COASTLINE COLLEGE

2020-21

Annual Program Review

Process Technology

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Section 1: Program Planning

Internal Analysis and Program Effectiveness: Process Technology

Productivity	2014-15	2015-16	2016-17	2017-18	2018-19
State-Funded Enrollment	61,279	63,824	60,164	61,368	59,444
Subject State-Funded Enrollment	208	306	386	350	434
State-Funded Resident FTES	6,073.30	6,343.88	5,929.28	6,189.33	6,104.88
Subject Resident FTES	17.23	25.14	31.95	27.63	37.26
Sections	8	10	13	13	14
Fill Rate	58.1%	68.0%	80.1%	69.9%	76.4%
WSCH/FTEF 595 Efficiency	396	459	567	506	583
FTEF/30	0.8	1.0	1.0	1.0	1.0
Extended Learning Enrollment	0	7	22	39	57

The percentage change in the number of Process Technology **enrollments** in 2018-19 showed a substantial increase from 2017-18 and a substantial increase from 2014-15.

The percentage change in 2018-19 **resident FTES** in Process Technology credit courses showed a substantial increase from 2017-18 and a substantial increase in comparison with resident FTES in 2014-15.

The percentage change in the number of **sections** in Process Technology courses in 2018-19 showed a moderate increase from 2017-18 and a substantial increase from the number of sections in 2014-15.

The percentage change in the **fill rate** in 2018-19 for Process Technology courses showed a moderate increase from 2017-18 and a substantial increase in comparison with the fill rate in 2014-15.

The percentage change in the **WSCH/FTEF** ratio in Process Technology courses in 2018-19 showed a substantial increase from 2017-18 and a substantial increase from 2014-15.

The percentage change in the **FTEF/30** ratio for Process Technology courses in 2018-19 showed a moderate increase from 2017-18 and a substantial increase in comparison with the FTEF/30 ratio in 2014-15.

There was a substantial increase in the number of Process Technology **Extended Learning enrollments** in 2018-19 from 2017-18 and no comparative data from 2014-15.

Calculation Categories

Language	Range
Minimal to No Difference	< 1.0%
Slight Increase/Decrease	Between 1.0% and 5.0%
Moderate Increase/Decrease	Between 5.1% and 10.0%
Substantial Increase/Decrease	> 10.0%

Comparison of Enrollment Trends	2014-15	2015-16	2016-17	2017-18	2018-19
State-Funded Enrollment	61,279	63,824	60,164	61,368	59,444
Subject State-Funded Enrollment	208	306	386	350	434

Modality	2014-15	2015-16	2016-17	2017-18	2018-19
Traditional	0.0%	0.0%	0.0%	0.0%	0.0%
Online	100.0%	100.0%	100.0%	100.0%	100.0%
Hybrid	0.0%	0.0%	0.0%	0.0%	0.0%
Correspondence (Cable, Telecourse, Other DL)	0.0%	0.0%	0.0%	0.0%	0.0%

Gender	2014-15	2015-16	2016-17	2017-18	2018-19
Female	17.8%	18.0%	20.7%	20.0%	15.0%
Male	78.8%	81.0%	79.3%	79.1%	85.0%
Unknown	3.4%	1.0%	0.0%	0.9%	0.0%

Ethnicity	2014-15	2015-16	2016-17	2017-18	2018-19
African American	7.7%	8.2%	13.2%	13.1%	5.8%
American Indian/AK Native	0.0%	0.0%	0.0%	0.0%	0.0%
Asian	9.6%	10.5%	10.4%	9.7%	7.4%
Hispanic	19.2%	30.7%	25.9%	31.1%	46.1%
Pacific Islander/HI Native	0.0%	1.0%	0.5%	0.6%	0.0%
White	49.0%	28.4%	28.5%	22.3%	17.5%
Multi-Ethnicity	10.6%	18.6%	20.2%	22.9%	22.4%
Other/Unknown	3.8%	2.6%	1.3%	0.3%	0.9%

