Program/Discipline Reviews 2015-2016
Themes by Topic

20 SACs did program reviews this year: 12 from Career-Technical Education (CTE): AMT, CADD, CJA, DA, DT, DST, EET, FP, ID, NRS, SLIP, WLD 8 from Lower-Division Collegiate (LDC) or Developmental Education (DE): ABE, BI, CG, CH, ESR, GGS, PS, SOC		
1A	Discipline/program goals and objectives, how they align with national trends, and whether they have changed in the past five years and/or are expected to change in the next five years	In CTE, there is a compelling goal in certain trades to produce more industry-ready graduates to fill job vacancies. As such, forging and maintaining partnerships with industry and upholding hard-won program accreditation is a common theme. For the sciences, meeting the needs of both majors and non-majors is a priority. Several SACs connect student achievement goals in the LDC-DE disciplines to lifelong success: In ABE, it is basic literacy for all age groups and all at-risk populations; in CG, it is personal, college, and career success; in PS, "empowerment and informed citizenship;" and, in SOC, the ability "…to intervene in the larger social forces that shape their lived experiences, their communities and the broader social world." Promoting ethics is an important goal for many, as is developing students' analytical literacy, higher-order critical thinking, metacognition, evidence-based decision making, and scientific understanding—recurring themes for both CTE and LDC-DE. The overarching goals have not changed for most of the SACs, but the landscape has changed in terms of "evolving technology advances and/or development" (CH), more reliance on math and science due to technological advancements (DT), and global events requiring students to reflect on their role in the community (CJA). The future promises changes for NRS due to the Institute of Medicine's 2010 recommendation that the proportion of nurses with a bachelor's degree be 80% by 2020, and for SLIP, where interpreters face a new bachelor's degree requirement for national certification. For BI and other SACs, enrollment shifts dictate more inter-campus communication and "a critical review of resource deployment on all four campuses."
1B	Changes made as a result of SAC recommendations in, or administrative response to, the last program review	Ten SACs reported significant equipment upgrades. Nine benefited from new or remodeled classrooms, laboratories, shops, conference/debriefing rooms, materials lab, office space, and learning areas (including Sylvania's Maker Space). Eleven SACs reported curricular-related projects that resulted in CCOG review and revisions (including attention to outcomes), course and degree restructuring, new courses and short-term certificates, deactivated courses, and/or changes to math requirements. Four SACs gained new FT or PT faculty positions, three acquired PT or Student Help-funded laboratory aides or techs, and three reported increased professional development among their ranks. Inter-department collaboration and improved tracking of cohorts and graduates were mentioned in a few reports as well.
2A i	SAC's process for reviewing course outcomes in CCOGs to ensure assessability	The SACs described different methods for ensuring systematic review of course outcomes. A few of the smaller departments conduct annual reviews of all their courses, while some of the larger SACs work through batches of their courses and outcomes on rotation, or as part of an "ongoing inquiry" as one SAC described it. Assigning course reviews to subcommittees or subject specialists is a strategy for some SACs. Most mentioned getting their departments together at every in-service or SAC Day, and some more frequently than that. Many of this year's CTE SACs (AMT, DST, EET, FP, ID, NRS) and even ABE cannot unilaterally develop or revise course outcomes but must adhere to outcomes dictated by industry or agency. Not doing so could compromise program accreditation, state or

		federal agency approval and ultimate student certification, industry expectations, and/or competitive edge. A couple LDC-DE SACs have undergone major reviews to delineate learning goals from learning outcomes, or have modified CCOGs to include comprehensive learning objectives, aspirational goals, and learning outcomes.
2A ii	Examples of changes made in instruction to improve students' attainment of course outcomes that were made as a result of assessment	Nine SACs created new courses or revised existing ones and six gave attention to assignment and/or rubric design. After that, there were no solid themes, with just two or three SACs sharing each of: • More emphasis on critical thinking skills, peer-reviewed articles, research and hypothesis-driven projects, scientific method, and/or written synthesis • More emphasis on case studies, scenario-based training, role playing, hands-on learning, and/or team-building exercises • Restructured testing environments and/or timing of assessments • Change in math requirement (CTE) • Deactivating courses that were no longer of value
2B	Core Outcomes Mapping Matrix	All reports included either an embedded revised matrix or a hyperlink to same.
