

Administrative Response to Program Review Computer Science Winter 2020

During winter term 2020, the Computer Science SAC presented their Program Review findings in a written document to PCC administrators and others with an interest in the discipline. This Administrative Response will: A) note particular highlights of the Computer Science Program and Program Review; B) provide observations and recommendations; and C) provide the administrative response to the SAC recommendations/resource requests.

Noteworthy Efforts or Achievements

- District Collaboration: We applaud you for your efforts to build out courses at the CA and SE campus.
- Adapting some of your current courses to include practice versions of the PSU Proficiency Demonstration exam in midterms and finals.
- Online tutoring has been introduced for CS students.
- Assessment practice significantly improved and found useful, as evidenced by successes in the changes in the content of CS 161 led to a higher pass rate in CS 162.
- The partnership with local high schools to offer courses as dual credit. This includes the relationships with the high school faculty that help facilitate alignment.

Observations and Recommendations

Transfer

- The program review states: "National guidelines, such as those published by the Association for Computing Machinery (ACM) and the Institute of Electrical and Electronics Engineers (IEEE) organizations, are of less importance to the program than the specific transfer requirements of our partner universities." While we appreciate the attention to supporting students to successful transfer, what is being lost in their path to degree when we are not attending to these guidelines? Are students who do not transfer to PSU being negatively impacted by our focus on transfer over career competencies?
- We appreciate your engagement in the statewide Major Transfer Map work for Computer Science and hope that this provides expanded opportunities for PCCs CS students.

Learning Assessment

- The program review states that communication is not emphasized in any CS courses. Given the importance of communication, could assessment measures be tweaked to align with this outcome? For example, presenting a final project to the class.
- The program review document notes that cultural awareness is critical in your field, but not an explicit aspect of your course content. We urge the SAC to consider ways to integrate cultural awareness into their teaching approach, even if not explicitly stated in the outcomes.

Improving Student Access to On-Campus Classes

- On p. 7, the program review states, "Data provided by online learning, data from BANNER reports, and data from learning assessments strongly suggests that delivery mode affects student success and student learning. Simply put, success rates in online classes are lower than on-campus classes, and one way to improve overall student learning and success is to have more face-to-face classes." While it is important to know when and how students are more successful in our classes, the Academic Affairs Council encourages the SAC to think more complexly and nuanced about the delivery method of on-campus and online courses. We would like the SAC to explore how to improve success in online courses as opposed to simply just advocating for on-campus courses instead.

Distance Learning

- On page 14, "Academic integrity in online courses has been an ongoing issue for our program as well as for our transfer partners. Cheating in online CS courses has been detected at PCC, PSU, OSU, and other schools. To prevent online students from cheating on exams, the CS department has implemented in-person proctored exams for CS 161, CS 162 and all 200-level courses." We recommend you look at other solutions for online exams. If a course is offered as an online course, the exams should also be offered online.
- On pg 7, "Simply put, student success rates in online classes are lower than on-campus classes, and one way to improve overall student learning and success is to have more face-to-face classes." Yes, but given that 50% of your students are OL (p23), and especially under our current circumstances of remote learning, there is some urgency to try to understand what contributes to the lower success online. Data from learning assessments is cited; ideally these results would give you some nuanced information regarding content, while Banner reports may shed light on student characteristics. Can D2L provide analytics to help identify content or timing that is problematic?

Online Tutoring

- On p. 16 of the document there is an indication that you intended to discuss online tutoring issues. We are eager to learn more about the issues your

program faces and ways we can support providing better support to our online students.

YESS

- We urge you to engage in additional training and a dialogue within your SAC about how you are actively contributing to increasing equity in your discipline. This includes a thorough review of your disaggregated outcomes and thoughtful reflections on the ways we might be contributing to any disproportionate outcomes you discover. Our system has been built in a manner that perpetuates inequity and it will be essential that we challenge our approach to dismantle the beliefs and practices that are getting in the way of equitable student success.

Administrative Response to Recommendations

SAC Related Recommendations:

- With another remodel coming at the SY campus and demand for classroom space increasing, it is more important than ever to allocate sufficient space for our program at times that students can attend. While not ideal, more temporary classroom space could be created at SY so long as it is equipped with the proper technology. Or, classes could be moved to other campuses and related scheduling and budget issues addressed by administration. It is simply not acceptable to transform on-campus courses into DL courses due to the equity issues noted above.