Age Group	2014-15	2015-16	2016-17	2017-18	2018-19
19 or Less	4.3%	5.2%	3.4%	2.0%	2.8%
20 to 24	11.1%	16.7%	20.2%	20.6%	36.3%
25 to 29	31.3%	27.1%	34.2%	32.0%	36.4%
30 to 34	21.2%	12.7%	16.8%	20.3%	15.0%
35 to 39	17.3%	12.4%	10.1%	13.7%	7.6%
40 to 49	11.1%	19.0%	12.2%	9.1%	7.6%
50 and Older	3.8%	6.9%	3.1%	2.3%	1.4%
Unknown	0.0%	0.0%	0.0%	0.0%	0.0%

Process Technology courses made up 0.7% of all state-funded enrollment for 2018-19. The percentage difference in Process Technology course **enrollment** in 2018-19 showed a substantial increase from 2017-18 and a substantial increase from 2014-15. Enrollment in Process Technology during 2018-19 showed 0.0% of courses were taught **traditional (face-to-fac**e), 100.0% were taught **online**, 0.0% were taught in the **hybrid** modality, and 0.0% were taught in the **correspondence (cable, telecourse, and other distance learning)** modality.

In 2018-19, Process Technology enrollment consisted of 15.0% **female**, 85.0% **male**, and 0.0% students of **unknown** gender. In 2018-19, Process Technology enrollment consisted of 5.8% **African American** students, 0.0% **American Indian/AK Native** students, 7.4% **Asian** students, 46.1% **Hispanic** students, 0.0% **Pacific Islander/HI Native** students, 17.5% **White** students, 22.4% **multi-ethnic** students, and 0.9% students of **other** or **unknown** ethnicity. The age breakdown for 2018-19 enrollments in Process Technology revealed 2.8% aged **19 or less**, 36.3% aged **20 to 24**, 36.4% aged **25 to 29**, 15.0% aged **30 to 34**, 7.6% aged **35 to 39**, 7.6% aged **40 to 49**, 1.4% aged **50 and older**, and 0.0% **unknown**.

Success and Retention: Process Technology

Comparison of Success Rates	2014-15	2015-16	2016-17	2017-18	2018-19
State-Funded Success Rate	65.4%	66.7%	68.6%	70.9%	72.2%
College Institution Set Standard Success Rate	55.4%	55.5%	56.7%	58.3%	59.8%
Subject Success Rate	68.3%	70.8%	74.1%	77.7%	84.6%

Modality	2014-15	2015-16	2016-17	2017-18	2018-19
Traditional	-	-	-	-	-
Online	68.3%	70.8%	74.1%	77.7%	84.6%
Hybrid	-	-	-	-	-
Correspondence (Cable, Telecourse, Other DL)	-	-	-	-	-

Gender	2014-15	2015-16	2016-17	2017-18	2018-19
Female	56.8%	66.7%	71.3%	81.4%	83.1%
Male	70.1%	72.2%	74.8%	77.6%	84.8%
Unknown	85.7%	33.3%	-	0.0%	-

Ethnicity	2014-15	2015-16	2016-17	2017-18	2018-19
African American	62.5%	48.0%	54.9%	63.0%	80.0%
American Indian/AK Native	-	-	-	-	-
Asian	35.0%	45.2%	72.5%	91.2%	90.6%
Hispanic	60.0%	67.0%	76.0%	77.1%	83.0%
Pacific Islander/HI Native	-	0.0%	100.0%	0.0%	-
White	86.3%	88.5%	81.8%	89.7%	93.4%
Multi-Ethnicity	54.5%	82.5%	75.6%	71.3%	81.4%
Other/Unknown	12.5%	37.5%	40.0%	100.0%	50.0%

Age Group	2014-15	2015-16	2016-17	2018-19	2018-19
19 or Less	88.9%	93.8%	46.2%	57.1%	66.7%
20 to 24	47.8%	68.6%	65.4%	81.9%	85.8%
25 to 29	66.2%	71.1%	75.8%	86.6%	84.2%
30 to 34	77.3%	53.8%	75.4%	64.8%	83.1%

35 to 39	61.1%	89.5%	66.7%	66.7%	75.8%
40 to 49	95.7%	68.4%	95.7%	93.8%	97.0%
50 and Older	25.0%	61.9%	75.0%	50.0%	100.0%
Unknown	-	-	-	-	-

The percentage difference in the **course success rate** in Process Technology courses in 2018-19 showed a moderate increase from 2017-18 and a substantial increase from 2014-15. When comparing the percentage point difference in the Process Technology 2018-19 course success rate to the College's overall success average* (72.2%) and the institution-set standard* (59.8%) for credit course success, the Process Technology **course success rate** was substantially higher than the **college average** and substantially higher than the **institution-set standard** for credit course success.