2C i CTE only	Describe evidence SAC has that students are meeting Degree & Certificate outcomes	In DA, the lowest attainment level for any outcome is 82% and the highest is 97%. In EET, 47/50 students have met the degree outcomes. DST boasts that 100% of its graduates in the past five years have found immediate employment upon graduation. In DST and FP, a significant portion of assessment involves hands-on demonstration of practical skills, so instructors are poised to offer immediate interventions when students need them. WLD added contact hours and 1 credit to its 3-credit offerings when it observed that students in its 4-credit courses more readily met outcomes. CJA and ID rely on their capstone courses to measure outcome achievement and to determine the effectiveness of the courses that lead up to them. CADD assesses all student work against five program outcomes, and has skills-based evidence that students are meeting them. DT courses are designed so that students gain introductory skills after completing early-first-year courses, developmental skills by mid-program, and job-ready skills upon graduation. AMT students meet all program outcomes by the time they finish their third practicum and are well-positioned for the FAA credentialing exams. NRS uses the pass rate on the NCLEX-RN exam as one measure of determining outcomes attainment. SLIP purchased a sophisticated software system calibrated to industry standards to evaluate and track students' mastery of its program outcomes.
2C i LDC & 2C ii CTE	Provide summary of one or two of the best assessment projects in last 5 yrs, incl efforts made to improve student attainment of Core Outcomes	All of the Core Outcomes except Cultural Awareness were prominent in the featured projects. Six SACs found value in using rubrics and in norming them. Three SACs found pre- and post-exams useful in identifying areas of weakness. Three others said the effort of reviewing CCOGs and rewriting outcomes was time well spent. The use of real or mock exam results allowed three CTE SACs to zero-in on topics needing more exposure. Capstone assessment projects were highlighted in two reports. Many of the best projects were proprietary in nature but still notable: A SAC's participation in MSC that did yield some take-aways despite other frustrations during the Collaborative's pilot year, a SAC's successful venture in having students develop business plans for a mock shop and having a real business owner critique them, the use of 'peer' reviews by one SAC where students were expected to decode another's plans and render an accurate drawing from them, a SAC's successful launch of benchmark assessment software to measure students' performance according to industry standards, and the conclusion made by an LDC SAC that time spent on Bloom's Taxonomy did not result in the improved levels of cognition it expected. A CTE SAC had high hopes for assessing Self-Reflection in 2013-2014, but found the students' responses to be too lengthy and varied to summarize effectively.

2C ii LDC & 2C iii CTE	Does SAC have evidence the changes made were effective by having reassessed the same outcome?	Four SACs had not yet reassessed but were looking forward to doing so. One SAC did not find evidence that its changes were effective and said it would use a new tool in the future if it again assessed and reassessed Self-Reflection. The remaining SACs *did* find that changes informed by the first round of assessment had been effective, and in addition to improving students' learning, two SACs credited their assessment projects with improving collaboration among faculty. Examples of reassessment results: • Student peer review led to heightened student awareness about the need for precision and clarity and has decreased the amount of 'red-lining' instructors have to do • Restructuring course content improved student engagement, and/or increased students' readiness for the next subject level or improved targeted skills • New and improved assignments led to students giving "clearer, more decisive answers," or raised students' cultural awareness, or increased students' performance on skills tests • Customized remediation allowed NRS faculty to pinpoint specific areas of improvement for each student, and PCC's consistently-high pass rates on the new and more rigorous NCLEX-RN is proof that it is working
2C iii LDC & 2C iv CTE	Evaluate SAC's assessment cycle processes and discuss the lessons learned that have improved or will improve assessment practices and strategies	A significant chunk of the SACs has achieved a sort of rhythm when it comes to conducting assessments. Many credited ongoing collaboration, improved rubrics, and/or having instructor-friendly assessment tools for bringing some uniformity to assessment and gaining greater faculty buy-in. Some SACs have used peer review feedback and assessment coaching to shore up their assessment practices, and a couple of SACs have found it time-effective to assess multiple outcomes using a single artifact. Two said timing of assessments can be problematic; one, a CTE SAC, is committed to conducting assessments in each cohort's third term, but that lands in the summer for the group that starts in January; and, for the second SAC, participating in the MSC means the results aren't forthcoming until a year later. In both cases, the results cannot be included in the SACs' June reports to the LAC. For the latter, the solution is to stagger assessments so there is a full year to review the results and make necessary changes to the curriculum before reassessing.
