

Program Efficacy Team Report (Instruction)

2018 – 2019

Name of Department: Computer Science

Efficacy Team: Johnny Roberts, Tim Hosford, Abena Wahab

Overall Recommendation:

Continuation Conditional Probation

Rationale for Overall Recommendation: *The Conditional rating stems from Does Not Meet ratings in Parts I, II, V, and VI. The program presents data without analysis, and does not adequately describe plans to address the challenges detailed in the EMP document.*

While the program demonstrates outstanding commitment to attracting prospective CS majors, with forward-thinking plans by which they introduce and encourage students, there are notable gaps in descriptions of the nuts and bolts of how the program is organized. Despite a robust network of partners and detailed plan to attract students, no specific provision is described to improve the discrepancy in women and African American representation in the program. While the numbers may exceed national averages, progress can still be made.

Low enrollment leading to frequently cancelled classes as described in the EMP are never addressed, nor are plans detailed to remedy the issue. New degrees and certificates are presented as reasons to hope for increased enrollment and graduation, but no details on how classes will be offered to support this. Distribution of online, weekend, evening and hybrid classes is an important part of Pattern of Service that is completely neglected in the document.

Other challenges listed in the EMP, such as certificate approval processes and the number of units needed for a CS AS-T degree are never mentioned or planned around. SLOs are unclear, and only the most recent data is provided, giving the committee little context in light of the low degree count for the 14-15 and 15-16 years. Finally, there is little to no examination of the productivity numbers, or whether the programs feels that they are satisfactory.

Part I: Questions Related to Strategic Initiative: Increase Access

Goal: SBVC will improve the application, registration, and enrollment procedures for all students.

SBVC Strategic Initiatives: [Strategic Directions + Goals](#)

	Does Not Meet	Meets	Exceeds
Demographics	The program does not provide an appropriate analysis regarding identified differences in the program’s population compared to that of the general population.	The program provides an analysis of the demographic data and provides an interpretation in response to any identified variance. The program discusses the plans or activities that are in place to recruit and retain underserved populations as appropriate.	In addition to the meets criteria, the program’s analysis and plan demonstrates a need for increased resources.
Pattern of Service	The program’s pattern of service is not related to the needs of students .	The program provides evidence that the pattern of service or instruction meets student needs. The program discusses the plans or activities that are in place to meet a broad range of needs.	In addition to the meets criteria, the program demonstrates that the pattern of service needs to be extended .

Does Not Meet **Meets** **Exceeds**

Efficacy Team Analysis and Feedback:

Demographics: The department does address the striking discrepancy in female representation within the program. By comparing the college demographics (21.5%) to the field nationally, in which the proportion of women is 18.7% and falling, the program does demonstrate that its representation is better than the national average. However there is no discussion of why this might be, nor whether the trend is improving at the college level. The program also neglects discussion of what it is doing to further encourage female participation specifically in Computer Science, implying that it is content with simply surpassing the national average.

Other discrepancies, such as the under-representation of African American students, are not analyzed in any fashion whatsoever.

Pattern of Service: The department effectively makes the point that demand for Computer Science and IT graduates is growing rapidly, as well as the need for more female representation in the program. It also points out that the program is small *compared to that demand*, consisting of less 25% of the total courses offered. It asserts that they constantly evaluate a range of data points in order to ensure the relevancy of the program.

The department describes outreach efforts such as the dedicated Maker Space and Open Lab, accessible to the college community. It is implied that these programs will make the program more attractive to women, though it does not seem to target any particular demographic. There is a lot to admire about these initiatives, which are further detailed later in the document. However, there is no discussion of the nuts and bolts Pattern of Services such as course delivery (online, evening/weekend, hybrid, etc.), class times, hours of operation for the aforementioned Maker Space and Open Lab, or instructor office hours. These aspects of the program are the most essential for ensuring that students can graduate and transfer, and the complete lack of attention is a glaring omission.

Part II: Questions Related to Strategic Initiative: Promote Student Success

Goal: SBVC will increase course success, program success, access to employment, and transfer rates by enhancing student learning.

