Professional/Technical
& Customized Education
Monitoring Report

2015 – 2019
(Cycle 21)

CORE THEME I: Workforce and Economic Development

Objective 1: Provide quality professional/technical education for employment, skills enhancement, and career development.

Objective 2: Partner with business, community groups, and other educational entities to provide workforce development and customized programs and services.

May 20, 2020

Professional/Technical & Customized Education Monitoring Report

Lower Columbia College's Key Performance Indicators were initially established in 1999 through a strategic planning process. The framework was updated in 2007, and revised in 2011 with the adoption of the Northwest Commission on Colleges and Universities new standards for accreditation.

Key Performance Indicators for Professional/Technical and Customized Education include:
- Student performance
- Demonstration of program competencies
- Licensure/exam rates
- Placement rate in the workforce
- Employer satisfaction
- Relevance of programs
- Client assessment of programs and services

Enrollment data is also included in the report.

Some of the actions that have come about as a result of reviewing data in this report include:

• Two new Certificates of Proficiency were developed in the Manufacturing, Trades and Transportation pathway: Production Technician and Engineering Technician. These programs were created in response to industry demand and will assist in addressing current local labor shortages.

• In the Production Technician COP, a new course, Fundamentals of Instrumentation and PLC's, was also created and the first time offering saw participants from six different local employers.

• Workforce Education programs, in partnership with College Relations, continued to strengthen marketing efforts and web page design to attract new students and improve navigation. LCC's "Go-to-Work" page was redesigned and several new recruiting and marketing materials were developed for Engineering Tech, Early Childhood Education, Nursing, and Medical Assisting. Active marketing for MEDA has been occurring as the cohort size has been down.

• Nursing has expanded the entering LPN2RN cohort from 46 students to 51 (10%).

• Pass rates for the nursing licensure exam are trending up; the two-day on campus Kaplan review course for licensure exam preparation continues to be offered every quarter.

• As part of the Guided Pathways initiative, all course data was reviewed in each program. Medical Assisting faculty made some changes regarding grading in some courses as a result of the data review.

• MEDA continues to encourage all students applying for certification to take the online review course.

• Selected Chemical Dependency Studies and Criminal Justice courses are now being offered hybrid and online.

• LCC became an approved AWS (American Welding Society) facility. The welding program adopted new curriculum through the AWS online educational library giving students an opportunity to graduate with additional industry recognized credentials.

• Professional-Technical Advisory Committees were strengthened this year by combining with K12 CTE programs and increasing employer participation. Over 30 new partners from business and industry were added and feedback on the combining of advisory boards with K12 has been highly positive.

• A new Business Achievement Center (BAC) was established to support students in Accounting, Business, and IT programs. The BAC provides students pursuing these majors a place to receive additional instructional support. As a part of this project, a new active learning classroom was also created that will serve students in all programs.

• LCC was awarded a $95,000 Workforce Technology Enhancement grant, with a matching portion from local industry and the LCC Foundation, to purchase a CDL training simulator to help support the ongoing demand for truck drivers.

In 2019-20, LCC revised/updated several key performance indicators, goals and data sources.

PART 1: PROFESSIONAL/TECHNICAL

Key Performance Indicator: <u>Student Performance</u>
(Mission Fulfillment = 80%)
(Stretch Goal = 85%)

Table 1: Proportion of students receiving C grades or better in workforce classes numbered 100 and above. Grades excluded: I, N, R, NA, X and V.

	2014-15	2015-16	2016-17	2017-18	2018-19
C or better (Overall)	84.0%	84.3%	85.7%	86.4%	87.3%
Male	81.7%	82.9%	85.9%	83.1%	80.5%
Female	87.8%	87.7%	88.8%	90.0%	89.4%
Students of Color	83.6%	84.6%	85.5%	87.1%	85.7%
Economically Disadvantaged	83.1%	83.6%	85.2%	85.4%	85.1%

Source: Select Kind of Student = W from Student Table, link to Transcripts for relevant year where grades not like I, N, R, V, X or NA; select dept_div, course num is >=100, gr, gr_dec, item and yrq; link to Class table using item and yrq to select INSTIT_INTENT_RECAT = "V" (Workforce Courses) from Class table.
Note: as of 2017-18, P grades included as successful grade.