When comparing the percentage point difference between instructional modalities to the overall Process Technology success rate for 2018-19, the success rate was no comparative data for **traditional (face-to-face)** Process Technology courses, a minimal difference for **online** courses, no comparative data for **hybrid courses**, and no comparative data for **correspondence (cable, telecourse, and other distance learning)** courses.

When comparing the percentage point difference between genders to the overall Process Technology success rate for 2018-19, the success rate was a slight decrease for **female** students in Process Technology courses, a minimal difference for **male** students, and no comparative data for students of **unknown** gender.

When comparing the percentage point difference between ethnicity groups to the overall Process Technology success rate for 2018-19, the success rate had a slight decrease for **African American** students in Process Technology courses, no comparative data for **American Indian/AK Native** students, a moderate increase for **Asian** students, a slight decrease for **Hispanic** students, no comparative data for **Pacific Islander/HI Native** students, a moderate increase for **White** students, a slight decrease for **multi-ethnic** students, and a substantial decrease for students of **other** or **unknown** ethnicity.

When comparing the percentage point difference between age groups to the overall Process Technology success rate for 2018-19, the success rate was a substantial decrease for students aged **19 or less** in Process Technology courses, a slight increase for students aged **20 to 24**, a minimal difference for students aged **25 to 29**, a slight decrease for students aged **30 to 34**, a moderate decrease for students aged **35 to 39**, a substantial increase for students aged **40 to 49**, a substantial increase for students aged **50 and older**, and no comparative data for students of unknown age.

Comparison of Retention Rates	2014-15	2015-16	2016-17	2017-18	2018-19
State-Funded Retention Rate	82.3%	83.4%	83.7%	85.1%	86.1%
College Institution Set Standard Retention Rate	70.1%	70.0%	70.9%	71.1%	72.3%
Subject Retention Rate	79.3%	91.1%	89.6%	90.9%	97.0%

Modality	2014-15	2015-16	2016-17	2017-18	2018-19
Traditional	-	-	-	-	-
Online	79.3%	91.1%	89.6%	90.9%	97.0%
Hybrid	-	-	-	-	-
Correspondence (Cable, Telecourse, Other DL)	-	-	-	-	-

Gender	2014-15	2015-16	2016-17	2017-18	2018-19
Female	67.6%	88.9%	85.0%	94.3%	100.0%
Male	81.7%	92.3%	90.8%	91.0%	96.5%
Unknown	85.7%	33.3%	-	0.0%	-

Ethnicity	2014-15	2015-16	2016-17	2017-18	2018-19
African American	75.0%	92.0%	80.4%	87.0%	100.0%
American Indian/AK Native	-	-	-	-	-
Asian	55.0%	74.2%	82.5%	97.1%	93.8%
Hispanic	72.5%	91.5%	89.0%	86.2%	96.0%
Pacific Islander/HI Native	-	100.0%	100.0%	100.0%	-
White	94.1%	93.1%	93.6%	94.9%	98.7%
Multi-Ethnicity	54.5%	94.7%	94.9%	92.5%	97.9%
Other/Unknown	62.5%	100.0%	80.0%	100.0%	100.0%

Age Group	2014-15	2015-16	2016-17	2018-19	2018-19
19 or Less	88.9%	100.0%	92.3%	100.0%	83.3%
20 to 24	56.5%	96.1%	94.9%	91.7%	98.4%
25 to 29	80.0%	90.4%	88.6%	94.6%	100.0%
30 to 34	90.9%	82.1%	86.2%	81.7%	92.3%
35 to 39	66.7%	97.4%	82.1%	89.6%	87.9%
40 to 49	100.0%	87.7%	95.7%	96.9%	100.0%
50 and Older	62.5%	90.5%	83.3%	87.5%	100.0%
Unknown	-	-	-	-	-

The percentage difference in the **course retention rate** in Process Technology courses in 2018-19 showed a moderate increase from 2017-18 and a substantial increase from 2014-15. When comparing the percentage point difference in the Process Technology 2018-19 course retention rate to the College's overall retention average* (86.1%) and the institution-set standard* (72.3%) for credit course retention, the Process Technology **course retention rate** was substantially higher than

the **college average** and substantially higher than the **institution-set standard** for credit course retention.