SBVC Strategic Initiatives: [Strategic Directions + Goals](#)

	Does Not Meet	Meets	Exceeds
Data/Analysis demonstrating achievement of instructional or service success	Program <u>does not provide an adequate analysis</u> of the data provided with respect to relevant program data.	Program <u>provides an analysis</u> of the data which indicates progress on departmental goals.	In addition to the meets criteria, the program <u>uses the achievement data</u> in concrete planning and <u>demonstrates</u> that it is prepared for growth.
Service Area Outcomes and/or Student Learning Outcomes and/or Program Level Outcomes	Program <u>has not demonstrated</u> that it is continuously assessing Service Area Outcomes (SAOs) and/or Student Learning Outcomes (SLOs) and/or Program Level Outcomes (PLOs) based on the plans of the program since their last program efficacy. Evidence of data collection, evaluation, and reflection/feedback, and/or connection to area services is <u>missing or incomplete</u> .	Program <u>has demonstrated</u> that it has fully evaluated within a four-year cycle and is continuously assessing <u>all</u> Service Area Outcomes (SAOs) and/or Student Learning Outcomes (SLOs) and/or Program Level Outcomes (PLOs).	In addition to the meets criteria, the program <u>demonstrates that it has fully incorporated Service Area Outcomes (SAOs) and/or Student Learning Outcomes (SLOs) and/or Program Level Outcomes (PLOs) into its planning, made appropriate adjustments, and is prepared for growth.</u>

Does Not Meet **Meets** **Exceeds**

Efficacy Team Analysis and Feedback:

Student Success: The retention numbers are solid and the increase in numbers of Degrees Awarded are positive developments. Analysis of the reason for the lack of degrees awarded between 14-15 and 15-16 would be a helpful metric and is not addressed in the document. The modification and creation of degrees, the hiring of faculty, and new marketing is hoped by the department to improve these numbers going forward. The document again notes that Computer Science and IT are the highest paying majors and are in

high demand in the Inland Empire.

SLOs/PLOs: The document lacks a clear listing of SLOs in either the EMP or the Efficacy Report. The program reports close to 79% of students meeting three SLOs in the 2017-18 year, but no data is provided for preceding years. Nor is there any detail given on how SLOs are assessed, or how recently they have been evaluated. The Data is linked to department goals.

The document asserts that the PLO is difficult to evaluate or analyze due to the fact that most of the degrees and certificates have not yet been fully integrated.

Part III: Questions Related to Strategic Initiative: Improve Communication, Culture & Climate

Goal: SBVC will promote a collegial campus culture with open line of communication between all stakeholder groups on and off-campus.

SBVC Strategic Initiatives: [Strategic Directions + Goals](#)

	Does Not Meet	Meets	Exceeds
Communication	The program <u>does not identify</u> data that demonstrates communication with college and community.	The program <u>identifies</u> data that demonstrates communication with college and community.	In addition to the meets criteria, the program <u>demonstrates</u> the ability to communicate more widely and effectively, <u>describes</u> plans for extending communication, and provides data or research that <u>demonstrates</u> the need for additional resources.
Culture & Climate	The program <u>does not identify</u> its impact on culture and climate or the plans are not supported by the data and information provided.	The program <u>identifies and describes</u> its impact on culture and climate. Program <u>addresses</u> how this impacts planning.	In addition to the meets criteria, the program provides data or research that <u>demonstrates</u> the need for additional resources.

Does Not Meet Meets Exceeds

Efficacy Team Analysis and Feedback:

Communication, Culture, and Climate: The department demonstrates a rich and well-developed sense of the needs of students who are prospective CS majors. The document describes a detailed path by which it introduces students to the program via instructor interaction, the Open Lab, and social media. The document also describes the Pathways to Pipelines bridge program.

External/Internal Partnerships: The program details strong partnerships both within and outside the college. The aforementioned Pathways to Pipelines bridge program is a partnership with the Media and CIT programs. External partnerships include NASA and Unity. Further partnerships are being developed with the major tech companies. There is a Cyber Girls seminar planned with local high schools to encourage girls to pursue careers in cybersecurity.

IV: Questions Related to Strategic Initiative: Maintain Leadership & Promote Professional Development

Goal: SBVC will maintain capable leadership and provide professional development to a staff that will need skills to function effectively in an evolving educational environment.

