

STUDENT OUTCOMES COMMITTEE OF THE BOARD OF TRUSTEES

Thursday, September 2, 2021

1:00 p.m.

Zoom

AGENDA

- (1) Executive Session
- (2) Public Session
 - (a) Approval of the Minutes of June 3, 2021 (A)
 - (b) Academic Program Reviews (A)
 - Facilities Management (A.A.S. degree)
 - Construction Management (A.A.S. degree)
 - Respiratory Care Technology (A.A.S. degree)
 - What changes in the Programs have occurred as a result of assessment? Has continuous assessment taken place?
 - What actions have been taken to address recommendations made in the last Program Reviews?
 - To what extent does the Committee agree with the Program Review findings and recommendations?
 - What is the Committee's action recommendation to the full Board?
- (c) New Business

Guests:

Mr. David Bertram, Department Head for Architecture, Design and Construction

Ms. Paula Behrens, Coordinator for Facilities Management

Dr. Chae Sweet, Dean of Liberal Studies

Dr. Jocelyn Lewis, Department Chair - Allied Health

Ms. Lisa Fielding, Faculty, Coordinator of Respiratory Care Technology

Ms. Catherine Blaine, Faculty, Respiratory Care Technology

Dr. Vishal Shah, Dean of Math, Science and Health Careers

Attachments:

Minutes of June 3, 2021

Academic Program Review: Facilities Management A.A.S.

Academic Program Review: Construction Management A.A.S.

Academic Program Review: Respiratory Care Technology A.A.S.

**STUDENT OUTCOMES COMMITTEE OF THE
BOARD OF TRUSTEES**

MINUTES

Thursday, June 3, 2021

1:00 p.m.

Zoom

Presiding: Ms. Posoff

Committee

Members: Mr. Clancy, Ms. Ireland, Ms. McPherson

College

Members: Dr. Generals, Dr. Hirsch, Dr. Roberts, Dr. Thomas

Cabinet

Members: Ms. Witherspoon, Dr. Zanjani, Ms. Zellers

Guests: Mr. Acosta-Morales, Mr. Geissing, Ms. Gordon, Mr. Joyce, Dr. Sanders, Dr. Sinnott, Dr. Voltz

(1) Executive Session

There were no agenda items for the Executive Session.

(2) Public Session

(a) Approval of the Minutes of May 6, 2021

The minutes were approved unanimously.

(b) Academic Program Reviews

Liberal Arts – Social/Behavioral Science (A.A. Degree)

Dr. Sinnott, from the Office of Assessment and Evaluation, highlighted the program's retention rate and growing number of graduates. In part due to Mr. Joyce's efforts to ensure a smooth path and that credits will transfer, students are transferring to four-year institutions. FYE 101, the first-year experience course required by the program, was implemented in Fall 2016; assessment of student learning is an integral part of continuous improvements for this course and the program in general. It is recommended that the program explore opportunities to partner with colleges and local Philadelphia organizations to raise awareness in the community about career opportunities and professions. Mr. Joyce, the program coordinator and Associate Professor of English, noted that increases coincided with the College's Guided

Pathways efforts, including wrap-around services and curriculum redesign. There are five advisors assigned to the program's students who are aware of the differences in related programs and transfer institutions and guide students appropriately. Primarily, students want to work in social work and in the city. Enrollments have been steady and students are career-aged (23-29). The College should provide messaging to the city that there are students who can fulfill the needs of the city in line with Mayor Kenney's budget. Moreover, the College could show young men in the city who are de facto social workers in their communities that this program is an option.

Mr. Joyce has met with the Director of Student Transition Success Programs who oversees the Center for Male Engagement to discuss programming for the next year, including a panel of alumni who continued their studies and now work in the field. He will also meet with the Associate Director of the Catto Scholarship to alert Catto scholars to the program and being a social worker in the city. Ms. McPherson said she would be willing to facilitate introductions between the program and Black social work organizations in the city.

Music Performance (A.A. Degree); Sound Recording and Music Technology (A.A.S. Degree)

Dr. Sinnott explained that the Music Performance program evolved from the closure of another program, which was a recommendation from the prior audit. The department developed an enhanced music performance program and transitioned students seamlessly to the new program. It is an expensive program, but its contributions are significant. Highly qualified faculty meet with students individually; it is the only program at the College that offers this kind of instruction. Students often go into music therapy and education fields, as well as performance. The program prepares students to audition for baccalaureate programs. Transfer opportunities have expanded, including with Kutztown University, Rowan University, and Berklee College of Music Online, with expected agreements with Temple University and University of the Arts.

Regarding assessment of student learning, the department has been a leader in moving to digital assessment (in Canvas) and analysis (using AEFIS for all assessment reporting) and is on track to assess each program learning outcome each semester. Mr. Geissinger, the department head, noted that Music Performance is a select program. These students know they want to pursue music, but many do not have the skill set coming into the College. The program made curriculum changes to keep students on their path, to move them through the course sequence, and encourage them to complete their degree before transferring. The department examines various ways to get students into the program, including offering options that are not offered elsewhere, such as the Piano Technician Proficiency Certificate (which is akin to a workforce development program within the degree).

With the Sound Recording and Music Technology A.A.S degree, the department reaches out to area high schools with similar programs to show how the program is a pipeline for their students and can help them save money. The program developed

two new business music courses to contribute to career planning. The College has almost completed developing a world-class recording studio on campus, which can be used to host events and invite industry representatives to campus. Dr. Sinnott added that students have completed internships at local recording studios, post-productions facilities, etc.

Assessment for the Sound Recording and Music Technology program is similar to that of Music Performance; both have raised their benchmarks for their assessments. A recommendation from the review is for the program to address the low persistence rate and student academic standing; factors impeding student progress and barriers to student success need to be identified and understood. Mr. Geissinger plans to leverage extra-curricular activities associated with Spring Garden Records to increase retention. He is also considering programs for DJ studies and music for video games. Mr. Geissinger wants the College to be on the cutting edge and have students come out with the skills for expanding fields.

While the program has high costs, it has access to the Perkins Local Plan grant for career-technical education programs. The program is strategic with purchases to bring in boutique items they will use in the studio to supply students with the smartest tools in the classroom that are essential to preparing students for employment.

Action: The Student Outcomes Committee unanimously recommended that the Board of Trustees accept the program reviews for the Liberal Arts – Social/Behavioral Science A.A., the Music Performance A.A., and the Sound Recording and Music Technology A.A.S. programs with approval for five years.

(c) Catto Scholarship Update

Dr. Thomas presented end-of-semester data for the inaugural semester of the Catto Scholarship, lessons learned, and plans for moving forward. The program has developed a robust dashboard which includes information on the 132 scholars related to area zip codes, average expected family contribution, age, and race. The racial breakdown of the scholars mirrors that of the city and the high school district. Dr. Thomas also provided data on placement in English (most students placed at college-level with a linked developmental course) and math (those who placed too low were able to take an accelerated course).

Regarding academic progress, 16 students earned a 4.0 GPA, 32 earned honors, and the “rising stars” group was comprised of 92 students with an average GPA of 2.5. For course pass rates, Catto students had an average course pass rate of 63%, compared to non-Catto students at 70%. It is expected that Catto students should over time be able to perform at or outperform non-Catto students. While students were still registering for the next semester, Catto students had a higher point-in-time retention rate than non-Catto students and the program expects a higher retention rate as registration goes on.

For developmental English courses, Catto students outperformed the baseline; for highest level of developmental English, they were on par with non-Catto students but below non-Catto students for the lower level. With developmental math, Catto students performed below both the baseline and non-Catto students. The program is working on support options for these students. Success coaches met with all Catto students in the spring semester, for a total of 490 meetings. To address basic needs, 111 Catto scholars completed Single Stop profiles and were directed to appropriate benefits. The program did survey students regarding the stipends provided by the city. Because of COVID, stipends were distributed in cash and the majority of students used the funds for food for themselves or their families and utilities/internet/cell service. In the future with in-person learning, funds will be distributed differently, such as with Lion cards.

Based on a review of data, the program will implement a first-semester foundational course sequence to include math, English, and a first-year experience course. This will provide students with an effective foundation for their studies. Dr. Thomas noted the importance of academic advising and of data collection and analysis. The program will also build on best practices the College already has implemented based on data. Ongoing updates are provided to the city and the Mayor's office, which in turn provides information to the city council. Dr. Voltz, the Executive Director of the Catto Scholarship, explained that they have bridge programs for upcoming cohorts to engage those scholars early and retention efforts planned for current scholars.