When comparing the percentage point difference between instructional modalities to the overall Process Technology retention rate for 2018-19, the retention rate was no comparative data for **traditional (face-to-face)** Process Technology courses, a minimal difference for **online** courses, no comparative data for **hybrid courses**, and no comparative data for **correspondence (cable, telecourse, and other distance learning)** courses.
When comparing the percentage point difference between genders to the overall Process Technology retention rate for 2018-19, the retention rate was a slight increase for **female** students in Process Technology courses, a minimal difference for **male** students, and no comparative data for students of **unknown** gender.

When comparing the percentage point difference between ethnicity groups to the overall Process Technology retention rate for 2018-19, the retention rate was a slight increase for **African American** students in Process Technology courses, no comparative data for **American Indian/AK Native** students, a slight decrease for **Asian** students, a slight decrease for **Hispanic** students, no comparative data for **Pacific Islander/HI Native** students, a slight increase for **White** students, a minimal difference for **multi-ethnic** students, and a slight increase for students of **other** or **unknown** ethnicity.

When comparing the percentage point difference between age groups to the overall Process Technology retention rate for 2018-19, the retention rate was a substantial decrease for students aged **19 or less** in Process Technology courses, a slight increase for students aged **20 to 24**, a slight increase for students aged **25 to 29**, a slight decrease for students aged **30 to 34**, a moderate decrease for students aged **35 to 39**, a slight increase for students aged **40 to 49**, a slight increase for students aged **50 and older**, and no comparative data for students of **unknown** age.

Equity

Based on the results of enrollment, success and retention, the access and equity gaps will be addressed through further professional development to promote equity-mined teaching with the goal of cultivating inclusive experiences that empower all students to achieve their full academic and workforce realities. Provide instructors with materials and tools to apply principles of culturally responsive teaching to explore core teaching values, teaching practices and revise accordingly to ensure all diverse needs of our students are net with compassion and humanizing interactions online. Incorporate the resources and open dialog available through the college's Student Equity plan.

Achievement

"Achievement gaps occur when one group of students (e.g., students grouped by race/ethnicity, gender) out performs another group and the difference in average scores for the two groups is statistically significant." (NAEP) The achievement gaps appeared higher for **African American** students in Building Codes Technology courses, not evident for **American Indian/AK Native** students, moderately lower for **Asian** students, slightly lower for **Hispanic** students, not applicable for **Pacific Islander/HI Native** students, and slightly higher for **White** students.

Program Efficiency

Based on your review of the data trends above (e.g., enrollment, FTES, FTES/FTEF, fill rate) please provide an analysis of efficiency gaps and accomplishments.

Student (SLOs) and Program Student Learning Outcomes (PSLOs)

In recent discussions with our PTEC faculty, we discussed the option to collect SLO data and to determine how to assess outcomes using a common tool. There is continued discussion concerning creating a common assessment for workplace ready skills outlined various certifications in the oil and related industries. Faculty also discussed creating 'department level shared' courses (faculty collaboration), so all student learning outcomes can be addressed with continuity and effective, authentic assessments.

Another discussion touched on creating common rubrics in Canvas to share across courses and instructors. All faculty were encouraged to create more extensive test banks for more effective randomizing of questions. Also, instructors are encouraged to create projects instead of relying on objective tests to measure workplace readiness as part of the course outcomes.

SLO Assessment and Plan

Course	SLO	Method(s) of Assessment	Participant(s) in the Planning Discussion	Recommended Changes
		Project/Exams	Faculty, dean department chair	none
		Project/Exams	Faculty, dean department chair	none
		Project/Exams	Faculty, dean department chair	none

Aggregate Process Technology Program Student Learning Outcomes (PSLOs), 2015-2016 through 2018-2019

Process Technology PSLOs	N	Able and Confident	Able and Somewhat Confident	Able and Not Confident	Not Able
Measure and control a process.	13	53.9%	30.8%	15.4%	0.0%
Safely operate process equipment.	13	46.2%	30.8%	23.1%	0.0%
Work as a team member.	13	92.3%	0.0%	7.7%	0.0%

The aggregate post-graduation survey results show that the majority of graduates of the Process Technology Program were able and confident or somewhat confident in demonstrating the PSLOs. Graduates indicated that their ability and confidence in working as a team member was highest.