Key Performance Indicator: <u>Demonstration of Program Competencies</u>
(GOALS SET BY INDIVIDUAL PROGRAMS)

Attainment of Competencies for Individual Programs

As part of the college's established Curriculum & Program Review process, all programs are required to collect and analyze data for the purpose of improving student learning outcomes. Each program review plan is unique, and addresses competencies relevant for the specific discipline. Some plans, such as Nursing and Medical Assisting, are related to external accreditation and/or industry standards. Faculty perform quarterly activities for Curriculum & Program Review according to a schedule set by the Instructional Assessment Committee. A full Curriculum & Program Review cycle lasts two years, at which point the cycle starts again.

<p style="text-align:center">Key Performance Indicator: <u>Licensure/Exam Rates</u></p>
<p style="text-align:center">(Mission Fulfillment NCLEX = exceed state benchmark of 80%; WABO = 80%; MAERB = 80%)</p>
<p style="text-align:center">(Stretch Goal NCLEX = 90%; WABO = 100%; MAERB = 90%)</p>

Nursing graduates must be licensed in order to work in the field. Nursing completers must pass the NCLEX – a national, standardized nursing test. Similarly, welding completers must pass the WABO test to earn their degree. Medical Assisting completers must pass the Medical Assisting Education Review Board exam. Rates are based on the calendar year.

Table 2: Licensure Rates for Nursing, Welding, and Medical Assisting

	2015	2016	2017	2018	2019
NCLEX (National Council of State Boards of Nursing) – first time pass rate					
Registered Nurse	89% (109/122)	88% (99/113)	82% (94/115)	88% (70/80)	95% (81/85)
WABO (Washington Association of Building Officials) – first time pass rate beginning in 2018					
Welding (LCC students only)	100% (n = 14)	100% (n=9)	100% (n=11)	96% (n=25)	88% (n=26)
MAERB (Medical Assisting Education Review Board) – pass rate					
Medical Assistant	100% (n = 19)	100% (n = 13)	89% (n = 16)	92% (n = 12)	*

Source: Nursing and Welding Departments. *data not yet available

- NCLEX rates are by cohort graduation year.
- WABO rates are by calendar year.
- The number of welding students taking the WABO fluctuates for several reasons, including the fact that students decide when they want to test (whether or not their instructor thinks they are ready). Some people who are only able to be in the program for a short time opt to test sooner than others, sometimes before they're ready. Also, some student testers are only enrolled for a short refresher course (rather than a degree or certificate program) but appear in the student data nevertheless. Hiring trends can also affect students' decisions to test earlier rather than later in their program.

Key Performance Indicator: <u>Placement Rate in the Workplace</u>
(Mission Fulfillment = no more than 2% below system average)
(Stretch Goal = Exceed System Average)

The State Board for Community and Technical Colleges coordinates annually with Employment Security to match records of employed students to determine employment placement rates. Students who continue their education in the Washington system are excluded from totals.

Table 3: Employment Rates for Lower Columbia College
(Indicates year students were employed—having completed studies the prior year)
Percent of Completers Placed in UI-Covered Jobs or Continuing Education

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
LCC	77%	79%	80%	74%	86%
System Average	77%	77%	77%	76%	77%

Source: SBCTC After College Outcomes Dashboard, Prof/Tech Placement View, located at sbctc.edu/colleges-staff/research/data-public/after-college-outcomes-dashboard.aspx. Excludes those who are self-employed and work out of state.

Table 4: Employer ranking of LCC Graduates' professionalism

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Professionalism is "Average" or "Above Average" ("Exceeds Expectations" or "Meets Standard" from Nursing survey; "Strongly Agree" or "Agree" from Medical Assisting survey)	90% (n = 52)	98% (n = 93)	97% (n = 140)	99% (n=77)	99% (n=116)

Source: Employer Feedback Survey and Early Childhood Education (ECED) Employer Survey. Starting in 2015-16, included Nursing Graduate Employer Survey. Starting in 2018-19, included Medical Assisting Employer Survey.

- Survey methodology includes surveying members of LCC's Professional/Technical Advisory Committees in addition to other employers including employers of Nursing, Medical Assisting and Early Childhood Education graduates.

<div align="center">

Key Performance Indicator: <u>Relevance of Programs</u>
(Mission Fulfillment = 85%)
(Stretch Goal = 90%)

Table 5: Proportion of LCC graduates who are satisfied with training at LCC
in relation to their job duties

</div>

	2013-14	2014-15	2015-16	2016-17	2017-18
"Good" or "Very Good" responses (and "Yes, Very" and "Yes" from Nursing Survey).	89% (n = 120)	89% (n = 90)	88% (n = 104)	91% (n = 145)	96% (n=113)

Source: Prof/Tech Alumni Survey. Starting in 2015-16, sources are Prof/Tech Alumni Survey and Nursing Graduate Survey.