2C iv LDC & 2C v CTE	Core Outcomes that are particularly challenging for SAC to assess, and why	More than half of the SACs said Cultural Awareness (CA) is difficult to assess if they even assess it at all. The technical or scientific content in disciplines and programs such as AMT, CH, EET, FP, GGS, and WLD is all-consuming and does not easily accommodate a CA component. Others have struggled to find an assessment instrument for CA and/or said attainment of the outcome is difficult to measure. Four LDC SACs do not assess Professional Competence: SOC acknowledged that this may change if PCC someday adopts majors. BI avoids it due to lack of benchmarks for comparison, PS because of "concerns about fit," and ESR because the SAC hasn't come to terms on the definition of PC in its discipline. For two SACs, Community and Environmental Responsibility (C&ER) is difficult to assess, and two more said they can assess the 'C' but not the 'ER' part of the outcome. Three SACs find Self-Reflection a challenge.
3A	Distance learning modality—offerings, rates of student success	Six SACs (mostly CTE) offer no web courses; five other CTE SACs offer only one course via DL, and the remaining nine have multiple courses available online. The departments with one or two courses taught exclusively online are in CTE. BI, CG, CH, CJA, FP, GGS, PS, and SOC have a significant presence online in terms of course variety and/or percentage of total offerings. The D2L platform is increasingly popular and many of the departments are using it in their face-to-face (F2F) classes for testing, discussions, assignment submission, and grading. BI requires all of its DL students to come to campus for exams and labs, while CH requires it for CH 100 only. CH has dealt with a variety of academic integrity issues, such

3A (cont.)	Distance learning modality—offerings, rates of student success (cont.)	as students falsifying data, students working together on at-home exams, students recycling reports submitted by others in previous terms, or even paying another student to take a course for them. Seven SACs said some or all of their F2F sections had higher pass rates than their DL counterparts; the gap was greater in some courses than in others. Six SACs identified courses where the DL students have higher pass rates, and six had evidence that performance rates were about equal. Some SACs had results in all three categories. ABE could pinpoint a distinct decline in performance after the introduction of the more rigorous GED exam in 2014. Other SACs attribute the discrepant pass rates to students' lack of readiness and/or lack of traits like persistence and initiative. The SACs have various strategies for increasing success: Some CH faculty send pre-term emails and syllabi to students to clearly delineate their expectations; ABE mandates a F2F pre-term orientation and tutoring during the term; SOC does outreach in the form of phone calls, emails, and CPNs; and DA uses mixed media to address all learning styles.
3B	Changes as a result of educational initiatives	Eleven SACs have adopted Community-Based Learning, and, for many, it has long been a mainstay of their disciplines/programs. Eight SACs have internationalized their curriculum to some degree, and six CTE and LDC SACs have embraced inquiry-based learning. Sustainability and cultural competence/equity and inclusion were each mentioned in three reports. ADA compliance, field-based learning, flipped classrooms, honors, interdepartmental collaboration, OER, Oregon Promise/First-Year Experience, and project-based labs received a nod from one or two SACs. The reports featured numerous examples of what these initiatives look like in the various disciplines.
