action for specific new actions centered around the two software changes below. See current actions.

Microsoft Office 2019 is still 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). Microsoft Office 2022 is being discussed as a possible upgrade division-wide in the next year.

We are also awaiting the Softlink software to be installed after 6 years to allow instructors to view all lab classroom computer

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terminal activity from the instructor computer. This is still not being implemented after many requests. Currently, the Hanford campus has this technology available, but Visalia does not, inhibiting instructors from using the assistive tool to keep students accountable.

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

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):

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% 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.

Leave Blank:

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

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Safety Issue: No

External Mandate: No

Safety/Mandate Explanation:

Update on Action

Updates

Update Year: 2023 - 2024

09/08/2023

Status: Action Completed

After months of pursuing a final answer and rationale from the General Education Committee Chair, we were formally notified by Linda Flora in December 2022 that Comp130 was not approved for the GE track. The following rationale was provided despite evidence given to support equivalency, "The committee did not approve COMP 130 for GE inclusion. Specifically, the course does not include topics and objectives that address the Area A-2 requirements. Please see the attached documents developed during the committee's review process."

This was disappointing and vague. It seems to be a disservice to students who would be better served being able to have the option of taking Comp130 versus Comp005.

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

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 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.