Please note: This is the most recent data available.

<div align="center">

Professional/Technical Enrollment

</div>

The professional/technical enrollment summary presents the annualized FTE (Full Time Equivalent) of all state-funded professional/technical enrollments by Institutional Intent. Enrollment of Worker Retraining students has a major impact on Professional/Technical programs.

<div align="center">

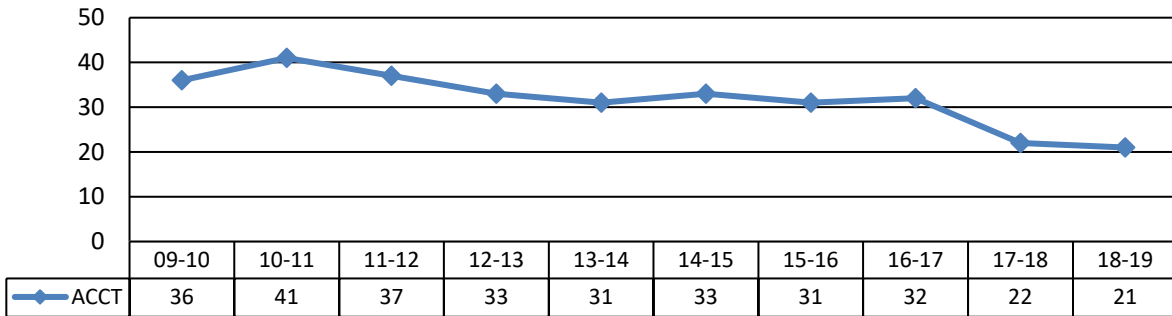**Table 6: Professional Technical Enrollment Summary (state funded only)**

</div>

	Prof/Tech FTE	**Worker Retraining FTE**
2014-15	793	99
2015-16	699	109
2016-17	606	103
2017-18	574	110
2018-19	548	100
1 year change	-5%	-9%
5 year change	-31%	+1.0%

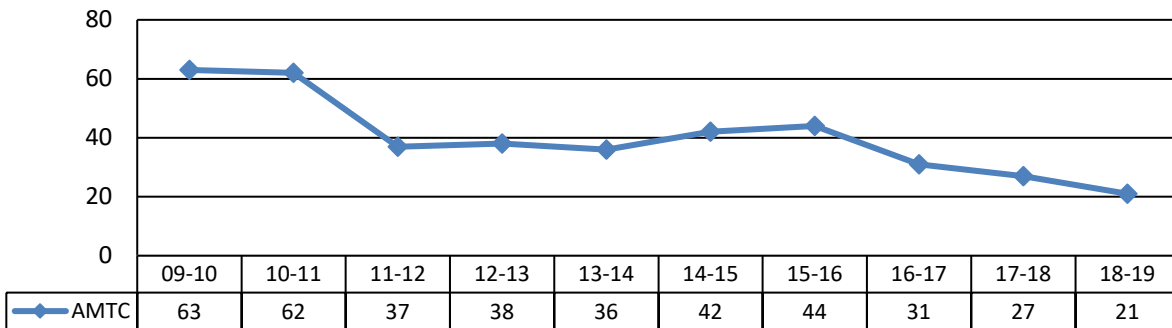Source: Data Warehouse, Access Monitoring Report for Prof/Tech FTE and Worker Retraining FTE.

- In 2018-19, Professional/Technical enrollment decreased and Worker Retraining enrollment decreased.

