Essay 5: Student Success: Student Learning, Retention, and Graduation

CPP’s commitment to “Student Learning and Success”—codified in the Strategic Plan and institutionalized in the Office of Student Success (OSS)—influences every aspect of the University. This is because CPP understands student success through an integrated, holistic model of student learning, engagement, and growth.¹ A holistic approach means these responsibilities are shared across the University, extend from matriculation to post-graduation, and require extensive coordination. This essay details CPP’s organized strategies to promote student learning and belonging, improve graduation rates, and close the equity gap.

Academic Competency and Self-Efficacy

At CPP, *finding* the right classroom is a prerequisite to success *in* the classroom. As such, student success initiatives occur before a student’s first term begins, with clear pathways and transitional experiences that highlight competencies rather than deficiencies. To that end, CPP’s early interventions foster student self-efficacy and belonging.

Academic Preparation (CFR 1.4, 2.2, 2.10, 4.1, 4.3)

One particular barrier to such belonging for CPP’s underserved student population is remediation. CPP data reveals that students who begin with basic skill deficiencies are less likely to persist beyond the first year compared to the general population (attrition rates 12-14% higher).

In 2014, the Department of English replaced remedial coursework with a “Stretch Composition” model. A survey directs students to place themselves in one of three composition tracks (1-, 2-, 3-).

¹ The University follows Astin’s (1984) theory of student involvement and Baumeister & Leary’s (1995) work on belonging in understanding its definition of the holistic student experience.
and 3-course sequences), all with the same learning outcomes. In line with national research on stretch composition programs, assessment of this strategy has been successful at CPP. Alongside other systemic changes—such as the increased opportunities for students to complete English senior experience courses (with specific SAT, ACT, EAP scores) and the expansion of Expository Reading and Writing Courses in K-12—Latino/a and African American students show a dramatic decrease in English remediation rates and DFW rates.

Further, an extensive portfolio review of student work reveals that students who chose the three-course sequence over the two-course sequence demonstrated higher written communication skills, even if this was not evident in overall GPA. This data suggests that course GPA is not the only indicator of student learning, affirming the University’s more holistic approach to student success. Overall, CPP’s interventions have been successful: from 2012-2017, remediation rates decreased from 32.4% in 2012 to 25.3% in 2017.

Learning from the success of DSP and stretch composition programming, and in response to the CSU Executive Order 1110 that significantly revises remediation, the University undertook a comprehensive redesign of math/quantitative reasoning. Beginning in fall 2018, students will be able to choose a track in Algebra, Statistics, and Quantitative Reasoning to foster student engagement, agency, and more professionally-relevant support the diverse career goals of CPP students.

Transition Programming (CFR 2.2, 2.3, 2.14)

Scholarship shows that students benefit from substantive onboarding experiences that introduce students to academic expectations, provide effective social support systems, and foster a sense of belonging and connectedness to the campus community. A key feature of CPP’s programming, in line with WSCUC’s recommendations in the 2016 action letter, is to understand the unique
opportunities and challenges of our students. One signature program at CPP is the STEM Success Coordinated Network,\(^2\) which includes multiple interventions and first-year initiatives for unique populations on campus. The Network provides three pillars of support for students: academic support, scholarly programs, and mentoring. STEM Success activities include a targeted orientation experience, a guided math curriculum, a First-Year Experience course and lab, peer mentorship, and the freshman innovation program “CPP Shark Tank.” More, the program works across departments, disciplines, and divisions to capture and support unique populations at CPP (Appendix ##).

Two examples illustrate the broader success of the University’s efforts: EOP Summer Bridge and PolyTransfer. Following dramatic increases in transfer student enrollment CPP established the PolyTransfer Program to provide summer transition programming, peer mentoring, professional workshops, personal goal development, and faculty education. The program holds a persistence rate of 96%, 6% higher than its comparison group. Similarly, EOP Summer Bridge is an example of a more targeted transition program that exposes first generation, URM, and low-income students to academic and social expectations, policies and regulations, and resources and services. The CSU Dashboard for High Impact Practices shows that from 2012-2014, CPP Summer Bridge participants had an average 11% higher first year persistence rate when compared to similar non-participating students. Both of these programs demonstrate CPP’s commitment to belonging and self-efficacy by cultivating meaningful relationships with faculty, staff, and peers.

\(^2\) [http://www.cpp.edu/~stemsuccess/index.shtml](http://www.cpp.edu/~stemsuccess/index.shtml)
Student Learning and Development (CFR 2.5, 2.13, 4.1, 4.3, 4.4)

Once students integrate into the community and begin their coursework, the campus’s responsibilities shift toward more direct support for student learning and development in the classroom. The University provides a broad range of resources for students as well as faculty (see the Course Redesign Institute).