(d) Update on Academic Program Review Recommendations: Liberal Arts: Honors and Behavioral Health/ Human Services

Dr. Hirsch explained that the Liberal Art: Honors program has made progress in their redesign. With the Behavioral Health/ Human Services program, the faculty have been resistant to making changes. Future status of the programs will be addressed at the October Committee meeting.

(e) New Business

There was no new business.

Next Meeting

The next meeting of the Student Outcomes Committee of the Board is scheduled for September 2 at 1:00 p.m.

Attachments:

Minutes of May 6, 2021 meeting

Academic Program Review: Liberal Arts: Social-Behavioral Science

Academic Program Review: Music Performance

Academic Program Review: Sound Recording and Music Technology

Catto Presentation

Update on Academic Program Review Recommendations: Liberal Arts: Honors

Update on Academic Program Review Recommendations: Behavioral Health/ Human Services

Community College *of* Philadelphia

Academic Program Review: Facilities Management A.A.S.

Authors:

Paula J. Behrens, Elizabeth Gordon

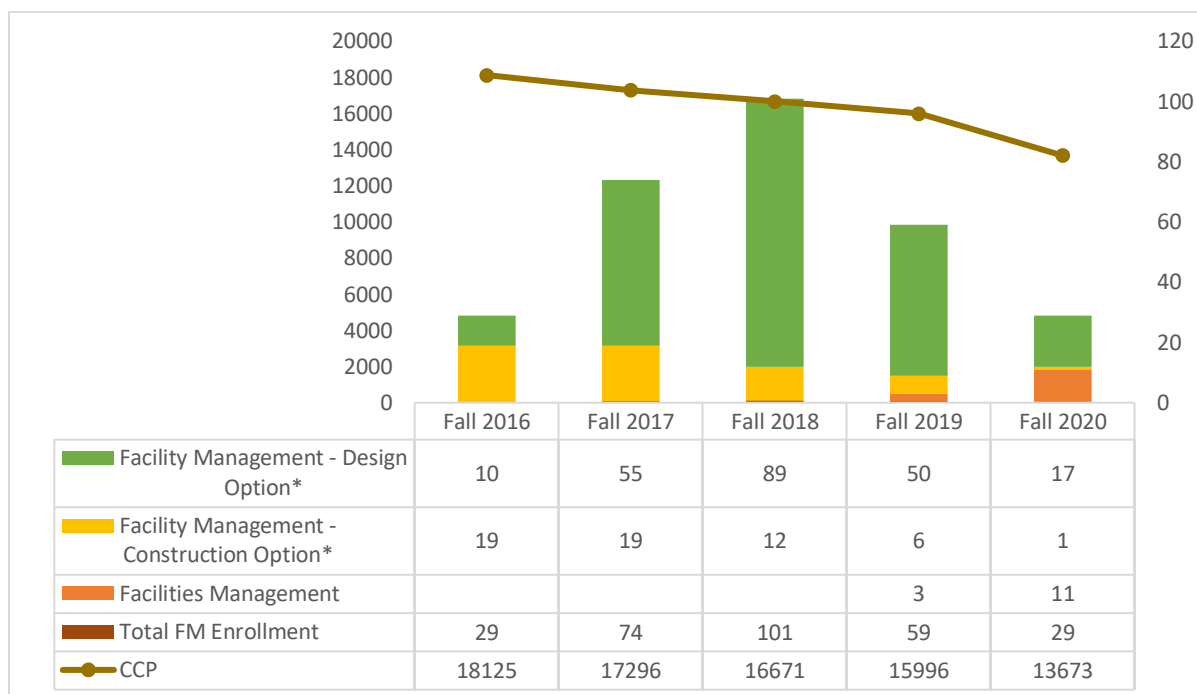
Fall 2021

1. Executive Summary

A. Key Findings

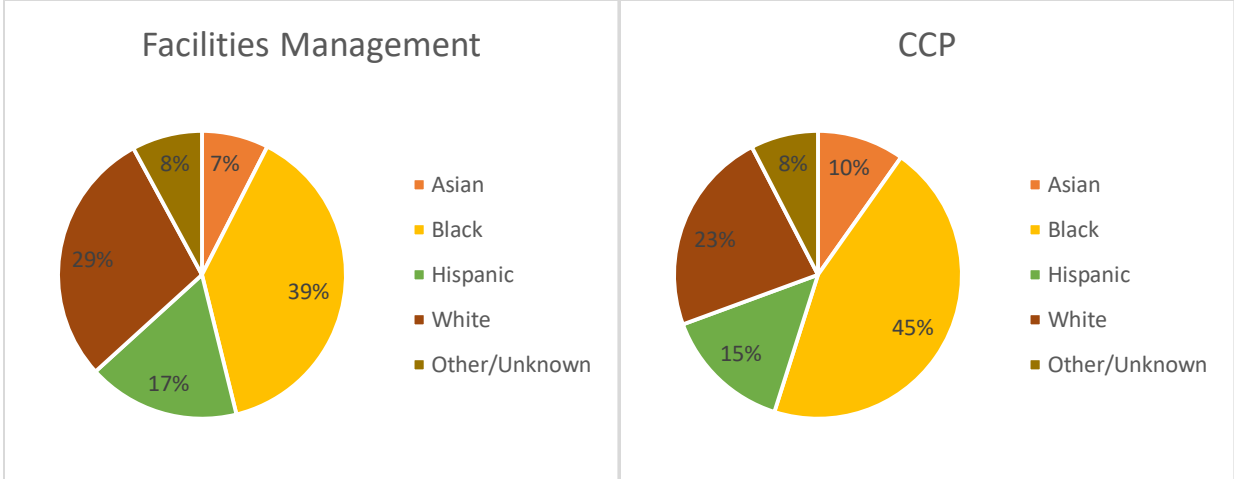
Enrollment and Demographics

- Over the period studied, Program enrollment rose from 29 in Fall 2016 to a high of 101 in Fall 2018, and then declined again to 29 in Fall 2020.

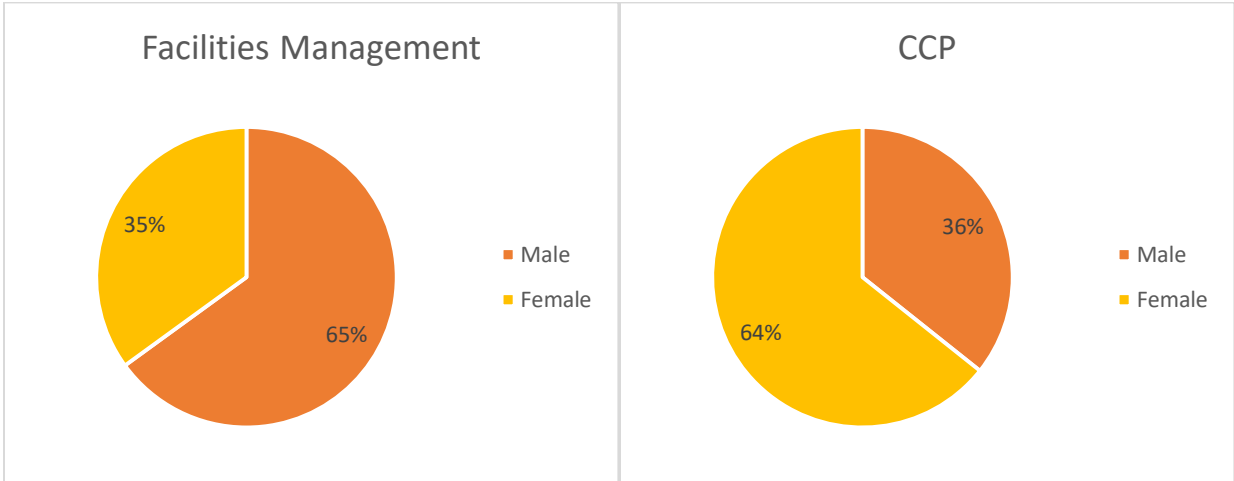


*Two different degree programs (Facility Management – Design Option and Facility Management – Construction Option) were merged, effective Fall 2019, to create a single Program (Facilities Management) with 2 concentrations (Design and Construction).