Figure 7: Professional Technical Enrollment by Discipline (annual state funded FTE)
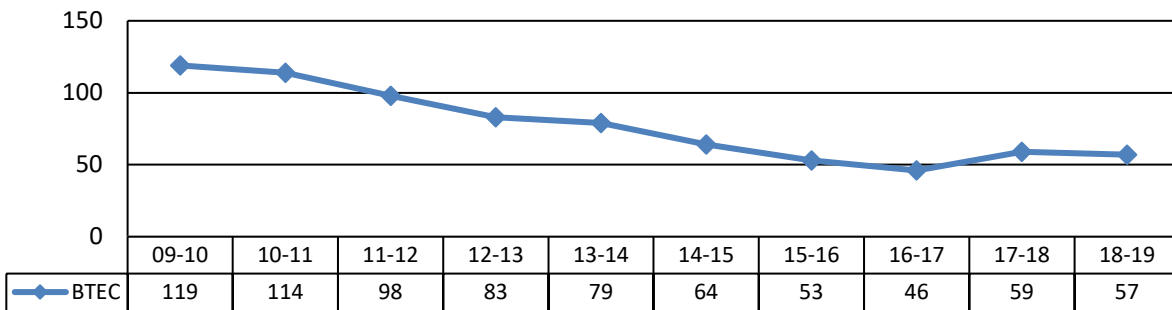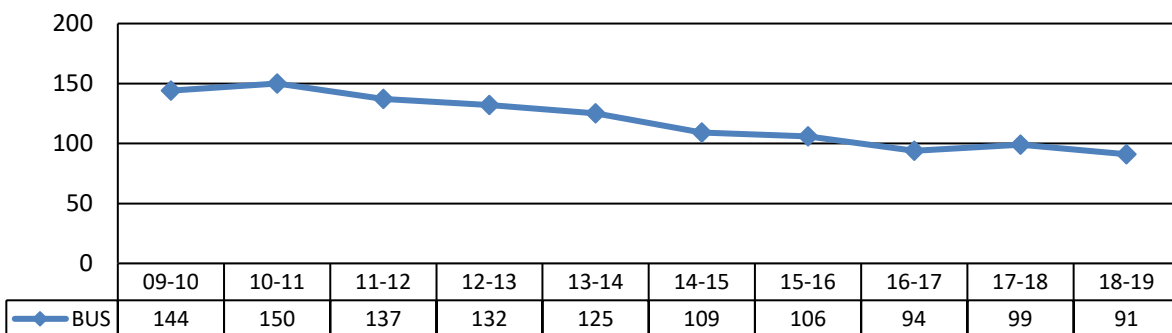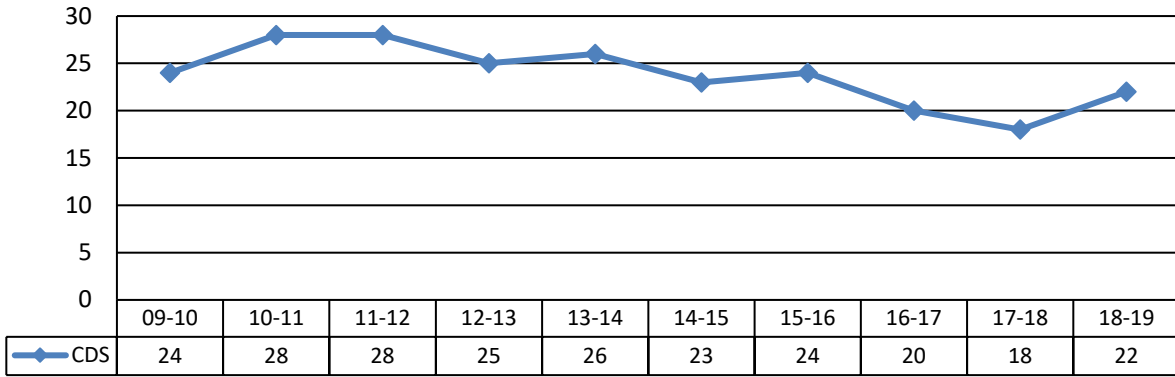
Accounting

	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
ACCT	36	41	37	33	31	33	31	32	22	21

Automotive Technology

	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
AMTC	63	62	37	38	36	42	44	31	27	21

Business Techology

	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
BTEC	119	114	98	83	79	64	53	46	59	57

Business

	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
BUS	144	150	137	132	125	109	106	94	99	91

Chemical Dependency Studies

	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
CDS	24	28	28	25	26	23	24	20	18	22

Criminal Justice

	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
CJ	19	20	17	17	20	17	11	10	14	14

Diesel/Heavy Equipment Technology

	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
DHET	55	53	42	55	52	44	42	35	31	23

Early Childhood Education

	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
ECED	29	33	37	26	34	33	28	20	24	32