3C	Existing dual credit partnerships and the manner in which SAC maintains relationships with the HS faculty in support of quality instruction	BI has the most partnerships--13 area high schools (HS) and 8 courses; CG - 11 HS and 10 courses, CADD - 7 HS and 4 courses, WLD - 6 HS and 8 courses, ESR - 5 HS and 2 courses, and FP - 3 HS and 4 courses. CH, CJA, DA, GGS, PS, and SLIP each have 1 active agreement, with SLIP hoping to add 1 more by fall. Eight SACs (mostly CTE) have no active agreements. Site visits, plus an annual meeting of the HS and college faculty, arranged by the PACTEC office or the PCC instructors directly, are the most common means of sharing curriculum and best practices. Not all of the HS teachers can get away to attend SAC meetings, but email and Google Groups serve to keep the lines of communication open. SLIP and WLD have participated in in-depth training with their HS affiliates. The inability to find HS teachers who can meet third-party-agency (FAA, Caterpillar) or PCC's instructor qualifications, the time constraints on HS and PCC faculty, the lack of content experts to support external demand, the concern about compromised program rigor, and the absence of subjects and/or the facilities to house them at local schools, were listed as the barriers to forging new or additional agreements.
3D	Describe use of Course Evaluations by SAC. Have SAC-specific questions been created and has the information received been useful?	There was a general consensus that the course evaluation system is of little value at the SAC level, because only individual faculty or department chairs have access to the results. The online system doesn't provide the "potentially valuable student summative feedback" that CH's previous instrument provided. Fourteen SACs did acknowledge or give examples of course-level changes that were made as a result of student feedback. Nine have created SAC-specific questions. In addition to the institutional system, four use a home-grown or other instrument to regularly collect input from their students. ID prefers traditional handwritten evaluations completed in class, saying they tend to elicit better impressions of faculty, facilities, software skills, and overall satisfaction levels.
3E	Other significant curricular changes	In addition to developing or revising courses and outcomes, the significant changes were these: Five SACs collaborating with other departments to create or revamp

		courses (in two cases this involved CTE partnering with LDC and vice versa); five SACs incorporating new software or other technology into their curriculum (CH -- nanotechnology concepts, DA and DT – CAD/CAM, ID – various design software, and SLIP – benchmark assessment software); BI, CH, and GGS upping the math prerequisite for some of their courses; FP and ID receiving new program accreditation, and WLD adding numerous short-term certificates to increase completion options for students who don't intend to or cannot complete a degree.
4A	Notable changes in instruction due to changes in populations served	Most SACs reported modest increases in students of color: CADD, more Asian and Hispanic students; ID, more Hispanic students and those identifying as multi-racial; SOC, more African American and Hispanic students; and in ABE and FP, more minority students in general. In addition to increases in students of color, SLIP is enrolling more tri-lingual students. DT's ethnic demographics were possibly the most striking, with white/non-Hispanic students declining from 76.5% in 2012-13 to 48.5% in 2014-15. Also on the increase are impoverished students and those who are underprepared. GGS created two new 'on-ramp' courses with this population in mind. In ABE, the influx has brought more migrant students and high school dropouts. To accommodate the needs of students who may need literacy remediation, ABE (and DT) mentioned ramping up lab hours and extending faculty office hours. NRS's partnership with OCNE brought perks for high-performing students, but its focus on GPA slanted the playing field for academically-disadvantaged students and those with weaker test-taking skills. A few SACs observed higher numbers of veterans and more 18 to 20-year-olds, while others noted the opposite was true. For a few SACs, the end of the recession created more demand for evening or online classes (CADD, FP, and SOC). DA's average student is 30+ and uses technology differently today—preferring texting, social media, You-Tube, and materials available online 24/7 over traditional means of communicating and learning. DST added more labs in lieu of lectures. BI introduced more exercises to "increase computer and internet literacy," enhanced its practical exams to aid students with academic accommodations, employed more attention to universal design in course materials, and gave special attention "to potential triggers related to PTSD" as they impact veterans in the classroom. A gender shift has occurred in several areas, which is notable even if it hasn't spurred instructional changes: DA and SLIP, traditionally female-dominated, are seeing more males; ABE, CJA, and FP are seeing modest increases in females; and DT is seeing a dramatic increase in females (74% in 2014-15 vs. 44% in 2012-13).
