VALENCIA COLLEGE

East Campus

2018-2019

Divisional Strategic Planning Brief – Science

Campus Outcome:

Research and develop a plan to address, review, and improve low-performing programs and courses.

Department Outcome:

Develop and refine academic programs and curriculum to best serve our students and part-time faculty

BACKGROUND & DESCRIPTION

While reviewing 2017-2018 student success data, an alarming trend emerged regarding the range in student success data for some of the highest enrolled science courses. As seen in figure 1, some of the courses had an 80% range in faculty student success. These courses are critical to the pathway for science students and student success should not be dependent upon faculty assignment of courses. Additionally, most of the extreme ends of the range were part-time faculty (PT) indicating more support and guidance was essential for optimum performance for students.

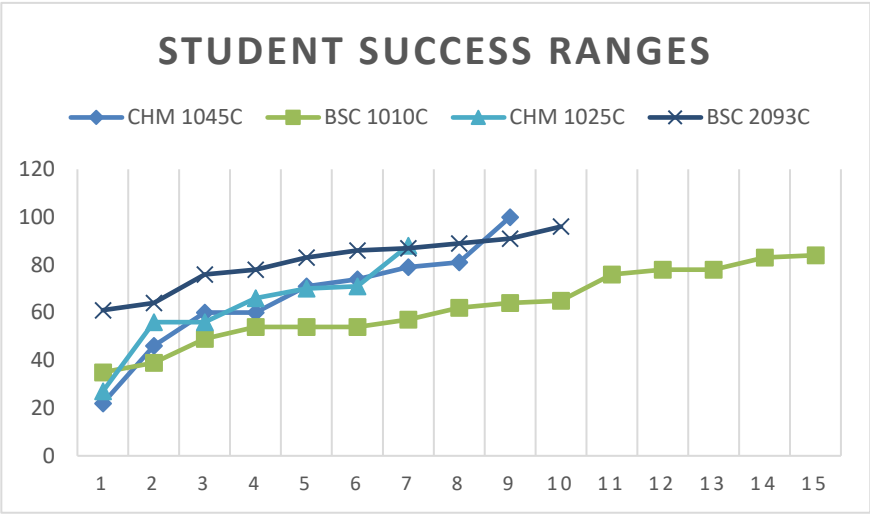

Figure 1. Student success ranges for high-enrolled science classes 201820

INTERVENTION

The disparate student success data presented multiple causation factors, so the intervention strategies developed were also multifaceted. While reviewing the data, full-time (FT) faculty identified possible causes for the inconsistent student success data. As shown in figure 2, the department determined to focus on curriculum and PT faculty engagement work knowing these areas will directly affect the pillars of learning assured and investing in each other.

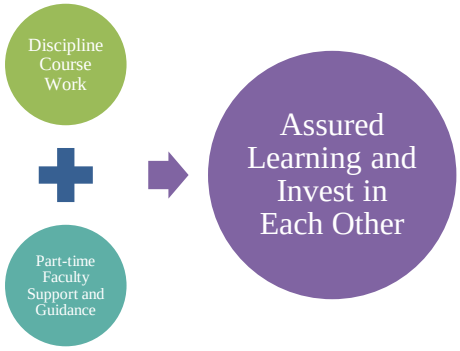

Figure 2 Improving Success Equation

Discipline Course Work

Biology and chemistry are the two disciplines within the department with the most extreme ranges in student success. These two disciplines began meeting on a regular basis and developed interventions to help faculty deliver standard curriculum to facilitate equitable outcomes.

The most robust example of intervention is CHM 1025C, Introduction to Chemistry. This course consistently has one of the largest ranges and has a large percentage of PT faculty teaching most semesters. The FT faculty determined there was a lot of inconsistency in policy and rigor for the course. PT faculty were not following any standard curriculum or policies regarding aides such as formula sheets. FT faculty further discovered many PT faculty did not know the depth on objectives to teach. The team decided to develop a course CANVAS page with example assignments and exams. They are working to formulate guidelines regarding exams. In a further step of collaboration, Amanda Norbutus will coordinate this chemistry curriculum work as a FLO in her ILP.