Education

	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
EDUC	14	12	11	13	19	18	16	15	18	20
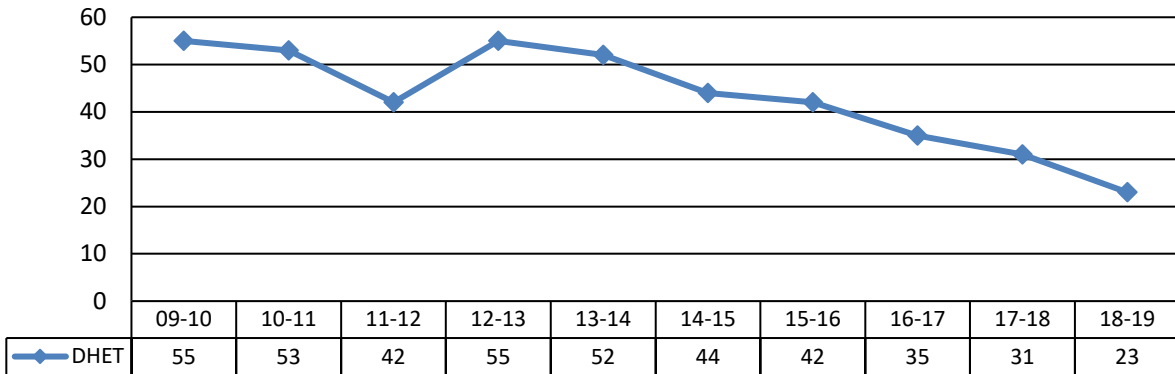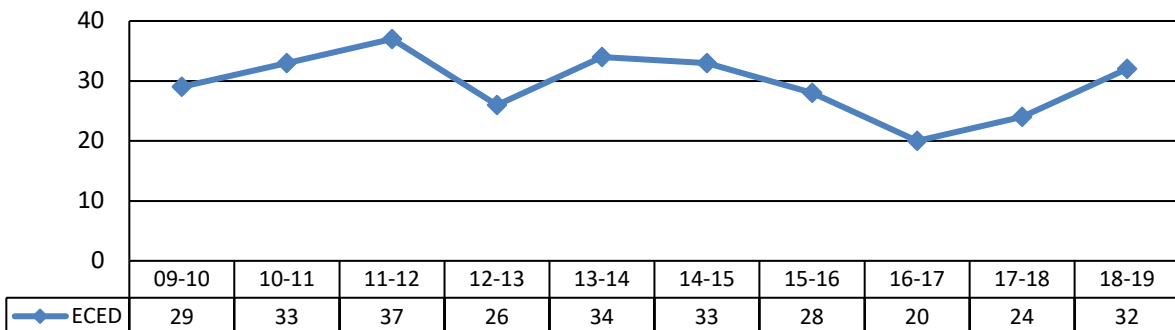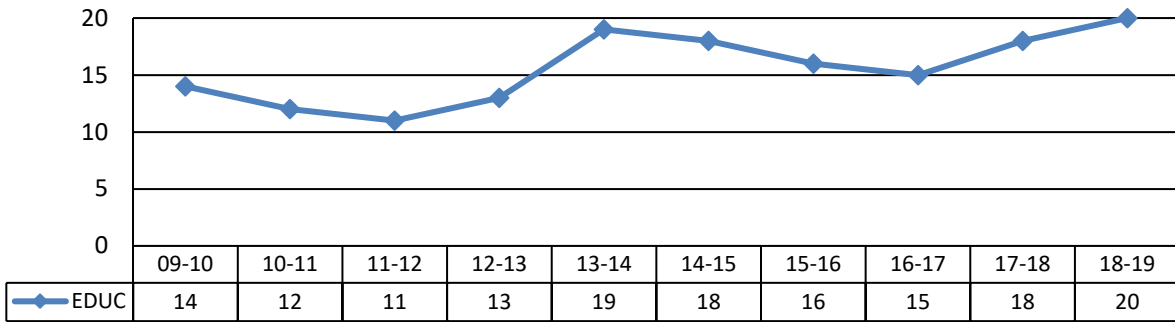
Information Technology / Computer Science

	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
CS/IT	95	109	92	85	85	83	77	71	43	24
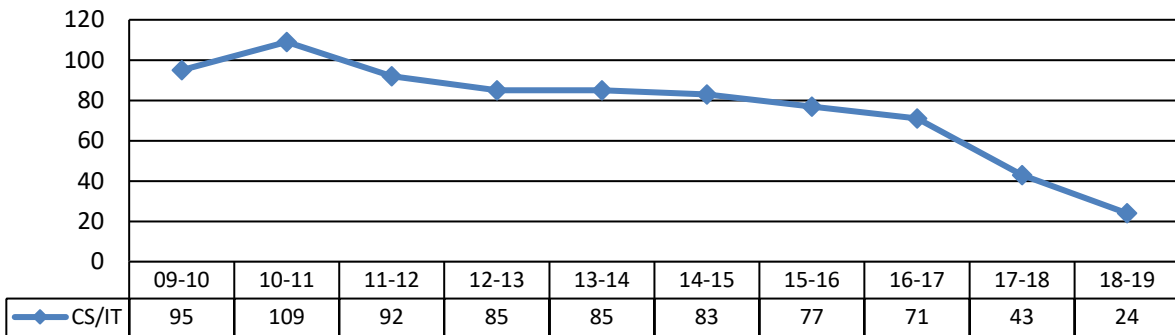
Note: includes IT FTEs beginning 2017-18.