4B	Strategies used within program or discipline to facilitate success for students with disabilities, and challenges in serving these students	Among all the reports was the theme of cooperation between the faculty and Disability Services (DS) to provide an array of services to DL and F2F students. In addition to working with interpreters and note-takers, instructors routinely make testing accommodations, get videos captioned, extend assignment deadlines or provide alternate assignments, post lecture notes and other resources online for F2F courses, modify lab stations to accommodate wheelchairs, allow students to record lectures, promote LiveScribe pens, and/or incorporate multiple modalities of instruction. The SACs identified the following challenges: • Some physical disabilities will disqualify students from certain programs, as departments must admit students who can perform to industry standards • How to make accommodations inconspicuous so as not to draw attention to students' special needs

		• Balancing special needs within a day's lesson plans, so that students needing extra assistance do not monopolize the bulk of class or lab time • Providing field-based accommodations to students who have limited mobility • Understanding the faculty's latitude in denying use of memory aids in class • Striking a balance "between reasonable accommodation and the essential functions of the…profession," especially when the accommodations made in class will not be afforded to the students when they take their boards • Lack of (or inconsistent) Testing Center services on the weekend • The sheer volume of accommodations and the steady growth of same • Working with struggling students who opt to go mainstream in college even though they might qualify for accommodations • One report noted: "The compensation and release time for these activities [ADA compliance] is not on par with the required efforts"
4C	How feedback from internal and external groups has been used to make curriculum and instructional changes	Student feedback has led to continuous course improvement in CG, DA, and DT; has spurred course offerings at new locations for ESR; has prompted innovative changes to GGS's independent study sequence; has inspired the Social Justice Focus Award, and has been a 'dramatic influence' on PS courses. Collaboration with university partners has ensured the continued transferability of key courses and sequences in FP (EOU) and in BI, ESR, PS, and SOC (all with PSU); and opened conversations at the state level about a possible ASOT for Biology. State, federal and other agencies have heavily influenced ABE (Title II, the 40-40-20 Initiative, and Oregon Promise); AMT (FAA), ESR (Clean Water Services), and FP (multiple fire boards). Noteworthy input from externship employers has helped gauge the effectiveness of instruction in DA and DST, and prompted EET to add networking and troubleshooting components to its courses. Advisory committees were credited in eight CTE reports for influencing course content changes that increase the 'real world' applications for students, for keeping programs current with industry expectations, and for creating unique learning experiences for students.
5A	How faculty composition reflects the diversity and cultural competency goals of the institution	Age and gender diversity are typically more prevalent than ethnic diversity in faculty composition. The female faculty contingent in the traditionally male-dominated disciplines of CH, EET, GGS, and WLD is considerable. CJA and SOC have gender diversity as well. AMT, CG, and NRS reported an age imbalance: NRS has experienced ongoing turnover due to retirements, the bulk of AMT's FT faculty are 60+, and only 2 of the 47 CG instructors answering a questionnaire were under 36. Only a handful of SACs are rich in ethnic diversity or at least moderately diverse. While 12 SACs struggle to meet PCC's diversity goals in terms of ethnicity, they are proud of their faculty's cultural competence. SOC noted that 2 of its faculty were among the 9 who received the Office of Equity and Inclusion's 2016 Diversity Award.
5B	Changes to instructor qualifications (IQs) since the last review and the reason for the changes	CH and SLIP expanded their IQs to include FT and PT faculty, CH modified Related Fields, and CH, PS, SLIP, SOC, and WLD differentiated the requirements for their specialty subjects. WLD also broadened its math and writing requirements and placed greater emphasis on lecturing experience. DA and DT revised qualifications to reflect heftier CODA standards. DT and AMT added language pertaining to Related Instruction. EET updated its qualifications to cover specialized tracks and course content revisions, and added demonstrated competency as a qualifier in two program areas. DST added a statement that new faculty must be Caterpillar-certified within a year of hire. FP clarified language and increased or reduced certifications as required to meet industry standards. With Dual Credit teachers in mind, ESR added demonstrated competency options for its non-major courses. A passing score on the C-BEST exam is now preferred but not required for ABE, and the SAC upped the degree requirement, language proficiency level, and experience required for those teaching Spanish GED. GGS published in 2011 some qualifications that were approved in 2008, and further revised

		the section on demonstrated competency a few years later. CG developed a single qualifications statement that applies to all of its courses, then added special qualifications for courses requiring subject expertise.
