Program Viability Committee Summary

April 22, 2021, 10:00 a.m. to 11:30 a.m. – Zoom

Members present: Garrett Rieck (Noncredit Faculty), Christopher Boltz (Theatre/CTE Rep), Lisa Hooper (Curriculum), Nicole Faudree (Business/COCFA Rep), Jason Burgdorfer (MSHP), Jesse Vera (Adjunct Counselor & AMSA Faculty Co-Advisor), Julie Hovden (Counseling), Regina Blasberg (Applied Tech) & Dr. Omar Torres (CIO)

Guests: Marilyn Jimenez (Academic Senate Administrative Assistant) , Harriet Happel (Dean of Career Education and Integrative Learning & CTE), Rebecca Eikey (MSHP), Don Carlson (Dean of Business), Dr. Kathy Bakhit (Dean of HPPS), Justin Hunt (Student Services Coordinator III (Comp. Operations/Adjunct Faculty), Paula Hodge (DSN, Info & Comm Tech (ICT)/Digital Media)

I. Routine Matters

1. Call to order: 10:03 am
2. Approval of 3/18/21 meeting minutes
    a) The summary will be brough back at the next meeting. The language needs to be changed the word “aid” to “assistant” are conflated and this needs to be clarified.
3. Approval of the Agenda
    a)

II. Reports

1. Year One Status Report: Construction Tech and Manufacturing Program Modification – Tim Baber and Harriet Happel
    a) This item will be tabled and will return on the May 6th agenda.

III. Discussion

1. Program Modification: Computer Networking including Cybersecurity – Harriet Happel
    a) Background: Justin Hunt has been teaching as an adjunct in this program and shared a presentation. This program has already been through a substantial modification. How do we incorporate Cybersecurity, Internet of Things (IoT) and Data Infrastructure into industry 5.10. COVID-19 has accelerated the skill sets required for this particular program. There is acceleration toward Ai Automation and Machine Learning. The college needs to be responsive to this to meet the needs of the students so they can find the jobs that cannot be filled due to a lack of people with the skills sets.
    b) Industry Data: The job market for both IT and Cybersecurity has been growing exponentially in every facet of business. There has been an uptake in salary median range. Nationwide there were 10,470 unfilled employment opportunities in the Cyber Security sphere. These jobs were left open for 6 months or more which indicates a massive need, an industry gap and a responsibility to create this program. There are 2 million Network Technology Employment Opportunities. Pre-Covid-19, Network Technology occupied 4 out of the 10 most in demand jobs nationwide. This trend has continued post COVID-19. Dev Net is a branch of Cybersecurity which is the number 2 jobs in the country. $2 trillion is the estimated economic output for the US Tech Industry. This is 10.5% of the National economy. CompTIA reports that IT and development fields are the most accessible and least geographically dependent fields in the American job market. The number of employer job postings were about 4 million and 20% were occurring or emerging tech roles. Forbes predicts that there is a premium to the machine learning, IT Technology and support fields. In Cybersecurity it is predicted that there is going to be a 31% growth over the next 10 years. The State of California has been the

number one employer of Network Technology jobs and number two in growth. Employment automation is a huge concern for most industries. This encourages not threatens the filed growth. California is in between the 5th and 6th largest economy of the word. If California where a county it would sit as the 18th largest county in the world. This communicates that those programs need to be relevant and embrace current trends. There is no need for a 4-year degree to work in this industry.

c) Existing Curriculum: Lee Hilliard had presented some issues to PV and came up with some creative solutions. CISCO Shops provides the certificates for Networking Technologies. The CCNA Prep I course is a 7-unit course. This is an entry level Certificate program and course. There was an attrition rate of 65%. One in every two students was failing to make the grade. This is a very cerebral course with a lot of theory and content. Student Success Retention data shows this program was at 64% the previous year and it has now jumped to 69% with a 5% jump. However, in 2015 and 2016 the retention and success rates were dropping. There is still a need for creative solutions to get students in the door.

d) New Proposed Curriculum: The idea is to offer 10 courses, 3 units each. Existing courses could be mixed with existing classes. The new programs maximize for newest students the ability to make changes to their immediate goal with little to no consequences. One in every two courses that students take will prepare them for nationally recognized certificates. Coursework is highly support by COMPTIA. This program projects towards remote emphasis, high income careers. Some work has also been done with Paula Hodge to ensure the program is working in concert with regional partners to utilize like resources.

    1. NET TECH 111 and 112: The proposal is to create an additional course. NET TECH 111 would be the only IT fundamentals focused course. This would also be a COMPTIA group and prepare students for the A+ Certification. This course would have an emphasis in cybersecurity. A+ Certification tracks more towards the hardware side.
    2. Naming Conventions: The idea is to create a Network numbering scheme; the second digit would be “6” and this would help identify a Cyber Security branch. The “1” is the level of depth of a course and the “3” would be incremental class. A student could take NET TECH 161 and this could help them move to the next step and they could take a hardware or theory focus. The list of certification prep is offered outside of the COMP range. The proposed naming convention will be easier for a brand-new student in the outer sphere to be more receptive. Those students who are in the inner circle will be familiar with the naming conventions. Course descriptions are fairly broad.
    3. Non-Credit Option: Non-Credit has an agility element that the credit side does not have. This is worth considering in terms of the holistic aspect. The idea of potentially mirroring non-credit could be considered. Student could take these courses and not pay for them if it is not necessary. If a course is mirrored in non-credit a student can retake a course. Students could be sent letters letting them know that they can take additional skills through the School of PPL. This was done in the MEA program with Animation and this increased enrollment. The tenants don’t change but faculty teach to the currency of technology. There are some interesting opportunities such as Ethical Hacking and Penetration Testing. While all programs perform similar functions, new programs become more robust and effective.