Machine Trades

	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
MASP	25	19	19	22	22	17	15	21	18	17

Medical Assisting

	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
MEDA	26	27	28	27	28	30	33	32	35	29
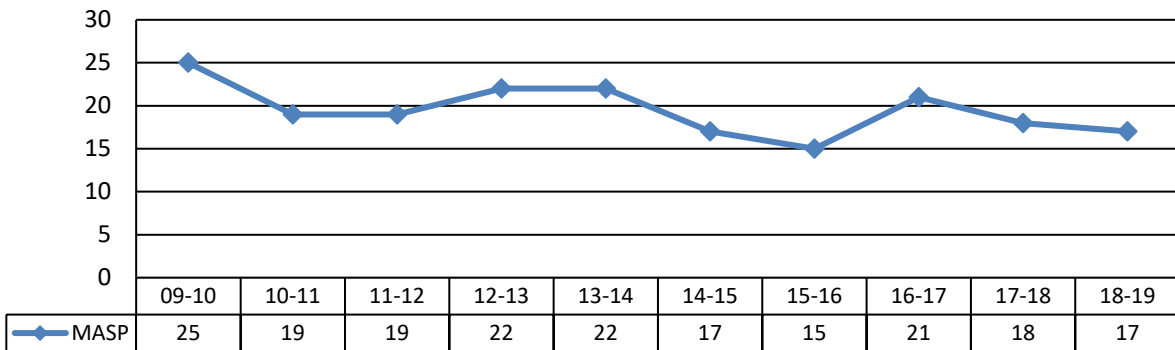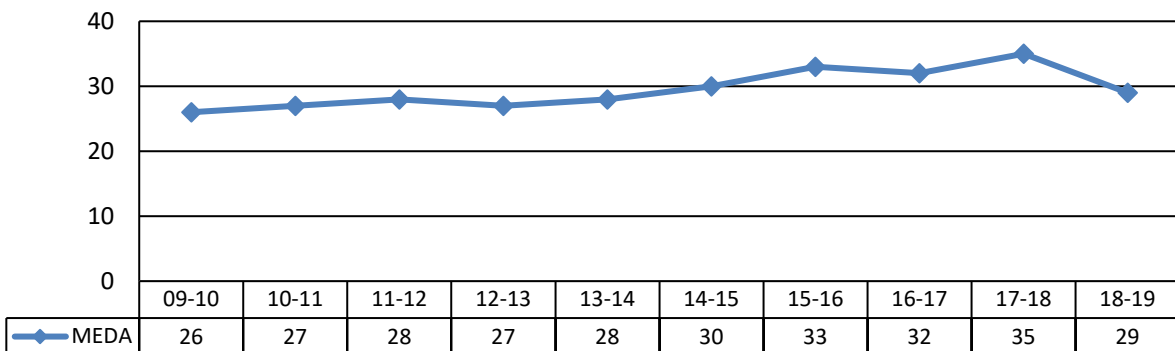
Manufacturing/Process Manufacturing (previously PULP)

	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
MFG/PMFG	32	21	14	17	14	9	11	9	8	13
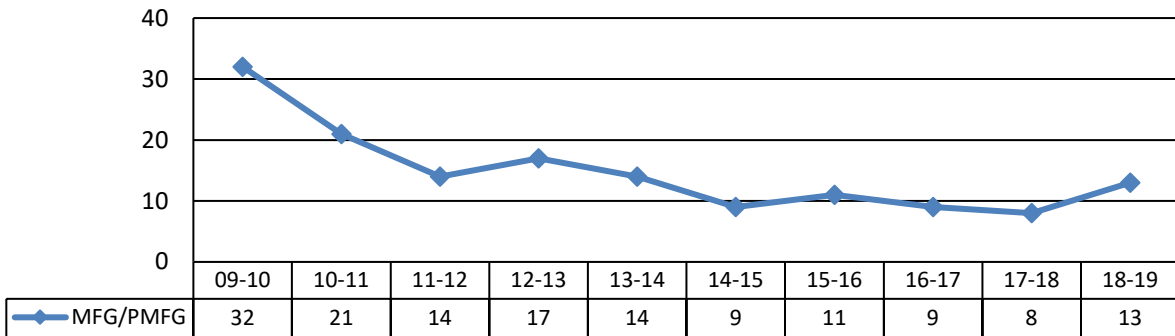
Nursing (including RN, LPN and Nursing Assistant)