Program Awards

Awards	2014-15	2015-16	2016-17	2017-18	2018-19
Degrees (Coastline Total)	1,609	1,893	2,074	2,025	2,188
Subject Degrees Awarded	4	1	5	8	12
Certificates (Coastline Total)	692	600	602	628	709
Subject Certificates Awarded	11	5	34	41	45

The percentage change in the number of Process Technology degrees awarded in 2018-19 showed a substantial increase from 2017-18 and a substantial increase from the number of degrees awarded in 2014-15. The percentage change in the number of Process Technology certificates awarded in 2018-19 showed a moderate increase from 2017-18 and showed a substantial increase in comparison with the number of certificates awarded in 2014-15.

Post-Graduation Outcomes

Post Grad Outcomes	2013-14	2014-15	2015-16	2016-17	2017-18
9+ CTE Units	33%	32%	19%	24%	28%
Earned a Livable Wage	71%	68%	72%	76%	Not Available
Median Annual Earnings	$62,969	$61,442	$61,442	$55,796	Not Available
Number of Students that Transferred	< 10	< 10	< 10	< 10	< 10

Curriculum Review

Course	Title	Term Reviewed	Status
PTEC C110	Introduction to Process Technology	SP19	Active
PTEC C111	Health, Safety, and Environment	SP19	Active
PTEC C112	Quality Management	SP19	Active
PTEC C113	Process Technology 1: Equipment	SP19	Active
PTEC C114	Process Technology 2: Systems	SP19	Active
PTEC C115	Process Technology 3-Operations	SP19	Active
PTEC C116	Instrumentation 1	SP19	Active
PTEC C117	Instrumentation 2	SP19	Active
PTEC C120	OSHA Standards for Construction Industry	SP19	Active
PTEC C121	OSHA Guide to Industrial Hygiene	SP19	Active
PTEC C122	OSHA Electrical Standards	SP19	Active
PTEC C123	OSHA Fall Protection	SP19	Active
PTEC C124	OSHA Excavation, Trenching, and Soil Mechanics	SP19	Active
PTEC C125	OSHA Electrical Safety and Lockout-Tagout for Construction	SP19	Active
PTEC C126	OSHA Principles of Ergonomics	SP19	Active
PTEC C127	OSHA Hazardous Materials	SP19	Active
PTEC C128	OSHA Respiratory Protection	SP19	Active
PTEC C130	OSHA Standards - General Industry	SP19	Active
PTEC C132	OSHA Permit-Required Confined Space Entry	SP19	Active
PTEC C134	OSHA Machinery and Machine Guarding Standards	SP19	Active

Course	Title	Term Reviewed	Status
PTEC C281	Work Based Learning	SP19	Active
PTEC C282	Work Based Learning	SP19	Active
PTEC C283	Work Based Learning	SP19	Active
PTEC C284	Work Based Learning	SP19	Active

New Courses

CUES C100C Introduction: Construction Industry
CUES C100U Introduction: Utilities Sector Infrastructure
CUES C101C Basic Construction Math
CUES C102C Construction Safety Awareness
CUES C102U Introduction: Gas Utility Sector
CUES C103C Construction Health and Safety
CUES C103U Introduction: Electric Utility Sector
CUES C281 Work Based Learning
CUES C282 Work Based Learning
CUES C283 Work Based Learning
CUES C284 Work Based Learning

External Analysis: Market Assessment Bureau of Labor Statistics

Advisory boards for the PTEC department meet virtually during the year. Due to market demand, we continue to pursue and develop courses in the (CUES) certificate covering Construction, Utilities, Energy and Safety. Suggestions included hiring at least one PT faculty each year to ensure relevancy in the field, and we were able to hire one in fall 2019 and are researching the PT pool.

We are continuing our partnership with the apprenticeship team, and students combine course work and job hours to complete stackable certificates towards entry level employment and eventually to journeyman status. We plan to continue to explore a pathway for the students who want to pursue the associates degree and then continuing on to a four-year engineering or business administrative degree.