- Two other programs within the Architecture, Design, and Construction (ADC) department, Interior Design and Architecture, were revised to have non-select admissions effective Fall 2019. Facilities Management saw a decrease in enrollment following this shift, as it had been used as a “holding program” for students intending to apply to the department’s select programs from 2017 to 2019.
- The Program enrolled a higher proportion of students identifying as White (28.8%) than did the College overall (23.0%), and a lower proportion of students identifying as Black (38.6%) than the College’s overall (45.1%).



4. The Program enrolled a higher proportion of students identifying as Male (65.0%) than did the College overall (35.8%), and a higher proportion of students identifying as Black Male (27.1%) than did the College overall (14.4%).



5. The Program enrolled a larger proportion of students over the age of 30 (31.3%) than did the College overall (25%).

Retention

- 6. Fall to Spring, the Program averaged a lower proportion of students who persisted within the same program (54.1%) and a higher proportion of students who returned to a different program (10.6%) and who graduated (5.1%) than did the College overall (64.4%, 4.8%, and 2.9%, respectively).¹
- 7. Fall to Fall, the Program averaged a lower proportion of students who returned to the same program (31.7%) and students who graduated (7.4%) than did the College overall (33.6% and 9.7%, respectively).
- 8. Over the period studied, the Program averaged a smaller proportion of students who had earned 24 credits or more (44.7%) than did the College overall (45.7%), and a larger

¹ Retention proportions were also affected by the departmental changes described in Key Finding 2.

proportion of students who had earned zero credits (14.9%) than the College overall (10.5%).

Success and Graduation

9. Over the period studied, the Program awarded 34 A.A.S. degrees.
10. A lower proportion of Program graduates transferred to another institution (42.9%) than graduates of the College overall (48.3%). Two Program graduates also graduated from their transfer institution (28.6%), compared with 11.7% of graduates of the College overall.
11. A transfer agreement to the Bachelor of Science Facility Management program at Temple University, Tyler School of Art became effective Fall 2017.
12. The Program averaged a higher proportion of students who were on Academic Probation on either full-time or part-time status (8.4%) than did the College overall (7.4%).

Advisory Committee

13. The Program has an active advisory committee that meets annually.
14. Members include representatives from local transfer institutions including Temple University and the Tyler School of Art at Temple University, as well as representatives from local industry firms including Mennonite Home Communities, the City of Philadelphia's Office of Housing and Urban Development, ARAMARK Corporation, and SMG.
15. Industry representatives on the committee regularly gave feedback concerning the desirability of graduates with A.A.S. degrees in the job market as well as broader industry trends.

Assessment

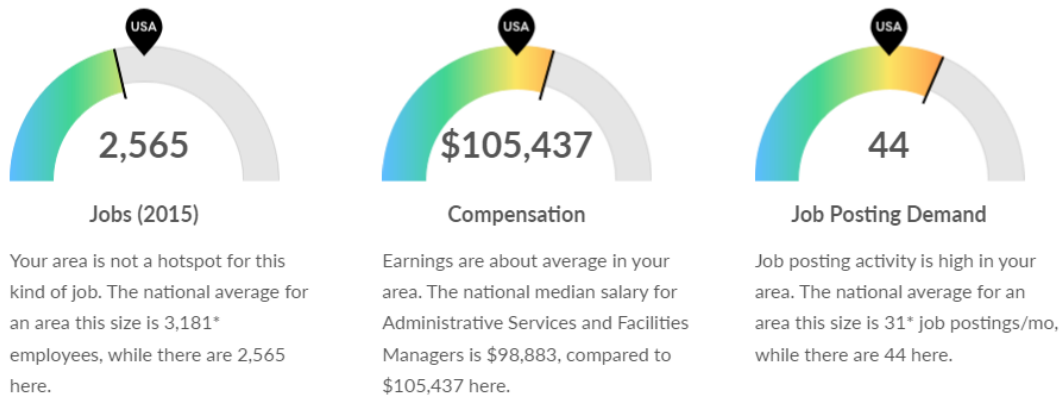
16. Program Assessment was conducted at the course level within the Architecture, Design, and Construction department and reviewed by department faculty at monthly faculty meetings.
17. The Program has four Program Learning Outcomes (PLOs), and each concentration option has one additional PLO.
18. During the period studied, assessment at the Program level was documented for three of the five PLOs associated with the Construction Concentration, and for all five of the PLOs associated with the Design Concentration, indicating that students met the threshold for mastery in one of the five Design Concentration PLOs.
19. Courses mapped to all PLOs associated with the both concentrations were assessed and documented. The Program successfully mapped Course Learning Outcomes (CLOs) to its PLOs within the AEFIS system and has been piloting the use of AEFIS for course assessment since Fall 2020; the Program will begin using AEFIS for all Program assessment as of Fall 2021.
20. Primarily direct assessment methods were employed, including performance on quizzes, projects, and in-class activities, and multiple methods were used to assess nearly all Course Learning Outcomes (CLOs).
21. Action plans concerning course pedagogy and materials were reflected in some course assessment documentation. Course and program revision documents indicate that student learning assessment data and discussions thereof informed revisions.

22. Program revisions were based on both student learning data and input from the Program’s Advisory Committee.

Workforce Development

- 23. The department funds an International Facilities Management Association (IFMA) membership for the Coordinator, and she attends at least five of their events yearly, organizes student volunteers for their major events, and encourages students to attend the Holiday Party in December. Faculty promote student memberships so that students have more opportunities to network with the membership.
- 24. In 2016, the local Greater Philadelphia chapter of IFMA established a scholarship exclusively for FM students at CCP. The scholarship has been awarded to three students every year since then. It began as a total of \$800, increased to \$1,000, and last year, was raised to \$3,000. This means that this year three students will be awarded \$1000 each.
- 25. Graduates from the Bachelor of Science Facility Management program at the Tyler School of Art at Temple University, with which the Program has an articulated transfer agreement, graduate with a 100% job placement rate. Program graduates have been employed at University of Pennsylvania, Comcast, PECO, Boeing, Cushman and Wakefield, among others.

Aggressive Job Posting Demand Over a Thin Supply of Regional Jobs



*National average values are derived by taking the national value for Administrative Services and Facilities Managers and scaling it down to account for the difference in overall workforce size between the nation and your area. In other words, the values represent the national average adjusted for region size.

Cost

26. Over the period studied, the Program ran between 10 and 15 sections of its required courses each semester, which were enrolled at 55.9% capacity on average.

² Employment figures are for the US Bureau of Labor Statistics SOC code 11-3011 (Administrative Services and Facilities Managers) and include employees who have earned credentials beyond the Associates level.

27. Program students benefit from a scholarship fund established in 2016 by the Greater Philadelphia chapter of the IFMA, which is awarded to 3 CCP students in the Facilities Management Program each year.

B. Prior Audit

Recommendations from Prior Audit and Program Response:

1. The department should create a program to accommodate students from the Construction Management, Facilities Management Design, Facilities Management Construction, and Computer Assisted Design students (and possibly Building Science).

The programs within the department have major overlaps in jobs, courses, and outcomes. In a survey of programs at the two and four year level, many schools had programs in one of these areas, but none had as many as CCP. Additionally, in many of these programs at the four year level; the first two years were largely the same courses. The markets (education and employment) do not appear to need the fine-grained divisions among disciplines at the two year level. While those with more education and/or experience may find, eventually, that there are specializations within the field; these divisions do not exist at the undergraduate level. A single AAS program would suffice, perhaps with options presented for students based on their interests, in a model similar to the Justice Program. The program should determine the value of accreditation, and if this has any bearing on the combined program. The above is only one proposal; the department may wish to present an alternative plan for consolidation.

Provide Alternative Plan

Timeline: June 2015

Persons Responsible: Department Head

Program Created to Accommodate other ADC Students

Timeline: Fall 2015

Persons Responsible: Department Head, Program Faculty, Dean of Liberal Studies

Program Response:

The two programs were consolidated into a single program with 2 concentrations in 2018. The program, Facilities Management, replaced the two Facility Management programs. The options were renamed concentrations, Construction and Design. In agreement with the administration and the Advisory Committee, the programs were not combined with Construction Management.

2. Improvements in Assessment.

The department needs to further examine its assessment practice. Standards for student success are quite low (65%), some outcomes are not accounted for in the curriculum maps and others are being assessed by courses not indicated on the map at all. In almost all instances students are achieving outcomes and there is no plan for continuous improvement. Closing the loop activities (changes to teaching, courses, or

programs based on student performance data) must be completed and uploaded to SharePoint. Timeline for assessment must be updated.