	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
NURS	205	206	185	167	170	171	150	137	133	127

Welding

	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
WELD	71	59	55	49	50	45	42	33	28	26
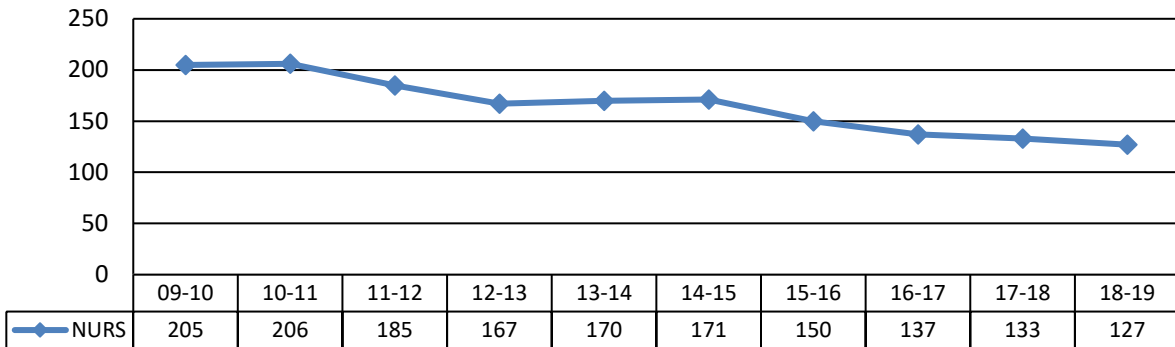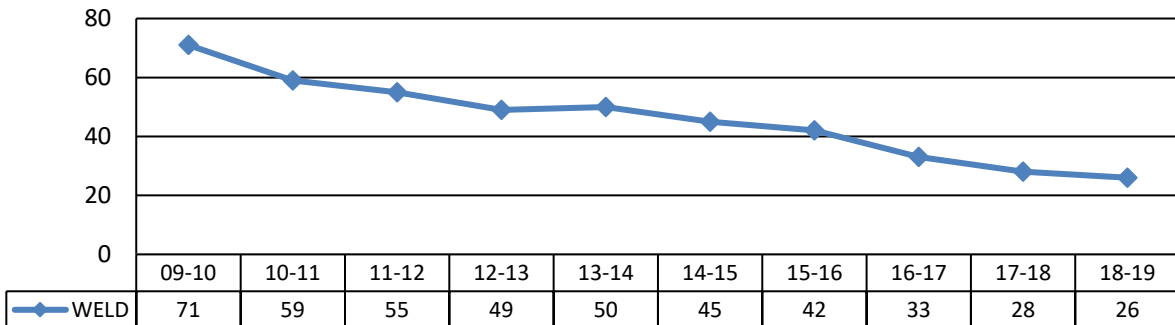
Source: Data Warehouse, Class Table (DEPT_DIV, COURSE_NUM, ITEM, YRQ, FTES_STATE/3).

PART 2: CUSTOMIZED EDUCATION

Key Performance Indicator: Client assessment of programs and services
(Mission Fulfilment = 90%)
(Stretch Goal = 100%)

Table 8: Evaluation of Corporate & Continuing Education

The following evaluations were administered across a variety of Corporate & Continuing Education courses in 2017-18 (including 359 responders). Respondents ranked each category on the following scale: Exceeded Expectations, Met Expectations, or Needs Improvement.

	2013-14	2014-15	2015-16	2016-17	2017-18
Percent indicating that overall expectations were met or exceeded.	99%	99%	99%	98%	98%

Source: Corporate & Continuing Education Office

- Client satisfaction remains strong.
- This is the most recent data available.

EDUCATION, TRAINING AND TESTING ACTIVITIES

Table 9: Continuing Education Enrollment: Duplicated Headcount

2014-15	2015-16	2016-17	2017-18	2018-19	1 yr Δ	5 yr Δ
2,260	2,131	2,018	2,109	1,842	-13%%	-18%

Source: Fact Book/Continuing Education office

- Enrollment in Continuing Education activities is trending down.