Strong Workforce Program Metrics, LaunchBoard, was used to determine how our program aligns with jobs in the current market. (https://www.calpassplus.org/Launchboard/SWP.aspx) Attendance at process technology and oil refinery meetings/conferences was recommended to obtain current information for the course and to recruit advisory members.

State	Position	Employment	Projected Employment, 2029	Hourly mean wage	Annual mean wage
California	Petro Pump Operators/Technicians	11,280	11,909	$39.09	$81,420

Labor Market Statistics

Employment of geological and petroleum technicians is projected to grow 5 percent from 2019 to 2029, faster than the average for all occupations. Demand for natural gas is expected to increase demand for geological exploration and extraction in the future. Oil prices will be a major determinant of employment growth. Higher prices can cause oil and gas companies to increase capital investment in new facilities and expand existing production operations, along with exploration.

The median annual wage for petroleum engineers was $137,720 in May 2019.

Progress on Initiative(s)

Initiative(s)	Status	Progress Status Description	Outcome(s)
Develop and produce twelve new process technology courses aligned with OSHA standards to advance students towards necessary certifications for job advancement.	Completed	Approved by curriculum	New certificate program
Hire two additional part time instructors to develop the new courses by FALL 2017.	Completed	Hired one PT faculty member 2019	Hire another PT faculty
Participate in the state and federal apprenticeship program grants in partnership with the Coastline's Contract Education team, resulting in job placement for all students, especially veterans. The PTEC department will create a bridge with the Building Codes department to expand the opportunities for students to seek varied levels of entering the workforce.	Completed	Developing additional pathways to BCT, PTEC. Developing new curriculum CUES	Partnerships and broadened apprenticeships
Expand the PTEC advisory board membership to include experts in additional process technology industries, such as Food and Beverage, Bio-Manufacturing and Wastewater Treatment.	On Going	Currently added the Building trades council, Career Expansions, Inc with other local companies and union reps.	Strengthening the board and the recommendations
Create and design one of the new process technology courses (aligned with OSHA standards to advance students towards necessary certifications for job advancement), as department course (Fall 2018) Coordinate the online **department/shared** development (faulty cohort) with the industry and state contributors	Ongoing		
Hire two additional PT instructors for the PTEC Program.	Completed/on going	One instructor hired	6 more instructors in PT pool

Initiative(s)	Status	Progress Status Description	Outcome(s)
Access PT faculty pool and reach out to additional recruiting agencies (Spring 2018).			
Create new CUES certificate (Construction, Utilities, Energy and Safety) to be offered in coordination with the apprenticeship program (Extended Learning Division team), resulting in job placement for all students, especially veterans. This new certificate will cover both PTEC and BCT departments to expand the opportunities for students to seek varied levels of entering the workforce in either area.	In-Progress	Completed 11 courses	Move on to certificate development
Create and design the new process technology/CUES certificate (Fall 2020). Coordinate the online course development process with the industry and state contributors	In-Progress	Working with employment consultants	

Response to Program and Department Review Committee Recommendation(s)

Recommendation(s)	Status	Response Summary
Seek new opportunities for pathways	ongoing	Developing additional clear pathways to BCT, PTEC. Developing new curriculum CUES
Expand partnerships to strengthen the apprenticeship program	ongoing	Currently added the Building trades council, Career Expansions, Inc with other local companies and union reps.
Grow the part-time faculty pool	completed	Hired one part time instructor and need one more
Facilitate the development of **department/shared** course	ongoing	Discussions underway to develop team with FSC
Expand the Program Advisory Committee to include representatives from engineering, environmental, manufacturing and related industries.	ongoing	5 new members attended the last advisory meeting

Program Planning and Communication Strategies

Faculty, dean and chair discussed the approach to SLO data collection in relationship to the five-year plan to assess and re-assess course SLOs revisions. Faculty determined the need for revisions based on industry changes for process technician standards and policies, software or legal guidelines. Ongoing efforts are being made to procure or create open education resources for the same reason, as faculty are mindful of the cost of materials can be a barrier. The challenge is the program must use industry sanctioned manuals. Possible scholarships for book allowances are being furthered explored.

We continue to schedule virtual meetings during the term to discuss findings. We can now align outcomes to key workplace ready skills outlined by the process technology regulations and those in our certificate programs. Faculty determine the most effective assessment for each course that ultimately prepares the student for the process technician position.