Learning Resource Center

Student academic support is critical to support student learning and academic success. The Learning Resource Center (LRC) has three branches in support of this mission: the Bronco Tutoring Center, the University Writing Center (UWC), and the Reading, Advising and Mentoring Program (RAMP). While the UWC provides peer tutoring for written communication on campus—including thesis formatting and GWT preparation—Bronco Tutoring provides more comprehensive tutoring in all subject areas. Both provide flexible access points through appointments, drop-ins, and online workshops.

RAMP is a U.S. Department of Education TRiO project serving 250 students who identify as first-generation, low-income, or disabled. Its core services are reading tutoring, supplemental academic advising, financial literacy, and peer mentoring, and it consistently exceeds its objectives of improving persistence, academic standing, and graduation rates.

Supplemental Instruction (CFR 2.2a, 2.5)

In 2016-17, college and program leaders began to develop, implement and track interventions intended to improve pass rates without compromising rigor or quality. Each college submitted a comprehensive plan to address courses with the highest failure rates. The proposed strategies included the expansion of faculty-led supplemental instruction, learning assistants, peer
mentoring, targeted URM Success Workshops, and course redesign. In 2016, CLASS identified EC 201: Principles of Economics as a high DFW course with significant student impact (a GE course with 3,000+ students enrolled per year) and piloted two interventions in spring 2017: a “Values Affirmation” approach and Supplemental Instruction. Both interventions yielded positive results, including as much as a 13% drop in DF grades against the control group. The study allowed Economics to identify areas for improvement, and the department is working with CLASS and the OSS to provide greater training for and accessibility of supplemental instructors.

In fall 2010, the Department of Physics & Astronomy created a designated physics tutoring room staffed by physics faculty, instructors, and talented undergraduate students working as Learning Assistants. The tutor room provides an average of 450-500 hours of free tutoring each year to the 2,500+ students who take introductory physics courses in the College of Science. In a 2015 student survey, over 70% of students enrolled in one course reported visiting the tutor room, and 70% rated the program “most helpful” to “very helpful.”

**Academic Advising (CFR 2.12)**

Research shows that proactive academic advising is critical to helping students stay on track and obtain their degree. While CPP offers highly successful targeted advising programs (see “Spotlight”), overall the academic advisor to student ratio at CPP is almost three times the national average. Over the last few years, the eight colleges have progressively implemented college-specific student success and advising centers in an effort to provide this type of service, assisted by the 2017 launch of a centralized Bronco Advising Center.

CPP introduced college-based Student Success Teams (SSTs) to facilitate student graduation, reduce attrition, and increase student engagement. Several targeted dashboards help advisors—alongside other key stakeholders—analyze data on persistence, scheduling, enrollment, and
registration to target interventions that maintain student momentum toward graduation (CFR 3.5). These teams also serve as “advising laboratories” that transcend organizational boundaries to help the university identify and resolve institutional impediments, strengthen systems, leverage data, and develop assessment procedures for advising efforts. In AYs 2016-18, SSTs focused on students nearing graduation in an effort to keep students on track to complete their degree through Q2S. These efforts led to dramatic improvement (7% increase) in 5-year graduation rates (2012 cohort) and provide a model for targeting students expected to graduate in 2.5 or 4.5 years. Moving forward, SSTs can use this data to make progress toward GI 2025.

Student Engagement and Holistic Support (CFR 2.11,2.13)

Key to the holistic model of student success is student engagement with campus life through extracurricular activities. There are over 320 registered clubs and organizations that offer students the ability to enhance their leadership and communication skills, form meaningful relationships, and “learn by doing.” Indeed, data from a recent study showed that CPP students who were involved in at least one extracurricular activity had a higher GPA than those students with no involvement (Leon 2017).
Health and Well-Being

The Campus Health and Well-being cluster in the Division of Student Affairs was created—along with a new AVP position—to oversee the campus’s efforts on managing student
development across the CPP community. The AVP now oversees a number of campus-wide initiatives that serve students experiencing housing instability, food insecurity, or emergency/crisis situations impacting financial stability, which has resulted in the Broncos Care Program. The cluster integrates and coordinates the Disability Resource Center, Health Services, Wellness Services, Counseling and Psychological Services, and Survivor Advocacy Services, and chairs PolyCARES, a campus-wide service that strives to promote and maintain the safety and wellbeing of the campus community through positive, proactive and practical risk assessment and intervention.

Residential “College Themed Communities”

[College Themed Communities](CTC) enhance students’ learning and intellectual development by tying the academic experience to residence life. Themes include not only majors, but interests and involvement. The data on CTC shows tremendous promise. [First-year students who participated](http://www.nacada.ksu.edu/Resources/Clearinghouse/View-Articles/Developmental-advising-definitions.aspx) in a CTC earned a higher GPA than those who were first year non-residential students. CTC also showed positive and statistically significant effects on persistence compared to peers who resided off campus. These effects remained significant even after controlling for student demographics, remedial status upon entry, and pre-college academic attainment.