Timeline: Summer 2015

Responsible Persons: Program Faculty

Assessment has been addressed by the Department with focus and timeliness. We are up-to-date with current Assessment schedule and expectations. The department faculty has been working assiduously on improving and completing all of the required assessments. They have been completed yearly according to the schedule. Standards for student success have been raised (from 65% to 85%), all outcomes are accounted for in the curriculum maps, and plans for continuous improvement are being developed and implemented. Closing the loop activities (changes to teaching, courses, or programs based on student performance data) were completed, uploaded to SharePoint (2018), and a full shift to AEFIS has been underway since Fall 2020.

B. Action Items

The Office of Assessment and Evaluation makes the following recommendations for the Program.

Enrollment and Demographics

- 1. Increase Enrollment as follows:

	Fall 2020 (Benchmark)	Fall 2021		Fall 2023		Fall 2025	
Headcount	29*	32	10.3% increase in headcount	35	9.4% increase in headcount	39	11.4% increase in headcount
		# of students by category	% of students by category	# of students by category	% of students by category	# of students by category	% of students by category
Returned to Same Program	32.2%	11	34.4%	13	37.1%	15	38.5%
Returned to Different Program	10.2%	2	6.3%	2	5.7%	2	5.1%
Graduated	0.0%	2	6.3%	2	5.7%	3	7.7%
Did Not Persist	57.6%	17	53.1%	18	51.4%	19	48.7%

*Combined Facilities Management + remainder of students enrolled under the 2 discontinued programs, Facility Management: Design Option and Facility Management: Construction Option
 Persons Responsible: Department Head, Program Coordinator, Enrollment Management
 Timeline: Fall 2025

2. Program should continue to monitor retention and graduation rates after the degree program merge to determine patterns and implement interventions as indicated.

Persons Responsible: Program Coordinator

Timeline: Fall 2023 to monitor and determine appropriate interventions, Fall 2025 to implement and assess effects of interventions

Assessment

3. In the two years since the present structure of the Program, including its PLOs, was established, there has not been sufficient time for a complete cycle of PLO assessment. Program should document and discuss Program-level assessment specific to Facilities Management and complete a cycle of assessment for all six of the Program Learning Outcomes, highlighting action plans for PLOs where benchmarks were not met.

Persons Responsible: Program Coordinator and Faculty

Timeline: Fall 2024

Success and Graduation

4. The Facilities Management Program enjoys strong ties with both local industry groups and transfer institutions. Given recent trends in the field, Program should continue to build on those relationships and pursue additional connections, including articulation agreements, program guides, and industry networking, to facilitate successful transfers and alumni transition into the workforce.

Persons Responsible: Program Coordinator, Department Head, Advisory Committee, Director of Articulation and Transfer

Timeline: Fall 2024

C. Narrative

Facilities Management is a rapidly professionalizing field. This program offers an opportunity to enter a field that has diverse employment opportunities for those interested in design and construction. As the COVID-19 pandemic highlighted, buildings and physical spaces are vital to the functioning of society – at the individual and community level.

The FM field focuses on managing the physical environment, and that involves decisions that are sensitive and responsive to the people using those environments. Sustainability, efficiency, and managing physical environments to be well-designed, well-built and operationally superior requires a wide-ranging set of knowledge and capabilities.

Overall, the field of facilities management has been even more significant because of the COVID pandemic. Cleaning, air circulation and physical distancing are only some of the areas that have become crucial aspects in the slowing of the spread of the virus, and these all involve the expertise, planning and execution of those involved in facilities. This heightened awareness of the physical environment (even the invisible parts – the air, digital cloud, etc., and all the aspects that happen behind the scenes) means

that the importance of this field has also been highlighted. In the future, this heightened awareness of the field will only create more interest in this as a professional path and increase the prestige of those involved.

Academic degrees in FM are increasing. Temple University has added their Bachelor of Science degree. With two FM programs in Philadelphia, the availability of academic degrees is high compared to most other cities.

Community College *of* Philadelphia

Academic Program Review: Construction Management A.A.S.

Authors:

David Bertram, Elizabeth Gordon

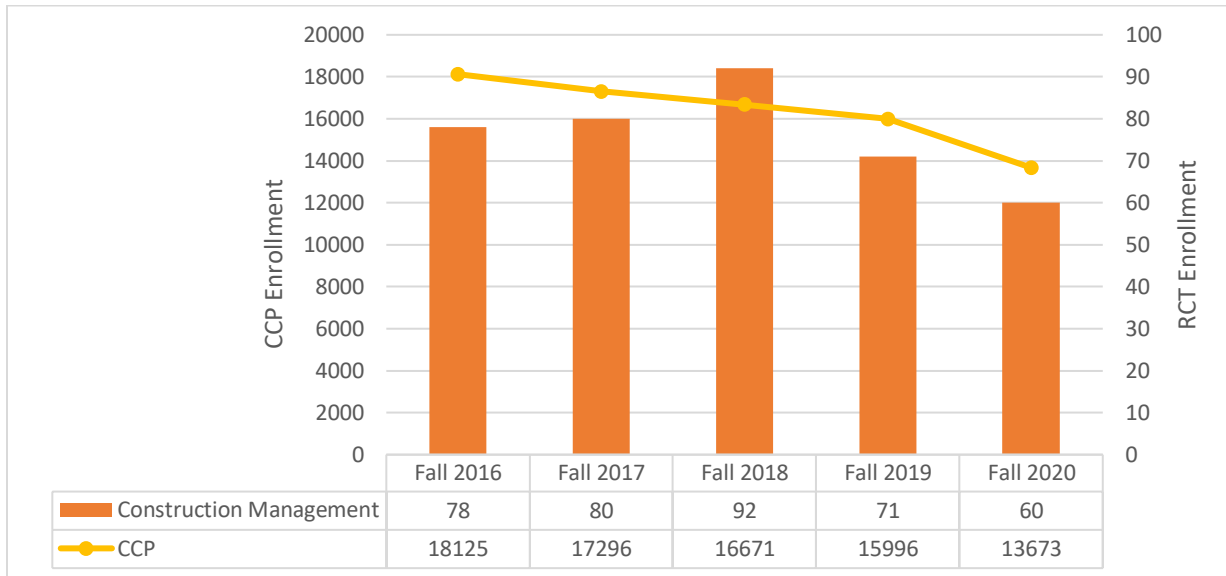
Fall 2021

1. Executive Summary

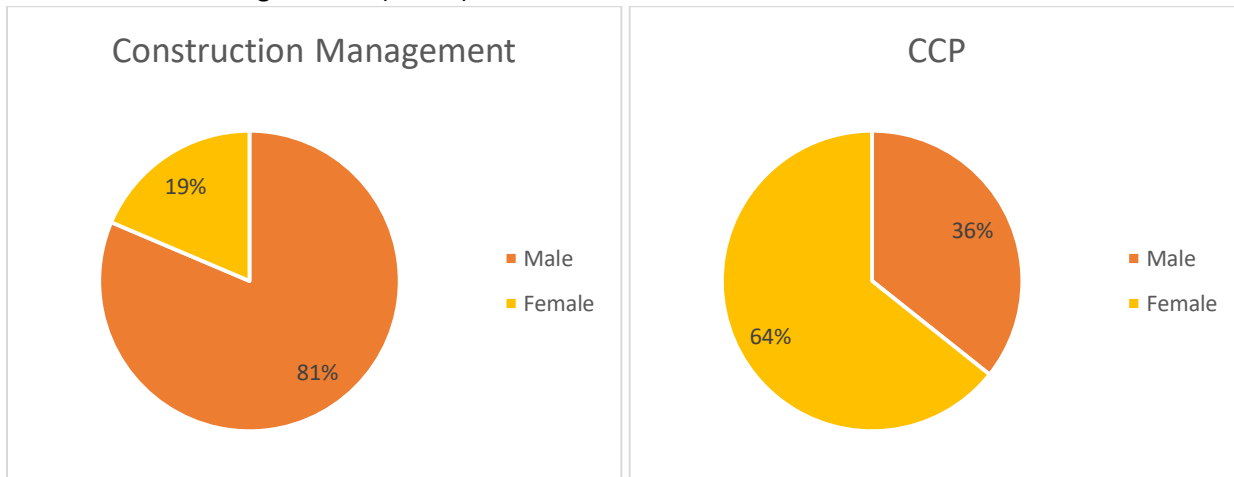
A. Key Findings

Enrollment and Demographics

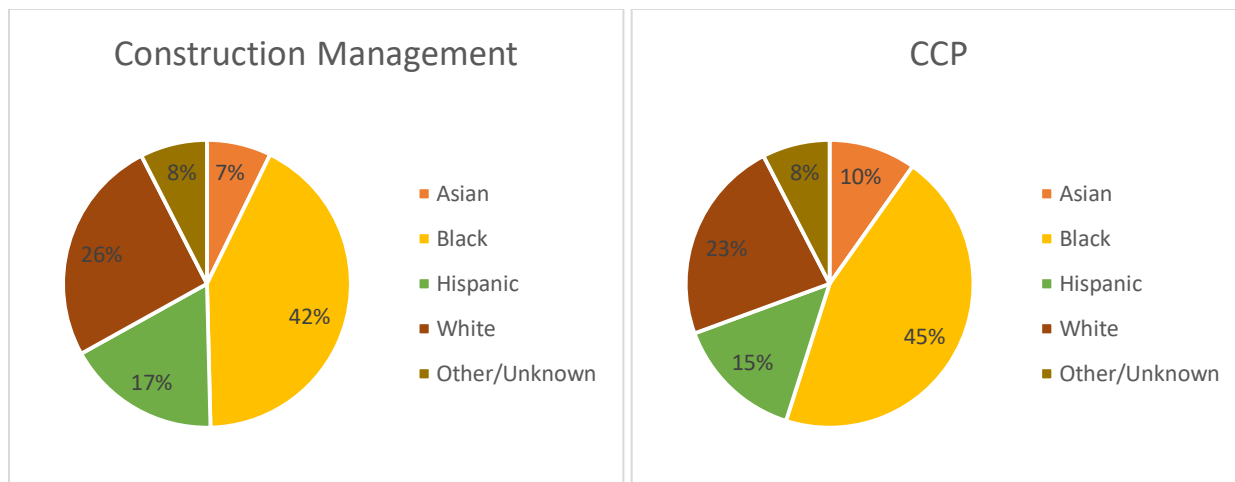
1. Program enrollment rose from 78 in Fall 2016 to 92 in Fall 2018, and then declined again to 60 in Fall 2020.



2. Proportions of students enrolled part-time and full-time mirrored those of the College.
3. The Program averaged a larger proportion of students who had earned 24 credits or more (49.6%) than did the College overall (45.7%), and a larger proportion of students who had earned zero credits (13.3%) than the College overall (10.5%).
4. The Program enrolled a higher proportion of students identifying as Male (83.1%) than did the College overall (35.7%).



5. The Program's proportions of students identifying within each of the IPEDS ethnicity categories mirrored those of the College overall.
6. The Program averaged a higher proportion of students identifying as Black Males (34.7%) than did the College overall (14.4%).



- The Program enrolled a larger proportion of students over the age of 30 (40.6%) than did the College overall (25%).

Retention

- Fall to Spring, the Program averaged a higher proportion of students who persisted within the same program (67.4%) and of students who did not persist (28.3%) than did the College overall (64.4% and 27.9%, respectively).
- Fall to Fall, the Program averaged a higher proportion of students who returned to the same program (37.0%) and students who graduated (11.7%) than did the College overall (33.6% and 9.7%, respectively).

Success and Graduation

- Over the period studied, the Program awarded 43 A.A.S. degrees.
- The Program averaged a higher proportion of students who were dropped due to insufficient progress or poor scholarship (2.8%) than did the College overall (0.7%).
- Over the period studied, a higher proportion of Program graduates transferred to another institution (57.1%) than graduates of the College overall (48.3%).
- The Program does not have any complete program to program articulation agreements. It does have a draft agreement with Jefferson University that awards CCP students full credit for all the program's required courses.

Advisory Committee

- Members of the advisory committee include representatives from common transfer institutions including Drexel University College of Engineering and the College of Architecture and the Built Environment at Thomas Jefferson University, as well as representatives from the local construction management industry including General Building Contractors Associated, Hill International, IMC Construction, Bittenbender Construction, Inc., the Philadelphia Water Department, and Turner Construction Company.
- Discussions at the two most recent meetings centered on retention and graduation rates, as well as strengthening connections between the Program and employment opportunities for graduating students.

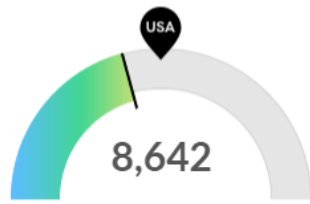
Assessment

16. The Program has four Program Learning Outcomes (PLOs).
17. Program Assessment was conducted at the course level within the Architecture, Design, and Construction department and reviewed by department faculty at monthly meetings.
18. Between the Program revision in 2018 and Spring 2020, Program assessment specific to Construction Management was not documented. Courses mapped to each of the four PLOs were assessed, documented, and reviewed by department faculty, but the specific connections between Course and Program Learning Outcomes were not articulated.
19. The Program successfully mapped Course Learning Outcomes (CLOs) to its PLOs within the AEFIS system and has been piloting the use of AEFIS for course assessment since Fall 2020; according to the Program, it will continue using AEFIS for all Program assessment beginning in Fall 2021.
20. AEFIS program assessment reports are available for three of the Program's four PLOs, indicating that students met the threshold for mastery for two of those three.
21. Primarily direct assessment methods were employed, including performance on quizzes, projects, and in-class activities, and multiple methods were used to assess nearly all CLOs.
22. An extensive Program Revision is currently underway; both implemented and planned changes to courses and the Program were based on direct and indirect assessment data.

Workforce Development

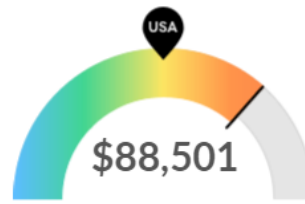
23. Changes and ever-evolving trends in the field includes digital project management technology and software, green building, and due to Covid19, remote worksites and mobile access for workers.
24. Project simulations and exposure to industry professionals and actual construction projects are two of the most effective and exciting means of preparing students for the industry.
25. Students in ADC 101: Introduction to Design and Construction often visit design and construction firms and are assigned the task of interviewing an industry professional and providing a report.

Average Job Posting Demand Over a Thin Supply of Regional Jobs



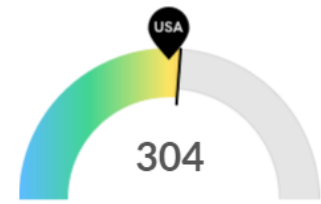
Jobs (2015)

Your area is not a hotspot for this kind of job. The national average for an area this size is 11,120* employees, while there are 8,642 here.



Compensation

Earnings are high in your area. The national median salary for your occupations is \$73,583, compared to \$88,501 here.



Job Posting Demand

Job posting activity is about average in your area. The national average for an area this size is 283* job postings/mo, while there are 304 here.

*National average values are derived by taking the national value for your occupations and scaling it down to account for the difference in overall workforce size between the nation and your area. In other words, the values represent the national average adjusted for region size.

Cost

26. Over the period studied, the Program ran between 12 and 15 sections of its required courses each semester, which were enrolled at 57.1% capacity on average.

B. Prior Audit

Recommendations from Prior Audit and Program Response:

1. Contact all students from Construction Technology into Construction Management

In 2006, the Construction Technology Program closed and the Construction Management Program opened. Ideally, all students in the Construction Technology program were supposed to complete the CT Degree or transfer to the Construction Management Program. All new students were supposed to enroll in Construction Management. Seven students are enrolled in courses this semester as Construction Technology students. These students must complete a change of major form this semester. The Office of Assessment and Evaluation can provide the Department with a list of students enrolled in Construction Technology.

Timeline: Spring 2015

Responsible Persons: Program Faculty

Program Response: At this time, two students remain in the CT program. One recently contacted the Department Head regarding graduating.

2. Assessment

The curriculum map identifies 10 areas in which program level outcomes are assessed. While it is clear that assessment is occurring, the documents in SharePoint indicate that

half the student learning outcomes are assessed in different courses than indicated on the curriculum map. Overall, the Program must increase transparency in the assessment process, including posting rubrics, clearly outlining which assignments from the courses feed into the outcomes and how the scores are calculated, and using independent measures for each outcome. Additionally, the Program needs to evaluate the benchmarks and create closing the loop activities.