Faculty continue to discuss developing additional department/shared courses in Process Technology so all student learning outcomes can be addressed with continuity and an effective, rich career aligned assessments.

Coastline Pathways

Program faculty and department chair were involved in college meetings and work groups throughout last year. Pandemic issues disrupted the process with meeting coordination and attendance with hopes of increased participation in fall and spring.

Implications of Change

Since being able to offer a better sequence of courses for students since hiring a new part time instructor the department is seeing a slight increase in certificates awarded. In addition, the students from the pilot apprenticeship special cohort which is focused on job readiness, are now registering in the mainstream PTEC courses and are expected to complete in Spring or Fall 2021.

Another factor is the EPP (Energy Pathway Program) partnership which provides students additional job readiness skills, will continue next year in spite of the pandemic situation.

The shift in demographics to younger students last year, is now trending to an older student. We feel this is due to the developing partnerships with career expansion projects in conjunction with trade unions. Many workers are coming back for re-training and with a clear pathway, should result in higher completion rates.

We continue to see a slow increase in students seeking courses due to the new state and local building projects or renovation projects that will need trained as well as re-trained workers.

Section 2: Human Capital Planning

Staffing

Year	Administrator /Management	F/T Faculty	P/T Faculty	Classified	Hourly
Previous year 2019-20	CTE Dean and Associate Dean		1 Dept Chair 5 PT Instructors		
Current year 2020-21	CTE Dean and Associate Dean		1 Dept Chair 8 PT Instructors		
1 years 2021-22	CTE Dean and Associate Dean		1 Dept Chair 8 PT Instructors		
2 years 2022-23	CTE Dean and Associate Dean		1 Dept Chair 8 PT Instructors		

With only part-time faculty, the challenge is how to grow the program and maintain the schedule needed to offer courses for certificate completion. In order to meet current workforce demands for marketable skills, technology literacy and changes in skill levels, as specified by the advisory board, it would be a top priority to hire a one part-time process tech instructor each year.

Professional Development Virtual

Over the past year, the college has offered varied opportunities for professional development during the school year and up until last spring, (Pandemic) when all conferences and training are online. The virtual Zoom trainings and meetings are more efficient to accommodate the department's part-time faculty and their work and family schedules.

Name (Title)	Professional Development	Outcome
Faculty	Petroleum, Oil, Gas or Energy Summit	For 2020/21
Faculty	Online training Simtronics	To update system and skills
Faculty and/or Dept Chair	InstructureCon - CANVAS	Augmented instructional strategies using CANVAS
Faculty and/or Dept Chair	Digital Learning Day	February International 'Day"
Faculty and/or Dept Chair	Can*Innovate	@ONE offers one day of free online workshops for teaching and learning
Faculty and/or Dept Chair	Coastline Pathway Training	ongoing
Faculty and/or Dept Chair	SLO Training in Canvas	ongoing
Faculty and/or Dept Chair	Canvas Apps Training	ongoing
Faculty and/or Dept Chair	Net Tutor and Camtasia & Knowmia Training	
Faculty and/or Dept Chair	Equity and Culturally Responsive teaching training	ongoing
Faculty and/or Dept Chair	Online Teaching Conference	Discussed new strategies for increased interaction, faculty at discipline meeting

Section 3: Facilities Planning

Facility Assessment

All courses/programs are offered completely online so there are no apparent facility changes or needs.

Section 4: Technology Planning

Technology Assessment

To maintain current updates to software such as Simtronics, the PTEC program will need to update the software and any industry mobile apps used in the field. Technology needs would be ongoing such as new software instructors need to learn. Additionally, we will research and explore new apps or tools to Improve teaching and learning in Canvas.

There is a need for ongoing training for faculty, so they will continue to learn more about rubrics and assessments in the LMS. The training and course review strengthened our online courses, with a focus on regular substantive interaction accompanied by academic rigor and promoting student success, retention and completion.

The continued district sitewide license for TechSmith products which include, Camtasia, Snagit and Knowmia (Relay) gives faculty the opportunity to create screenshots, capture movement on the computer screens and edit the video to produce tutorials or short movies, including closed captions. Instructors are developing more videos that are interactive with quizzes and commenting. We continue to schedule continuous course improvement workshops to encourage varied assessments. Faculty are gradually moving their create videos to Knowmia from YouTube for consistency and security.