5C	How professional development activities of faculty contributed to the strength of the program or discipline, and whether they resulted in instructional or curricular changes	The two most popular forms of professional development (PD) is attending and/or presenting at conferences, institutes, and/or workshops; and being active in professional organizations. In-house trainings, in-service events, committees, and councils are inexpensive ways for faculty to keep current on trends. Faculty from nearly half of the SACs completed online or F2F courses for CEU or regular credit. Members from three SACs were approved for sabbaticals and used their leaves for extensive PD. Working part-time outside of PCC or performing volunteer work/community outreach allow others to stay current in their fields. The tangible results from this PD: New courses, including D2L options, were added; curricular revisions were made, including incorporation of new technology; courses and programs were upgraded to agency standards; new labs and innovative course projects and activities were developed; learning outcomes were overhauled and assessment practices improved; informed purchasing decisions were made; numerous CTE instructors earned industry certifications; several faculty made progress toward or completed advanced degrees; student learning resources were enhanced; student internships were landed, and awards and grants were offered to others.
6A	How classrooms, technology, labs, & equipment impact student success	BI, CADD, CH, EET, GGS, ID, and SLIP benefited from the bond in the form of new facilities and/or equipment and technology. Others gained through enhanced campus resources (e.g., new Multicultural, Veterans' and Women's Centers) and upgraded technology in the general-purpose classrooms. Program credibility increased when: DA installed donated dental units with built-in computers and monitors, EET's new technology brought improved student engagement, FP leveraged program savings to lease a new engine; DT added new technology and new lab stools; Wi-Fi technology brought AMT a Smart Board and ready access to online maintenance manuals, and the Learning Garden expanded ESR's living lab. Still, 75% of the SACs have outgrown their facilities or are challenged by old and deteriorating equipment at one or more locations. Most often cited were: • Inadequate laboratory space that limits course offerings/expansion or hampers normal class activity (CADD, CH, DA, FP, GGS, WLD) • Lack of funds to adequately maintain labs, equipment, and consumables (AMT, CH, DA, DT, NRS, SLIP) • Inadequate or inconvenient storage space which sometimes requires faculty to cart or carry props, equipment, and supplies—including glassware—to and from class, sometimes at a distance (AMT, BI, CH, DA, GGS) • Frequent network outages that affect access to D2L and to online resources that are vital for in-class activities and research (CG, DST, ESR, SOC) • Insufficient space for housing the large vehicles and aircraft upon which their programs are dependent (AMT, DST, FP)
6B	Students' use of Library & non-classroom resources	Students in two-thirds of the SACs use the PCC libraries in a traditional fashion; that is, for materials and equipment on reserve, shelved books, periodicals, computer use, and study rooms. With the proliferation of research databases and other online resources (e.g., You-Tube, pcc.edu, my.pcc.edu/Panther Tracks, D2L, and proprietary websites), several SACs noted that their students are using the physical libraries less. Other resources include field trips, guest speakers, the STEM Center and Maker Space, the Student Learning Centers, potential employment sites, and the Cascade law library.

		Two CTE SACs no longer provide how-to sessions in the Library, as they are finding today's students are entering their programs already savvy in information literacy.
6C	Extent to which students use Advising, Counseling, Disability Svcs, Veterans Svcs, and other important supports for students	Ten SACs rely heavily on their dedicated or shared Perkins advisors, Health Admissions Office representatives, or success coaches. These specialists provide new student orientations, in-class presentations, program or course advising, and timely web page updates. Disability Services was the next most-cited student support resource. General Advising got a nod from a few SACs, though three of the sciences and one CTE SAC (BI, CH, ESR, SLIP) said they frequently see students misadvised when new or uninformed advisors recommend the wrong courses or sequences (for science majors vs non-majors) or mistakenly suggest ASL as an easier language option for students with various disabilities (SLIP). Counseling, Jobs/Internships, and Testing Centers also were mentioned as well-used resources.