Table 10: Pre-Employment Testing (Work Keys, etc.) Unduplicated Headcount

2014-15	2015-16	2016-17	2017-18	2018-19	1 yr Δ	5 yr Δ
540	294	455	332	385	16%	-29%

Source: Fact Book/Testing Office/Continuing Ed Office.

- Pre-Employment Testing increased in 2018-19 from the previous year.

Table 11: Other Testing Exams: Duplicated Headcount

Exam	2014-15	2015-16	2016-17	2017-18	2018-19
NREMT (EMT Test)	117	151	166	165	159
Educator Licensing Exams (NES, West-B, ORELA)	200	259	232	289	304
Automotive Service Excellence (ASE)	232	281	206	125	154
ASE Student Entry-Level Certification	***	***	***	***	26
CLEP (Prior Learning Assessment)	45	25	25	45	23
Certiport (Microsoft Office Certification)	22	146	251	200	202
Pesticide Testing (Washington State Department of Agriculture)	70	241	327	379	455
IT Exams (Comptia, Cisco, Microsoft, Juniper Networks)	*	43	41	41	45
ParaPro (certification exam for paraprofessional educators)	**	**	103	91	84
Castle Worldwide (ACE certification, BPS, certification, and others)	**	**	17	17	14
Medical Certification Exams (Pharmacy Tech, ACSM, PTI)	***	***	***	***	15

Source: Fact Book/Testing Office. *Data not available because test newly offered in 2015-16. **Data not available because test newly offered in 2016-17. ***Data not available because test newly offered in 2018-19.

Lower Columbia College
Professional/Technical Monitoring Report
Analysis from the Review Team

Members include: Tamra Gilchrist & Karen Joiner, co-chairs, Lynell Amundson, Randy Byrum, Leszek Cromwell, Dana Cummings, Liz Engel, Sarah Griffith, Heidi Hamer, Serena Lampkin, Elissa Loren, Anita Quirk, Connie Ramos, Stefan Rijnhart, David Rosi, Rebekah Rossetti, Stefanee Sorgenfrei, Dani Trimble, Nonnie Weaver, Ann Williamson, Jill Yates.

1) **Based on the data in this report, what are LCC's strengths in providing professional/technical preparation and customized education?**
- Based on employer satisfaction and placement rates, we are doing a good job of connecting with the local workforce and surrounding community.
- Our pass rates for licensure are very high for all programs represented.
- Our Early Childhood Education and Education pathways are growing, at least partially in response to our new BAS-TE degree.
- We have been able to stabilize and maintain our Worker Retraining enrollment, which brings new enrollments and provides additional funding for our programs and support services for students.

2) **Based on the data in this report, what are LCC's weaknesses in providing professional/technical preparation and customized education?**
- We need to continue to look at our programs that have declining enrollment and deploy strategies to strengthen them, such as through curriculum reform, connecting with Centers of Excellence, etc.
- A lack of updated facilities may be impacting enrollment in some areas. The new vocational building should address this issue.
- The landscape is changing in some fields that are beginning to prioritize industry certifications over educational credentials. Because students in some programs may leave before completion (but after achieving certification), there may be an impact on enrollment. On a related note, opportunities may exist to add certification options for people who have already earned degrees.

3) **Based on the data in this report, what are LCC's opportunities for providing professional/technical preparation and customized education?**
- The COVID-19 pandemic has inadvertently provided an opportunity to explore more online instruction in areas that have traditionally been predominantly face-to-face.
- We have an opportunity to grow continuing education, especially in terms of employer training.
- Increasing capacity in the nursing program is an opportunity.
- We are currently exploring development of a second BAS pathway that fits with a majority of our existing professional/technical associate degrees.
- In terms of our K-12 partnerships, we have an opportunity to increase alignment and collaboration.

- Reengagement of adults over 25 is a growing opportunity, and aligns with similar initiatives being promoted by the Washington Student Achievement Council (for example).
- Closing equity gaps in terms of student performance is an opportunity we can begin to explore by diving further into the data.

4) **Based on the data in this report, what are LCC's threats for providing professional/technical preparation and customized education?**
- Facilities limitations will remain a threat while we are awaiting our new vocational building.
- The COVID-19 pandemic will remain a threat to enrollment for an undetermined amount of time, but could also result in an enrollment boom. Overall, the outlook is uncertain.

Board Plus/Delta

"What is good about this report and what would you like to see changed?"

+	Δ