Timeline: Summer 2015

Responsible Persons: Program Faculty

Program Response: The Construction Management Program Level Outcomes and associated Curriculum map were revised in 2017-18. In 2020-2021 the Department worked with the College's assessment team to review and improve curriculum maps, rubrics, benchmarks, and closing the loop activities. The Department faculty works continuously on improving its assessment processes and associated documents and has begun assessment in AEFIS.

- 3. The department should create a program to accommodate students from the Construction Management, Facilities Management Design, Facilities Management Construction, and Computer Assisted Design students (and possibly Building Science).** The programs within the department have major overlaps in jobs, courses, and outcomes. In a survey of programs at the two and four year level, many schools had programs in one of these areas, but none had as many as CCP. Additionally, in many of these programs at the four year level; the first two years were largely the same courses. The markets (education and employment) do not appear to need the fine-grained divisions among disciplines at the two year level offered here. While those with more education and/or experience may find, eventually, that there are specializations within the field; these divisions do not exist at the undergraduate level. A single AAS program would suffice, perhaps with options presented for students based on their interests, in a model similar to the Justice Program. The above is only one proposal; the department may wish to present an alternative plan for consolidation.

Provide Alternative Plan

Timeline: June 2015

Persons Responsible: Department Head

Program Created to Accommodate other ADC Students

Timeline: Fall 2015

Persons Responsible: Department Head, Program Faculty, Dean of Liberal Studies

Program Response: The Building Science and CAD programs have been discontinued. The Facility Management degrees have been consolidated in a single degree with two concentrations. As Facility Management and Construction Management are two distinct academic and career paths, it has been concluded that they will remain distinct degrees at CCP.

- 4. Create a program management plan**

Once the department has agreed upon a solution to recommendation 3 (above), they must develop a program management plan that address low course enrollment, the disproportionate rate of sophomores' progression through the program, and high operating costs. Currently the Construction Management Program is composed of a high proportion of older students with strong outcomes while the Facilities Management programs are composed of a high proportion of younger students with weaker outcomes. The program management plan must provide a framework for combing these programs and achieving results in these two populations.

Timeline: Spring 2016

Persons Responsible: Program Faculty, Department Head

Program Response: Each program in the ADC Department has a Program Coordinator, who with the Department Head, manages the issues listed above. Enrollment remains an ongoing concern that is addressed explicitly by our Division Dean and in our annual goal report. The COVID-19 pandemic poses new enrollment challenges that are addressed in the current 21-22 enrollment plan.

C. Action Items

The Office of Assessment and Evaluation makes the following recommendations for the Program.

1. Increase Enrollment as follows:

	Fall 2020 (Benchmark)	Fall 2021		Fall 2023		Fall 2025	
Headcount	60	67	11.7% increase in headcount	74	9.5% increase in headcount	81	8.6% increase in headcount
		# of students by category	% of students by category	# of students by category	% of students by category	# of students by category	% of students by category
Returned to Same Program	32.4%	23	34.3%	27	36.5%	31	38.3%
Returned to Different Program	2.8%	1	1.5%	1	1.3%	1	1.2%
Graduated	18.3%	13	19.4%	15	20.3%	17	20.9%
Did Not Persist	46.5%	30	44.8%	31	41.9%	32	39.5%

Persons Responsible: Department Head, Program Coordinator, Enrollment Management

Timeline: Fall 2025

Assessment

2. Program should document and discuss Program-level assessment specific to Construction Management and complete a cycle of assessment for all four of the new Program Learning Outcomes.

Persons Responsible: Program Coordinator and Faculty

Timeline: Fall 2023

3. Program should assess whether Program revisions and curricular changes being implemented are (1) increasing enrollment, (2) better preparing students for the workforce, and (3) enhancing student learning.

Persons Responsible: Program Coordinator and Faculty

Timeline: Topics should be addressed at least annually through Fall 2023

Success and Graduation

4. Despite being an A.A.S. Program, the Construction Management Program has a higher proportion of students who transfer to four-year institutions after graduation than the College does overall. The Program should consider pursuing articulation agreements or program guides to facilitate successful transfers.

Persons Responsible: Program Coordinator, Department Head, Advisory Committee, Director of Articulation and Transfer

Timeline: Fall 2026

D. Narrative

The Construction Management degree covers topics and skills related to the built environment. The program requires capabilities both in 2D drawing and 3D computer modeling, public speaking and presentations, knowledge of building materials and processes, safety and code compliance, construction supervision and business practices, and building sustainability. The students also must understand construction documents (both drawings and specifications), project management and scheduling. The Construction Management Program prepares graduates to enter a variety of careers in the construction industry and related fields, including jobs as estimators, project managers and schedulers, surveyors, specifiers, quality control supervisors, construction materials and equipment salespersons, owners' representatives, and site inspectors.

Students are exposed to a very wide scope of technical information in the program. Students are taught to think critically about the many decisions that are necessary when working with the built environment. First-year classes introduce students to basic skills such as reading construction drawings and AutoCAD as well as a great deal of information regarding building materials and project workflow. With this foundation, second year students delve into most advanced project simulations that require material quantity take-offs, cost estimating, and project scheduling.

Often, classes host guest speakers and/or panels that relate to design, construction, and facility management. During the 2020-2021 year, this included Zoom presentations that were then available as recordings through the Department CANVAS page. Interviews were also done and recorded with graduates who had transferred, addressing transfer challenges, scholarship searching, and tips for success from former CCP students.

Changes and ever-evolving trends in the field includes digital project management technology and software, green building, and due to Covid19, remote worksites and mobile access for workers. A significant revision to the program is currently underway. An important hierarchy will be structured, through the use of prerequisites, which is intended to provide a greater sense of continuity and

academic progression for students. The goals of the program revision are to create a more engaging curriculum that will improve retention and graduation rates, create better alignment for transfer, and better focus on key skills for the workforce. The revision will touch approximately half the program's requirements.

Community College *of* Philadelphia

Academic Program Review: Respiratory Care Technology A.A.S.

Authors:

Lisa Fielding, Dr. Cathy Blaine, Dr. Jocelyn Lewis, and Elizabeth Gordon

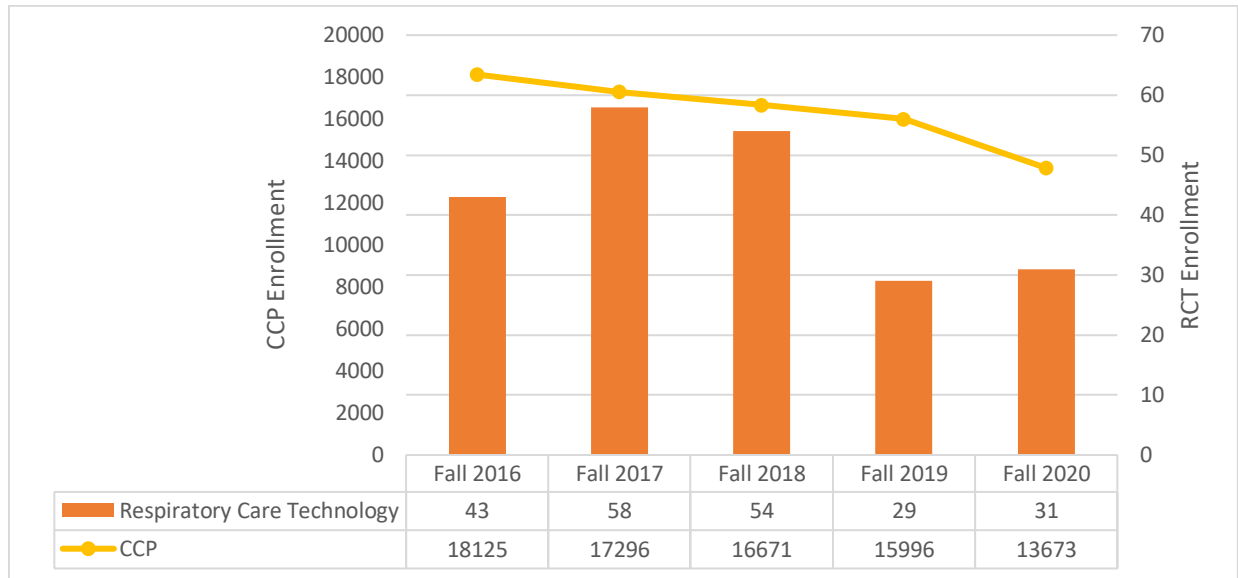
Spring 2021

1. Executive Summary

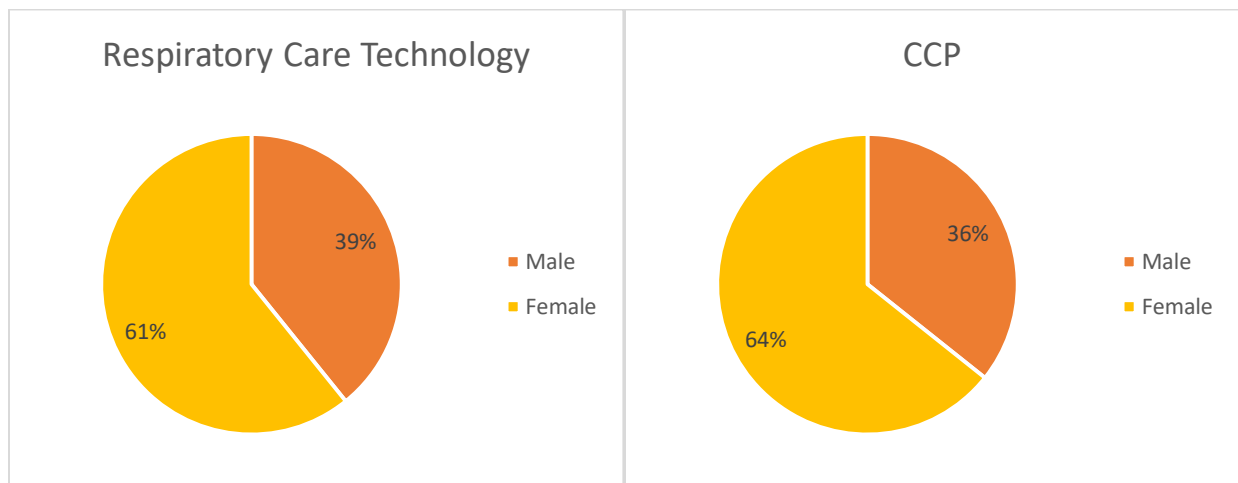
A. Key Findings

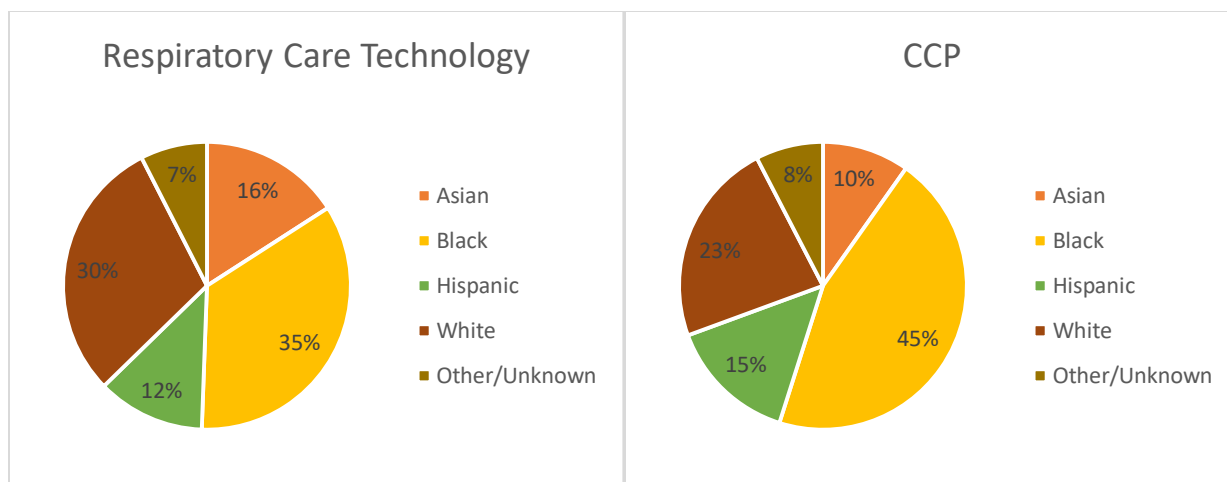
Enrollment and Demographics

- Over the period studied, Program enrollment increased from 43 students in Fall 2016 to a high of 58 students in Fall 2017, then declined back to 31 students in Fall 2020.



- The Program did not admit a new cohort in Fall 2020 due to social distancing-based class limits; Program admitted class of 24 students for Fall 2021.
- On average, the Program enrolled a lower proportion of full-time students (11.6%) than did the College overall (27.9%).
- The Program enrolled a higher proportion of students identifying as Asian or Pacific Islander (16.5%) than did the College overall (9.8%), a lower proportion of students identifying as Black (36.0%) than the College's overall (45.1%), and a higher proportion of students identifying as Male (39.2%) than did the College overall (35.7%).





Retention

5. Fall to Spring, the Program averaged a higher proportion of students who persisted within the same program (86.8%) and a lower proportion of students who did not persist (11.6%) than did the College overall (64.4% and 27.9%, respectively).
6. Fall to Fall, the Program averaged a higher proportion of students who returned to the same program (46.4%) and students who graduated (23.1%) than did the College overall (33.6% and 9.7%, respectively).

Success and Graduation

7. Over the period studied, the Program awarded 72 A.A.S. degrees.
8. Because of minimum admission and performance standards determined by the Program's national accrediting body, nearly all Program students (99.8%) remained in Good Academic Standing during the period studied.

Transfer

9. Over the period studied, a lower proportion of Program graduates transferred to another institution (36.0%) than graduates of the College overall (48.3%).
10. A lower proportion of Program graduates also graduated from their transfer institution (8.0%) than did graduates of the College overall (11.7%).

Advisory Committee

11. Members of the Program's advisory committee include individuals from Temple University, Albert Einstein Medical Center, Penn Presbyterian Medical Center, Thomas Jefferson University Medical Center, Hospital of the University of Pennsylvania, Cooper University Hospital, and CHOP.
12. The November 2020 meeting of the advisory committee, held via Zoom due to the COVID-19 pandemic, focused discussion on enrollment and graduation rates, including COVID-related caps on admissions and other limitations, a tentative articulation agreement with the University of Cincinnati, and ways to encourage students to sit for Board exams.

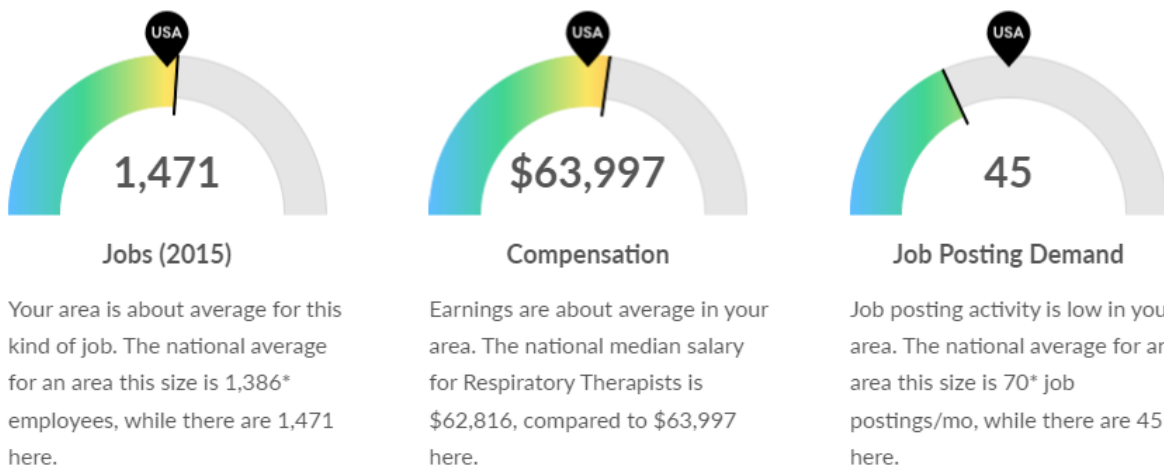
Assessment

13. The Program is accredited by the Commission on Accreditation for Respiratory Care (CoARC), the accrediting body of its professional organization, the American Association for Respiratory Care (AARC).
14. The Program has four Program Learning Outcomes (PLOs), which are assessed annually and were developed to reflect curriculum content requirements set by CoARC.
15. The Program primarily employed direct assessment methods, including performance on quizzes, exams, and in-class activities. Assessment in courses that include field work is primarily done through clinical preceptor and instructor ratings on clinical evaluation forms.
16. The Program made changes to course content, exams, learning software, student support in clinical rotations, pedagogy, and course materials as a result of assessment data.
17. The Program was required to establish an action plan for any element of its annual accreditation report that fell below the minimum threshold set by CoARC. This annual reporting has resulted in robust documentation of continuous improvement by the Program.