e) Human Resources-Faculty and Staff: The department needs to hire at least one full-time

faculty member to the make the course proposal tenable. Faculty and staff will need concurrency and training for CISCO and COMPTIA training. Will Lee Hilliard be replaced? Dr. Omar Torres confirmed the Chancellor's office will be coming out with a memo to the Academic Staffing committee and he is in support of moving forward with refilling the Network Technologies position for next year. There is also support with a quick curriculum development to have a full-time faculty member start in fall of 2022. There was also a recommendation for compensation for Gary Quire and Larry Alvarez and any other faculty who have done work on this curriculum development.

f) Financial Outlays: There is no software license that needs to be purchased. In terms of repetitive software costs with SEC there are licenses for multiple testing suites. These are aligned to the COMP accreditation certifications. Justin has been working with a COMP Rep to determine what may be other costs for materials. There will also be free digital materials available through the SCCRC. However, if there are request for hardcover books then there will be a fee associated. Dr. Omar Torres confirmed that he is committing the district to any financial support needed. Just is also receiving supplemental services for this his time. There is also a budget for Computer Networking that is available.

g) Marketing: More outreach to high schools and target populations is needed. There is also a need to rebrand the program. Need to look at data driven re-assessment and look at how to better serve students by working with IRD. Work closer with SCCR, WASTCH, other institutions, mentors, engagement and community offerings.

h) Proposed Changes:
    1. Changes to degree/certificate offering: The proposal is to shift from a single degree offering to 4 pertinent associate degrees each representing the largest projected industry demands. The proposed program looks at Networking Technology as an entire program which includes A.S. degrees in Computer Networking, Cybersecurity, Enterprise Data and Internet of Things (IoT) and Automation. The second proposal is to increase the number of relevant certificates to 7 offered at strategic locations. The new proposed certificates would be in PC Repair, Linux Administration, Security & Authentication and Dev Ops. These are industry standards and nationally recognized certificates which make students immediately employable.
    2. Bring in equity to disproportionately groups: When looking at disaggregated data by race, African American/Blacks come in at 28% who have completed the program successfully. It is important to present the industry with a diversity of candidates. It is recommended to partner with more BIPOC groups and student alliances. Bring in gender equality as women come in at 57%, outperform men in courses.
    3. Increase access avenues: Offer courses in a variety of delivery formats such as hybrid, in person, Online and OnlineLIVE. Providing resources, virtual learning labs and digital courses resources and materials. Emphasize on meeting students who are both in the (Outer Ring: Out "Front door" Student) those we have not yet entered the field and (Inner Right: Out Technology Workforce Student), student who are already actively working in Technology. Provide economic mobility and support to the workforce in response to emerging technologies.

i) Challenges and Caveats: There is concern with students. There is a matrix from five years ago that now needs to exist with this proposal. This has to be based on content and not based on a course. This is difficult for enrollment services as courses need to equate on the back side. If courses are renumbered this poses challenges as counselors will have a difficult time discerning what students know and don't know. The Curriculum committee

will need to understand what is included in the courses in order to know how to number them. Cyber Security is a template example that is used in the Curriculum Institute for emerging disciplines. Cyber Security and Career Education needs to be available to our constituents.

j) Identify Redundancy and Gaps: Curriculum also needs to see where there may be redundancy or gaps. This will ensure students are not being asked to take unnecessary courses. The regional and national labor market data are not the same. It would have been good to see national data as the argument is that this program is not geographically dependent. This data demonstrates that this work is not done remotely. There are ways to write courses which allow for more evolution in a discipline. Objectives can be written which allow for more dynamic application. If the skill is new then there's a need to create new curriculum but if it not this could be captured in a revision. If a course is revised a student cannot take for credit. Moorpark has a packaging that looks like the proposal. The strive was to model similar to San Jose State. It is good to see what other institutions are doing.

a) Hart District Letter of Support: A letter of support was received from the Director of College and Career Readiness at the Hart District. The letter states how Computer Science is their largest pathway close to 1000 students and based on their feedback they've incorporate Cyber Security and how to build a pathway for their students.

b) LMI Data: Dr. Kathy Bakhit has done some research and has collected links to websites and sample curriculum. The LMI report came from the Orange County/LA Consortium as the college falls within the LA Consortium. There are 5,000 + openings and 5,000 + graduates.

c) Suggestions: It was recommended to include some of the information presented in the program proposal to allow other committee members more time to review the information and formulate their questions. The proposal could return in two weeks with a possible ad-hoc group meeting in between to discuss curriculum and the program map. A group will meet and include Justin Hunt, Harriet Happel, Gary Quire and and Larry Alvarez. It would also be recommended to meet with the Curriculum Chair and someone from counseling. It's recommended the department align with outside agencies to obtain industry recognition. It is possible that these changes could be implemented by fall 2022.

d) Special thanks to all involved in the development of this proposal including Justin Hunt, Larry Alvarez, Gary Quire, Garrett Rieck, Harriet Happel, Paula Hodge, Jason Burgdorfer and past Academic Senate President, Rebecca Eikey.

e) Motion to approve this program by Chris Boltz, seconded by Jesse Vera. Unaimous. Approved.

2. Program Viability Forms – Garrett Rieck
    a) Discontinuance Form: Special thanks to Rebecca for her work and Lisa, Julie who provided feedback. The plan is to begin using this form.
    b) The other forms are on hold due to the next agenda being packed. Any suggestions can be sent to Garrett Rieck. The updated forms will be not be used until the beginning of the semester. Work is also being done on the PV Flow Chars that will be made available on the website and the CANVAS shell.

IV. Adjournment: 11:30 am