Student Success Coaching

Through a collaborative partnership between the College of Letters, Arts, and Social Sciences (CLASS) and the Division of Student Affairs, CPP will offer supplemental holistic coaching—also known as developmental advising—to underrepresented and low income first year students in the college beginning in the fall of 2018. The pilot is designed to improve first-year retention
rates, student GPAs, and average unit load to ensure students make timely progress toward graduation.

**Career and Professional Development (CFR 1.4, 2.2a)**

Holistic support at CPP also includes preparing students for their professional lives after graduation. CPP’s polytechnic education—with its curricular (essay 4) and co-curricular (essay 3) engagements—promotes professional confidence and career-readiness. Academic programs are supported in these efforts by a robust Career Center and the Center for Community Engagement.

The Career Center provides services like the Career Success Conference, classroom instruction activities, a summer workshop series, a Career Fair (with the most employers in the CSU), Resumaniac—a employer-driven resume coaching event—and CPU 100: Career and Personal Development, a course designed to help students identify their skills and interests. In 2017, the Career Center implemented a new career management software system, “Handshake,” resulting in over 14,000 students creating and updating their profiles. On-campus interviewing in 2017 increased by 25% from the previous year.

Acutely aware of CPP students’ particular needs, the Career Center was one of the first to sponsor the establishment of a “Clothes Closet,” a free resource for students to find gently-worn professional clothing donated by the campus community. The Closet runs an annual Pop Up event serving over 600 students, and hundreds more drop in throughout the year. More, the Center works with Apparel Merchandising and Management students to inventory, market, and assist students with the task.

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4 [https://www.cpp.edu/~career/student/clothes-closet.shtml](https://www.cpp.edu/~career/student/clothes-closet.shtml)
Center for Community Engagement

CPP embraces the value of service learning in both its polytechnic identity and its ILOs. Service learning not only asks students to apply classroom skills to professional situations, but does so with an eye toward global citizenship. The Center for Community Engagement coordinates these activities at CPP, running a Faculty Fellows course design cohort, distributing mini-grants, maintaining data on service learning courses at CPP, overseeing the “Bronco Volunteer”\(^5\) program and participating in the “Learn through Discovery”\(^6\) program. The success of these interventions was recognized in 2015 through the President’s Higher Education Community Service Honor Roll, for its “exemplary commitment to neighboring communities.”

Graduation Rates

Since 2005, without exception, the University increased its graduation rates. Most notable is that these gains were made alongside record University enrollment: while the student population increased 30% since 2005, the University grew more efficient in helping students meet their graduation goals. These increases are true across the board, with all eight academic colleges improving their rates.

The WSCUC Graduation Rate Dashboard (GRD) is a new tool and the campus is still developing an understanding of how to interpret the results. Tentatively, the GRD provides evidence that CPP outperforms peer institutions on the proportion of units granted that are eventually “redeemed” for a degree from our institution (Unit Redemption Rate [URR]) and the proportion of students entering CPP that eventually graduate from our institution (Absolute Graduation Rate

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\(^5\) [https://www.cpp.edu/~cce/bronco-volunteer/index.shtml](https://www.cpp.edu/~cce/bronco-volunteer/index.shtml)

\(^6\) [http://www.cpp.edu/~learndiscovery/](http://www.cpp.edu/~learndiscovery/)
[AGR]). The GRD notes that sustained enrollment increases depress the URR and AGR, making this measurement all the more impressive.\textsuperscript{7}

More, the case study shows that average annual units completed by CPP students increased by two over the last eight years. This data point points to the University’s continued improvement regarding graduation rates, and well-position the University to achieve the CSU Chancellor’s office ambitious graduation rate goals set forth in the Graduation Initiative 2025 (GI 2025).

Beginning with the 2018-19 Program Review cycle, graduation rates—along with retention rates—will be provided directly to departments for consideration of continuous improvement.

### CPP GI 2025: Progress

<table>
<thead>
<tr>
<th>Metric</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2025 Goal</th>
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<tr>
<td><strong>Freshman 4-Year</strong></td>
<td></td>
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<tr>
<td>Graduation</td>
<td>17.8% (2011-15 Cohort)</td>
<td>21.3% (2012-16 Cohort)</td>
<td>22.8% (2013-17 Cohort)</td>
<td>38.0%</td>
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<tr>
<td><strong>Freshman 6-Year</strong></td>
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<tr>
<td>Graduation</td>
<td>63.2% (2009-15 Cohort)</td>
<td>68.9% (2010-16 Cohort)</td>
<td>66.1% (2011-17 Cohort)</td>
<td>73.0%</td>
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<tr>
<td><strong>Transfer 2-Year</strong></td>
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<td></td>
</tr>
<tr>
<td>Graduation</td>
<td>17.3% (2013-15 Cohort)</td>
<td>18.2% (2014-16 Cohort)</td>
<td>23.8% (2015-17 Cohort)</td>
<td>29.0%</td>
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</tbody>
</table>