SBVC Strategic Initiatives: [Strategic Directions + Goals](#)

	Does Not Meet	Meets	Exceeds
Professional Development	The program does not identify currency in professional development activities.	Program identifies current avenues for professional development.	In addition to the meets criteria, the program shows that professional development has impacted/expanded the program and demonstrates that the program is positioning itself for growth.

Does Not Meet Meets Exceeds

Efficacy Team Analysis and Feedback:

Professional Development: The department has established a robust professional development network, including Cyberwatch West, Cisco Academy, and applications for NSA Certification. Other avenues of professional development are identified and described.

V: Questions Related to Strategic Initiative: Effective Evaluation & Accountability

Goal: SBVC will improve institutional effectiveness through a process of evaluation and continuous improvement.

SBVC Strategic Initiatives: [Strategic Directions + Goals](#)

	Does Not Meet	Meets	Exceeds
Mission/ Statement of Purpose	The program does not have a mission/ statement of purpose, or it does not clearly link with the institutional mission.	The program has a mission/statement of purpose, and it links clearly with the institutional mission.	
Productivity	The data does not show an acceptable level of productivity for the program, or the issue of productivity is not adequately addressed.	The data shows the program is productive at an acceptable level.	The program functions at a highly productive level and has planned for growth as appropriate.
Relevance, Currency, Articulation	The program does not provide evidence that it is relevant, current, and that courses articulate with CSU/UC, if appropriate. <u>Out of date course(s) that were not launched into Curricunet by Oct. 1, 2017 may result in an overall recommendation no higher than Conditional.</u>	The program provides evidence that the curriculum review process is up to date. Courses are relevant and current to the mission of the program. Appropriate courses have been articulated or transfer with	In addition to the meets criteria, the program discusses plans to enhance current course offerings that link to student/community needs and positions the program for improved student outcomes.

		UC/CSU, or plans are in place to articulate appropriate courses.	
Challenges	The program does not incorporate weaknesses and challenges into planning.	The program incorporates weaknesses and challenges into planning.	The program incorporates weaknesses and challenges into planning that demonstrate the need for expansion.

Does Not Meet Meets Exceeds

Efficacy Team Analysis and Feedback:

Mission Statement: While there is a mission statement, it almost reads more as a description of the pathway to transfer or graduation than a statement of purpose. It is, ultimately, linked to the College Mission.

Productivity: While the data is presented earlier in the document, there is no analysis of the productivity data. The large dip in enrollment in the 15-16 year is not addressed, nor is there any discussion of other factors that could affect enrollment, such as grants, industry standards, intern/externships, access to software licenses, lab space, etc. Many of the challenges listed later in the document would have provided insight here. The low WSCH/FTEF and frequently cancelled classes due to low enrollment are of particular concern for a program that seeks to grow.

Relevance and Currency: There appear to be two courses that are past due for review. These are not addressed in the document, except to say that all courses are articulated and transferable. The documents lists several areas in which the catalog should be updated as new degrees are approved, and the program is working with the appropriate parties to do so.

Challenges: The document lists seven challenges from the EMP document. However few of these are referenced in any planning, either in this section or elsewhere in the document. The document does describe outreach to high schools and ROP programs, but no concrete planning aside from this.

VI: Questions Related to Strategic Initiative: Provide Exceptional Facilities

Goal: SBVC will support the construction and maintenance of safe, efficient, and functional facilities and infrastructure to meet the needs of students, employees, and the community.

SBVC Strategic Initiatives: [Strategic Directions + Goals](#)

	Does Not Meet	Meets	Exceeds
Facilities	The program does not provide an evaluation that addresses the sustainability of the physical environment for its programs.	Program provides an evaluation of the physical environment for its programs and presents	In addition to the meets criteria, the program has developed a plan for obtaining or utilizing additional facilities for program growth.

		evidence to support the evaluation.	
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Does Not Meet **Meets** **Exceeds**

Efficacy Team Analysis and Feedback:

Facilities: The document asserts that the program has adequate material and space and that it is conducive to learning. There is no description or evaluation of this space or material. There is no discussion of how space would be utilized in a program that seeks to grow, or how much growth can be supported with current facilities.

VII: Previous Does Not Meet Categories

Does Not Meet **Meets** **Exceeds**

Efficacy Team Analysis and Feedback: **No previous DNM categories.**