7A CTE Only	Impact advisory committee has on curriculum and instructional content/methods/ outcomes	Advisory committees and their members have: • influenced a change in program prerequisites to ultimately improve retention • driven innovative course/program development and revision • guided purchasing decisions for program tools and technology • given insights on industry trends and needs • had an impact on assessment methods • provided tutoring or coaching to PCC students • evaluated student performance (via Coop Education or capstone projects) • hired PCC graduates • joined forces with the advisory committees of other community colleges to improve communication and reduce duplication of effort (NRS/OCNE)
7B CTE Only	Describe current and projected demand and enrollment patterns and the impact it will have on the program	There is an ongoing talent drain occurring in a variety of the trade, technical, and health industries due to the rapid rate with which Baby Boomers are retiring. While this trend is a boon for PCC's skilled graduates, the natural tapering of enrollments post-recession means fewer students in the current CJA, DT, FP, and ID pipelines; or, in the case of AMT, CADD, DA, DST, NRS, and WLD, SACs are confined by limited facilities and stretched resources and cannot accommodate all of the students they may attract. Unique challenges or advantages: AMT - Some graduates are lured into industries that are not placing them into positions for which AMT is designed, thereby exacerbating the shortage of FAA mechanics. CADD - Enrollments in core courses have been mostly healthy, but a decline in 3D modeling in 2014 is a cause for concern. CJA - Enrollments declined as the economy surged, and the department responded by reducing elective offerings. Because it is an open program, exploring students may take individual courses. This practice, and the ability to use CJA courses as electives in other PCC programs, has helped to sustain enrollment in core classes. DA - The SAC's liaison in Jobs and Internships says half of the job leads she forwards to students are in dental assisting, and the US Bureau of Labor says the employment outlook for this field is outpacing the average for all occupations and "is projected to grow 25 percent from 2012 to 2022…" DST - "Currently the demand for students is very high with the Caterpillar Dealerships needing more full time employees…with the right infrastructure the program could add additional seats meeting the needs of our Caterpillar Dealerships."

		DT - The program has admitted all qualified applicants in recent years, but enrollments have fluctuated from a high of 28 in 2010-2011 to a low of 16 in 2013-2014. It is one of only 19 CODA-accredited programs in the U.S. EET - Many local employers are looking to PCC to fill their Boomer-vacated positions, and PCC has seen a timely uptick in "program applicants, particularly in…Biomed and Mechatronics options." FP – Fire Protection Tech remains Cascade's fifth most popular major, despite lighter enrollments and fewer job vacancies since the recession ended. By reducing the number of its Academy cohort, the department believes employment prospects will improve for PCC's grads. ID - The number of students declaring interior design as their major has fallen in recent years, and where there used to be more students in the 26-30 age range, most of today's students are 21-25 and inclined to attend school part-time. This trend is likely tied to the improved economy. NRS - With seven new faculty in fall 2016 and more retirements expected at the end of 2017, the program planned to admit fewer students into its 2016-17 cohort (it annually attracts 500-800 applicants). The industry, too, is seeing an exodus of Boomer nurses and an increase in jobs requiring a bachelor's degree. There remains strong demand for the PCC program, however, and for the OCNE partnership that guarantees PCC's graduates a seat in OHSU's School of Nursing. SLIP - ASL "is the third most studied foreign language in the U.S…" according to the Modern Language Assn of America, and correlates with the growing need for sign language interpreters. Also on the rise is the number of SLIP students who are tri-lingual. This niche "may…represent an excellent opportunity for one segment of the diverse population to benefit from a specialized education that leads to a living wage." WLD - The manufacturing industry anticipates a void in welders over the next 10 years, and local and national companies are poised to recruit every skilled welder that comes out of PCC. Welding is one of the programs seeing unusual post-recession growth.