Part-time Faculty Support and Guidance

Since Fall 2016, the science department has grown 11% (563 students). This enrollment growth has been accomplished largely due to the increased number of PT faculty hired in the last couple of years. The college's current budget constraints demand that more classes are taught by adjunct faculty. The science department currently maintains approximately 64% of courses taught by PT faculty, with some classes taught exclusively by adjuncts. This situation provides many challenges and opportunities that require mindful management. There is a benefit to students when faculty are working as scientists in the workforce, as they gain insightful knowledge beyond curriculum. The challenge is for the department to provide proper support and guidance to maximize the impact of the faculty member. To that end, the responsibility falls to the department to have a structured and meaningful approach to onboarding new PT faculty and those needing development. This is not something that existed prior to Fall 2017, but over the last few years we have formulated an onboarding and first year experience to better support and develop new faculty. The new approach has multiple approaches to fit as many needs as possible.

- Internal/departmental onboarding and first-year experience
- Scheduling priority for Associate Faculty or faculty with the Active Learning certificate
- Monitoring PT faculty's SFI and student success

The Internal/departmental onboarding and first-year experience system was established to provide an extra level of support for PT faculty during the first year. The department does not have leads or coordinators, so we rely heavily on all FT faculty to serve as mentors to new PT faculty. Figure 3 is the first-year experience for new PT faculty.

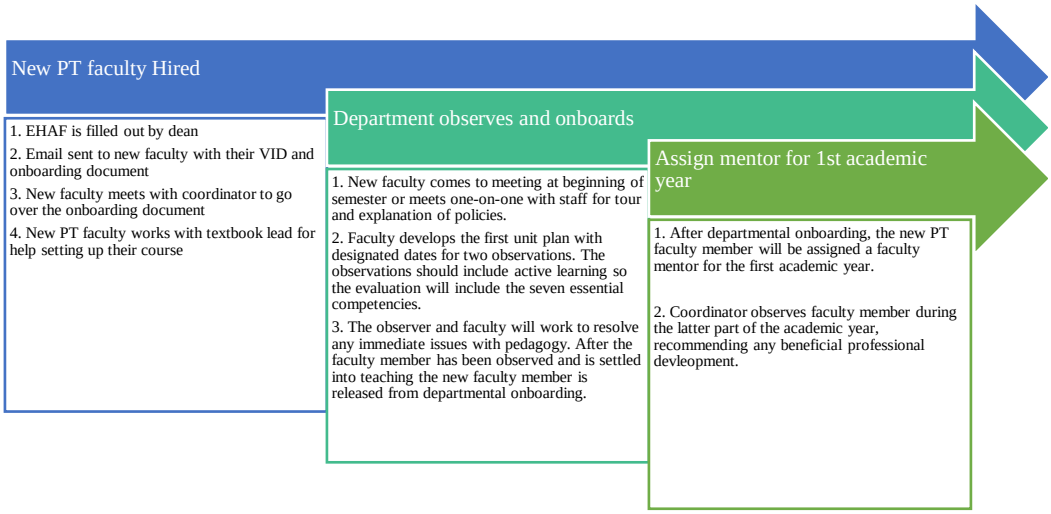

Figure 3 Science Department Onboarding Map

Some PT faculty have taught a substantial amount of time in the past and do not need intensive guidance during the first year. The program is designed to be more or less intrusive depending on the needs of the faculty. The faculty are encouraged to engage in peer observation with

their mentor.

Scheduling priority is used to incentivize new PT faculty to participate in faculty development. Most of the science courses have a lab component that allows for faculty to teach more than twelve contact hours due to the ACA calculation of lab time. This is not the norm for our faculty, but it is a nice benefit to PT faculty. The ability to teach a few more hours and make more money is a strong incentive for faculty. PT faculty are encouraged to obtain their Associate Faculty or Active Learning certificates and will get first priority at extra classes if the enrollment demands additional courses. This has motivated many faculty to pursue professional development and helped fill the need for faculty as our enrollment continues to climb.