Planning & Capital Construction, in partnership with Sylvania Administration, are making every effort to maximize available space to ensure that programs will have access to needed spaces. In the event that space is constrained, there will be continued opportunities in the future to offer classes on other campuses. Has the SAC considered hybrid courses as a way of maintaining F2F presence while maximizing use of space?

- In the upcoming reorganization, it will be crucial to address student advising. A sane approach would be to have discipline specific advisors available at each campus district wide. In the same vein, counselors are essential to student success. A system must be put in place so that CPN's trigger an email from an academic counselor followed by mandatory visit to said counselor – currently, they do neither. How can we help students that are struggling if there is no efficacious communication between faculty and support staff?

The Early Alert Works system is in the pilot stage at this time and has not yet been activated. The system will work as follows:

- Instructors use EAB to send an automated email notice to the student***
- The assigned advisor attempts to contact the student (phone or email)***
- Advisor attempts a second outreach***
- Advisor connects with the student to discuss success strategies and makes referrals to resources***
- Advisor closes the case (and submits a student of care report in some cases)***
- Instructor receives a notice that the case is closed.***

In addition, assigned advising will begin later this summer term. The assignments will be based on the six pathways.

- Another topic to be addressed in the reorg is class scheduling. Currently, this is done in an impromptu fashion by department chairs, but this is tough on students since classes in different departments often conflict. A district-wide scheduling department for related disciplines should be established. Or, a system created so that department chairs can confer with chairs of related disciplines to take on this arduous task and are compensated for their time.

We are working our way towards a more strategic methodology for scheduling, hopefully with the help of technology and in alignment with the district-wide approach set forth in the college reorganization.

- Tutoring for CS needs to be made available at the SE and CA campuses. Every quarter, multiple students request this basic support system. This should have happened years ago when the programs first began.

As this issue requires computer systems and appropriate staffing, we urge you to work with the Academic Support Manager team. Academic Support Managers are working to better align district tutoring needs based on student needs.

- Currently, the CS Linux server is supported by CS faculty rather than IT. This is confusing for students and places undue strain on faculty. The correct approach would be to incorporate Linux access into PCC's existing IT infrastructure like D2L. This would likely be an extended project but will be necessary for the CS department to continue to host student work on Linux.

Please contact Troy Berreth, the Director of Infrastructure Services at Portland Community College. He would appreciate an opportunity to discuss this with your group and to work toward a solution. He looks forward to working with you and discussing requirements, objectives and possible solutions.

- A project should be undertaken to bring the CS and CIS departments closer together since students often take classes in both of these departments. Faculty should attend both departments' SAC meetings and receive compensation for doing so. A pathway for faculty from one department to easily teach a course in the other should be established. Finally, a project should be undertaken so that the departments could establish a system of cross-credit for degrees and certificates.

We look forward to hearing more about the ways we can bring the CIS and CS departments closer together. With college reorganization ahead, these kinds of conversations will be critical. Please work with your Division Deans to begin a conversation about how these departments could be better partnered. This is a general goal for Guided Pathways, so attention to the implementation of our pathways structure and function will provide an important opportunity for CIS and CS partnership.

- Lastly, as has been mentioned multiple times above, these changes to support our students need to be undertaken in a principled way, district-wide, in the coming reorg. This is the whole spirit of YESS. In that spirit, redistributing the full-time faculty among the four campuses should be seriously considered. The current impromptu situation of SY lending out faculty needs to stop, and a permanent solution put in place. The most important part of PCC is the instruction, and for true equity among students, the quality of instruction must be the same for all campuses.

We are open to the idea of redistributing faculty across the district. Should a current faculty wish to relocate to another campus, please notify your Division Dean so we can begin this discussion.

Closing

In closing, we want to again thank the Computer Science faculty for sharing the results of your program review with us. We enjoyed learning more about the discipline, your successes and plans for the future. We look forward to supporting your ongoing work on continuous program improvement.

Administrative Response submitted by Cheryl L. Scott, with input from and on behalf of the Deans of Instruction and Dean of Academic Affairs.

Kendra Cawley, Dean of Academic Affairs
 Karen Paez, Dean of Instruction Sylvania Campus
 Cheryl Scott, Dean of Instruction Rock Creek Campus
 Kurt Simonds, Dean of Instruction Cascade Campus
 Sarah Tillery, Interim Dean of Instruction Southeast Campus