\textsuperscript{7} [Link](https://www.wscuc.org/resources/about-the-graduation-rate-dashboard#t420n1557)
Table 1 - GI 2025 Progress (Source: CPP Tableau Dashboard)

<table>
<thead>
<tr>
<th>Transfer 4-Year Graduation</th>
<th>74.6%</th>
<th>72.5%</th>
<th>77.6%</th>
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<tbody>
<tr>
<td>Gap - Underrepresented Minority (URM)</td>
<td>13%</td>
<td>12.8%</td>
<td>14.4%</td>
<td>0.0%</td>
</tr>
<tr>
<td>(2009-15 Cohort)</td>
<td>(2010-16 Cohort)</td>
<td>(2011-17 Cohort)</td>
<td></td>
<td></td>
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<tr>
<td>Gap - Pell-eligible</td>
<td>6.5%</td>
<td>5.5%</td>
<td>5.3%</td>
<td>0.0%</td>
</tr>
<tr>
<td>(2009-15 Cohort)</td>
<td>(2010-16 Cohort)</td>
<td>(2011-17 Cohort)</td>
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</table>

The Equity Gap (CFR 1.4, 2.5, 2.6, 4.3)

A key feature of GI 2025 is the elimination of the Equity Gap. CPP’s URM graduation rate and gap is comparable to the national average. When contrasting the University’s four-, five-, and six-year graduation rates with the 2008 (most recent publicly available) national average the University’s averages are consistent, while the equity gap for URMs trend slightly to significantly better. Similarly, Integrated Postsecondary Education Data System (IPEDS) data identifies CPP as third among its CSU comparison group in URM graduation rates and fifth in its national comparison group.8

Internally, the University shows substantial improvement in URM graduation rates over the last decade. From the incoming freshman class of 2005 to the incoming freshman class of 2011, the

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8 Notably, only one CSU with a comparable profile—CSULB—surpasses CPP on these measures. Similarly, only one other nationwide comparison has as sizeable a URM population—CSULB—among the 34 campuses and higher overall and URM graduation rates. This URM-adjusted measure places CPP at No. 2 among the 34 IPEDS comparison schools.
6-year graduation rate for URM students increased 18.3%, compared to a 15.8% increase for non-URMs. Transfer students fare even better: when analyzing 2-year graduation rates from 2005 to 2015, the gap between non-URM and URM students averaged only 2.29% (with some years—2012, 2014—inverted).

CPP’s early successes in closing the equity gap reflect the University’s attentiveness—following WSCUC’s recommendation—to make more informed interventions through stronger awareness of student needs. CPP uses several metrics to hear the voices of its students, including campus climate, NSSE, senior exit surveys, and focus groups. From this information, the University is able to better provide targeted interventions that meet the particular needs of CPP students.

The Future of Student Success (CFR 4.7)

The scale of implementing an integrated student success model and closing the equity gap requires a well-defined strategy. Among the “Strategic Initiatives and Goals” identified in the Strategic Plan and the “Action Steps” of the Academic Master Plan are the seeds of CPP’s continuous improvement in this area. Notably, “creat[ing] a culture that promotes wellbeing and resiliency” (SP 2.6) and “improving the use of data to monitor the progress of student groups, including implementation of early alerts and predictive analytics” (AMP 4.4) are already under way, providing guided pathways for student success.

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9 While the 6-year equity gap in graduation rates is 14.4% (2011 cohort) and the 4-year rate is 11.3%, analyzing persistence rates beyond the first four years shows URM students persisting at a 3-6% rate higher, indicating they are taking longer to graduate. Therefore, the ultimate graduation gap between the two populations—regardless of time—is likely to be in the single digits.

10 For example, the NSSE 2017 results demonstrate that the University averages lower than the comparison group in advising indicators. This data helped guide University efforts to strengthen advising, specifically for first-year students, the University has continued making significant progress in this area, which will be reflected further in this report.
In addition, CPP is working to hire more diverse faculty, remove institutional impediments, understand student needs, adopt an equity-minded framework, and redesign courses. An illustrative list of current projects include the following:

- CPP will implement EAB’s Student Success Collaborative in 2018, a predictive analytics and early alert system that helps advisors conduct proactive advising management and support real-time tracking and reporting.
- The University will launch a comprehensive campaign to provide temporary, emergency financial support to students in need.
- Colleges and the Bronco Advising Center will carry out a multi-year plan to reduce the advisor-to-student ratio and professionalize advising by enhancing advisor competencies. Specifically, CPP is hiring eight retention and graduation specialists and an e-advising coordinator to support the expanded vision of academic advising.