Intensive monitoring of faculty is the last important piece of our new system of supporting PT faculty. The dean reviews the Student Feedback on Instruction (SFI) for all faculty at the conclusion of the semester. Faculty receive emails highlighting the positive and developmental feedback. PT faculty are becoming more proactive about the areas of development and sending queries to the dean for suggested faculty development. Due to the large range in student success data, the dean sends emails to faculty in the high-risk category. The high-risk category is defined as success that is outside of +/- 20% of the average. Faculty are asked to reflect of possible causes and develop a strategy to improve. Most faculty are eager to dig in and find improvement. The expected outcomes of this intentional intervention is to make faculty more aware of the multifaceted lens for viewing student success. It is important to acknowledge student responsibility, but it is also important to ensure curriculum and faculty are part of the student success equation.

STRATEGIC RESULTS

The curriculum work is still in the early phases. The chemistry department is working to get everything ready for PT faculty teaching CHM 1025C by Fall 2019. This is important work and has been acknowledged as faculty service to the college, so it is being done while faculty perform their other job responsibilities.

In this academic year, twelve new PT faculty participated in our new onboarding program and were assigned FT faculty mentors. New PT faculty report enjoying the relationship with their mentors and appear to feel a greater sense of belonging with the department. The goal is to have new PT faculty observed at least three times during the first academic year. Some new faculty were very experienced and did not require as much development, but they have still invested in Valencia College faculty development to maximize their teaching potential. The number of Science faculty participating in faculty development courses has increased in the last academic year, resulting in half of thenew PT faculty have obtained/are obtaining Associate Faculty status.

The first group of PT faculty needing development based on SFIs and student success data met with the dean in January. Each faculty member developed actionable items to implement in

their courses to improve outcomes. While some of their outcomes increased, there are still development conversations recognizing the continuous improvement cycle.

REFLECTION

East Campus Science department has maintained double-digit enrollment growth this year. The growth in enrollment has galvanized the need to respond to disparate outcomes. The pattern of allowing ineffective faculty to flounder without support and guidance for improvement has not resulted in strong outcomes for students. Budget constraints have prevented the department from hiring more experience FT faculty, so the need to develop and maintain a strong adjunct pool is vital to our continued success as a department.

The onboarding process is very time intensive for our faculty. They are dedicating many hours to the development of curriculum and PT faculty. As this process expands to more courses and faculty, it is imperative to give FT faculty reassign time to accomplish our departmental goals. Enrollment growth is impressive, but it only takes a few semesters before students decide the risk of failure is too high and pursue their classes on other campuses. The responsibility is on the department to monitor and correct these poor outcomes.

NEXT STEPS

The curriculum work will expand to other disciplines throughout the coming academic year. Microbiology and Anatomy & Physiology are working very closely to develop materials to assist new faculty with curriculum and classroom management. Physics faculty are working to develop a “toolkit” for faculty teaching in the new innovative classroom, which requires active and applied learning. FT faculty are deeply invested in the work and their work product will benefit the department, college, and students.

The onboarding map will be used for the second academic year, which will allow any modifications to occur if areas are identified needing changes. The FT faculty have divided their efforts mentoring new PT faculty, but this year the mentoring plan will be expanded to PT faculty that need development regardless of their status or experience with Valencia College. This work is critical and FT faculty will need college support to engage deeply in the work.

This Fall the department is hosting a faculty conference during Welcome Back week. This time will provide professional development and allow all faculty to interact building a stronger sense of community. Additionally, it will kick off the new Growth Mindset training for STEM faculty as it relates to underserved populations. This conference is a pilot for the department, but the faculty seem interested and eager to exchange great ideas.