Workforce Development

18. Faculty connect with industry leaders every week through clinical rotations, and yearly at professional meetings and the advisory committee meeting.
19. Program alumni won the highest clinical award given at CHOP for demonstrating outstanding clinical skills and professional behaviors in 2016 and 2018.
20. There has been a 24.4% increase in demand for respiratory therapists since 2015, a position which pays a median annual salary of \$64,000 in the Philadelphia metro area.

Light Job Posting Demand Over an Average Supply of Regional Jobs



*National average values are derived by taking the national value for Respiratory Therapists and scaling it down to account for the difference in overall workforce size between the nation and your area. In other words, the values represent the national average adjusted for region size.

Cost

21. The Program incurs a number of specialized costs, including disposable equipment used in practical instruction each year as well as larger pieces of equipment such as ventilators, spirometers, and training simulators.
22. Over the period studied, the Program ran between 3 and 4 sections of its required courses each semester, which were enrolled at 62.2% capacity on average.

B. Prior Audit

Recommendations from Prior Audit and Program Response:

1. Update assessment and Complete Course Revisions

The Program should determine if there is a need to update its program learning outcomes, redesign assessment materials, and complete the seven course revisions. Once these areas are evaluated, the Program should determine if a program revision is necessary.

The Program needs to evaluate their Program Learning Outcomes and determine whether they meet the needs of the Program. Outcomes must align with specific learning that happens during the course of the program. They need to be measureable, action oriented, results based, and time oriented. Quality assessment involves using both direct and indirect measures to assess outcomes. While both direct and indirect outcomes are beneficial, programs should use at least one direct measure of assessment. The Program Learning Outcomes in Respiratory Care measure achievements or accomplishments that occur after the students leave the program and can only be measured using indirect measures. The curriculum map does not identify where outcomes are being introduced, reinforced, mastered, or assessed. Rather, the map merely identifies that one of these activities is occurring with an 'X'. There is no clear evidence to indicate that the SLOs align with the PLOs. The Program should perform a comprehensive evaluation of their assessment tools and refine the assessment process.

Program faculty have started seven course revisions which have been on hold since 2012. Faculty need to review the documents, make any necessary changes, and continue the process of getting the revisions approved.

Timeline: Spring 2017

Persons Responsible: Department Head and Program Coordinator

Program Response: A complete Curriculum revision of all courses was completed in 2018 and 2019 through the Curriculum Office via Amy Birge. The Faculty wrote and rewrote several versions of both the Student Learning Outcomes (SLOs) and the Program Learning Outcomes (PLOs) working with the Dean and Department head. We are pleased to report that the PLOs have been simplified and look forward to integrating the program into AEFIS.

2. Review the guidelines of the advisory committee

Over the past three years the advisory committee has met annually to discuss the strengths and challenges in the Program and gain insight from people working in the field. The Program holds these meetings off campus and has been inconsistent in recording advisory committee meeting minutes. The Advisory Committee Meeting Guidelines state that 'the Division Dean, the

Department Head, full-time faculty members, and students, if appropriate, should attend the meetings, and that the committees should meet on campus at least once a year.’ The Advisory Committee Meetings must be held on campus in order to give these parties the opportunity to attend. Meeting minutes must be kept for each meeting. The Advisory Committee should review the Guidelines and adhere to all requirements. Additionally, Program faculty should consider including student members.

Timeline: Fall 2016

Persons Responsible: Department Head and Program Coordinator

Program Response: Possible Additions: Student member in 2016, 2018 meeting. Zoom Meeting, Fall, 2019, another Zoom will take place this fall.

3. Encourage graduates to take the RRT exam as soon as possible after graduation

The most recent Annual Report of Current Status and Resource Assessment Matrix was submitted by Program faculty to CoARC in 2015. In this report Program faculty state ‘that program graduates continue to delay taking the RRT exam despite faculty and employer recommendations that these exams be taken as soon as possible after graduation.’ The Program faculty needs to discuss ways to encourage students to take the RRT exams upon graduation.

Timeline: Fall 2016

Persons Responsible: Department Head and Program Coordinator

Note: This recommendation has been completed.

Program Response: Students attended a three-day Kettering Review in person from 2016-2019 at Bryn Mawr Hospital, 2021 All faculty and students attended 2021 3day zoom for Kettering. Students are required to take 2 practice simulation exams from software purchased by CCP from C and S Solutions. Students must also take a Self-Assessment Exam purchased from the National Board of Respiratory Care testing center. Clinical Instructors have also been enlisted to re-enforce taking the RRT exam asap after graduation.

C. Action Items

The Office of Assessment and Evaluation makes the following recommendations for the Program.

Enrollment and Demographics

1. Increase Enrollment as follows:

	Fall 2021		Fall 2022		Fall 2025	
New student enrollment (cohort)**	24*		32		36	
Fall-to-Fall return to same program	20	83.3%	27	84.4%	31	86.1%
Projected graduation (within IPEDS 150% of time-to-degree limit)	18	75%	26	81.3%	29	80.6%

*Social distancing-based class limits in effect starting Fall 2020; Program admitted class of 24 students for Fall 2021. It is expected that enrollment will return to pre-pandemic levels as space limitations are lifted.

**Due to Program not admitting a new class of students in Fall 2020, and due to Program's cohort-based admissions model, enrollment here is projected per cohort, not using total enrollment figures as in the retention models used elsewhere in this Academic Program Review.

Persons Responsible: Department Head, Program Coordinator, Enrollment Management
Timeline: Fall 2025

D. Narrative

The Community College of Philadelphia's Respiratory Care Technology Program is the only Respiratory Technology Program in Philadelphia. The Program is 22 consecutive months and is fully accredited by the Commission on Accreditation for Respiratory Care. Most Program students are hired by Philadelphia Hospitals, but as Registered Respiratory Therapists, they are qualified to work anywhere in the United States, and in some International locations. The Program offers classroom and hands on clinical experience in Philadelphia and Cooper Hospital in New Jersey. It is a challenging Program that provides students with an exciting career working with physicians, nurses, and state of the art ventilators to help save people's lives in all areas of the hospital. Respiratory Therapists are part of the healthcare team that responds to all emergencies, including traumas, can be part of a flight team, and can work with newborn premature infants to geriatric patients. Currently, approximately 1 in every 5 professional in the field within Delaware Valley is a graduate of the program.

The fundamental intellectual question of the program is: how can respiratory physiology, anatomy, and disease states that produce life-threatening illnesses be treated in a variety of clinical settings during the clinical skills, equipment and academic material taught during the Cardiorespiratory Program? The teaching and learning that takes place in this program is all directed in answering this question. The Program's faculty and clinical instructors are all involved in student assessment and success. For example, part-time faculty are responsible for pre-clinical laboratory competencies to make sure students are knowledgeable about clinical equipment and skill before they go to area hospitals. Clinical instructors have clinical objectives, patient cases studies and clinical behavioral evaluations they do to make sure students have the professional and clinical skills necessary to be successful.

Faculty connect with industry leaders every week through clinical rotations, and yearly at professional meetings and the advisory committee meeting. Presently, the Program has in place articulation agreements to complete a bachelor's degree with Gwynedd Mercy University in Respiratory Care, and with West Chester University for a bachelor's in health care administration.

The changes in technology and the increased demand for Respiratory Therapists has been highlighted by COVID-19. There is astronomical demand in the field for new therapists who have the critical thinking skills to survive in ICU and learn new technologies and therapies daily. One

of the few good moments during the COVID-19 pandemic was when a Program alumnus, a Vice President of Administration at the Temple Health system, called asking if they could borrow all of the Program's ventilators, as they desperately needed them for critically ill patients. Program Director Lisa Fielding was instrumental working with College lawyers in twice lending them to Temple to meet patient needs.