Cloud computing, virtual desktops and “laptops on loan” for students, faculty and staff are more essential due to working and learning from home. (Pandemic related) For our department, since all are PT instructors, they rely on their own equipment. They are surveying students to target the most urgent needs.

Section 5: Ongoing/New Initiatives

Initiative: Hire additional part time instructor in Spring 2021 to revise curriculum and teach PTEC courses by Fall 2021.

Describe how the initiative supports the college mission:
It supports the college mission by providing experienced instructors to develop new courses and revise existing courses, which is a direct outcome of building stronger relationships with oil refineries and industry leaders, expanding our advisory board, and offering a focused pathway.

What college goal does the initiative support?
☐ Reduce all student equity gaps regarding access and achievement (Equity)
☒ Increase student completion and achievement outcomes by 20% (Achievement)
☐ Strengthen College collaboration, communication, continuous learning, and community engagement (Engagement)
☐ Further develop, adopt, and adapt innovative practices and technologies that advance student success and institutional effectiveness (Innovation & Effectiveness)

How does this initiative play a part in Coastline Pathways?
This initiative plays a part in clarifying the student's path and exploring existing job opportunities while completing the college and industry specified certificates.

What evidence supports this initiative? Select all that apply
☐ Learning or Service Area Outcome (SLO/SAO) assessment
☐ Internal Research (Student achievement, program performance)
☒ External Research (Academic literature, market assessment, audit findings, compliance mandates)

Describe how the evidence supports this initiative.
Industry and state recognized certificate/license for process technology technicians and engineers.

Recommended resource(s) needed for initiative achievement:
Existing updated courses and hire one part-time instructor.

What is the anticipated outcome of completing the initiative?
The ability to complete the certificate program successfully and gain marketable skills for job placement.

Provide a timeline and timeframe from initiative inception to completion.
Hire additional part time instructor in Spring 2021 to revise curriculum and teach PTEC courses for fall 2021.

Section 6: Prioritization

List and prioritize initiative requests.

Initiative	Resource(s)	Est. Cost	Funding Type	Health, Safety Compliance	Evidence	College Goal	Complete By	Priority
Hire additional part time instructor in Spring 2021 to revise curriculum and teach PTEC courses by Fall 2021	Existing updated courses and hire one part-time instructor.				External Research (Academic literature, market assessment, audit findings, compliance mandates)	Increase student completion and achievement outcomes	2021	1

Prioritization Glossary

Initiative: Provide a short description of the plan
Resource(s): Describe the resource(s) needed to support the completion of the initiative
Est. Cost: Estimated financial cost of the resource(s)
Funding Type: Specify if the resource request is one-time or ongoing
Health, Safety Compliance: Specify if the request relates to health or safety compliance issue(s)
Evidence: Specify what data type(s) supported the initiative (Internal research, external research, or learning outcomes)
College Goal: Specify what College goal the initiative aligns with
Complete By: Specify year of anticipated completion
Priority: Specify a numerical rank to the initiative

Data Glossary

Enrolled (Census): The official enrollment count based on attendance at the census point of the course.

FTES: Total **full-time equivalent students** (FTES) based on enrollment of resident and non-resident students. Calculations based on census enrollment or number of hours attended based on the type of Attendance Accounting Method assigned to a section.

FTEF30: A measure of productivity that measures the number of **full-time faculty** loaded for the entire year at 30 Lecture Hour Equivalents (15 LHEs per fall and spring terms). This measure provides an estimate of full-time positions required to teach the instruction load for the subject for the academic year.

WSCH/FTEF (595): A measure of productivity that measures the weekly student contact hours compared to full-time equivalent faculty. When calculated for a 16 week schedule, the productivity benchmark is 595. When calculated for an 18-week schedule, the benchmark is 525.

Success Rate: The number of passing grades (A, B, C, P) compared to all valid grades awarded.

Retention Rate: The number of retention grades (A, B, C, P, D, F, NP, I*) compared to all valid grades awarded.

Fall-to-Spring Persistence: The number of students who completed the course in the fall term and re-enrolled (persisted) in the same subject the subsequent spring semester.

F2S Percent: The number of students who completed a course in the fall term and re-enrolled in the same subject the subsequent spring semester divided by the total number of students enrolled in the fall in the subject.