7C CTE Only	How students are selected/prepared for program entry	**Open entry:** CJA, ID, and WLD. Welding always has a wait list, so students are encouraged to take Weld Processes and Blueprint Reading in the interim. **Minimal prerequisites:** AMT requires its one-credit AMT 101 plus MTH, RD, and WR prerequisites. CADD has MTH and WR prerequisites. Students pursuing DST must meet MTH, RD, and WR prerequisites and be referred by a Caterpillar dealer. EET has MTH and WR prerequisites and encourages hospital volunteer experience for its Biomed candidates. FP requires completion of FP 101, a gateway class that includes various assessments for physical and mental preparedness. **Competitive or Skill-Based:** SLIP applicants are assessed in written English and ASL proficiency, and are admitted only if the faculty feel they have the ability to complete the program in two years. DA, DT, and NRS require formal application by way of the Sylvania Health Admissions Office. DA recently added a job-shadowing requirement for admission and will see if it is an effective retention measure before switching to a point-based system. DT asks its qualifying applicants to complete a wax-carving test. NRS operates on a point-based system devised by OCNE. The Consortium sets the minimum prerequisites and the department is allowed to add additional requirements.

7D CTE Only	Job placement data including salary info if available; forecasts for state and national employment	AMT does not formally track its graduates, but knows its former students have dispersed into a myriad of industries. In aviation, the three largest employment sectors have been heavy-lift helicopters, traditional aircraft, and mercy flight agencies. As mentioned earlier, AMT is rapidly losing its oldest techs, and "Boeing estimates an additional 88,000 new technicians will be needed in the U.S..." through 2035. CADD heard from 22 of its 30 graduates in a spring 2015 survey. Five were employed in the industry and the other 17 "were either not employed, employed in other industries or [had] decided to return to school." Lack of work experience holds some graduates back in the competitive market, but forecasts indicate opportunities exist for employment in the industry. CJA knows many of its program graduates have sought jobs in law enforcement or corrections, but it has no hard data. Thousands of openings in corrections and law enforcement are anticipated in the next three years in all areas (police, sheriffs, detectives, investigators, fish and game, and transit safety). The 2014 median pay for police and detectives was reported as $58,630/yr. or $28.19/hr. DA's most reliable data comes from the annual exit survey which, in 2015, indicated that 54% of DA completers had accepted a job offer at the time of graduation. State employment statistics reported a median hourly wage of $19.02 and an annual mean wage of $40,920 in spring 2014. DST students are carefully matched to internship sites with the intent they will transition into full-time employment at those sites upon graduation, resulting in a 100% placement rate for those who complete the Caterpillar core courses. Entry wages begin at $18 to $23/hr., and students with five years of field experience earn up to $26/hr. DT has had some success with exit surveys. In spring 2015, 8 of its 11 graduates reported having job offers before graduation. OED considers DLT a career in high demand in Oregon and elsewhere due to the retiring workforce and the growing demand for oral dentifrices. The 2014 BLS cites that 75% of those employed as DLTs were earning $23.38/hr and $48,630/yr. EET has no job placement data for the past five years; however, newly-created entry and exit surveys will be used starting 2015-16. Local employers "are predicting significant demand over the next three to five years." FP can viably account for only 34% of its 258 graduates over the last five years. Some are hired before they graduate and others do not report back on job offers, so true placement is thought to be much higher. Forecasts look good through 2022 due to Boomer retirements. In 2015, Oregon's average FF pay was $27.88/hr. and $57,991/yr. ID finds it difficult to track student job placement due to the fact that students change jobs frequently and because they do not keep in touch once they leave PCC. However, a 2015 survey garnered 36 responses, and all the grads were working at least half time, earning an average of $21.65/hr. Being a 'design-centered city,' Portland offers considerable job prospects for program graduates and even non-completers. NRS collects data via the exit surveys and via email through a graduate listserv. The Metro market has become slightly less competitive since 2014, so more graduates are

		able to find jobs locally. Nursing is a high-growth occupation, and between 2012 and 2022 new positions are expected to increase by 19%, not including replacement hires. The average annual nursing salary in Oregon in 2013 was over $80,000/yr. SLIP conducted a survey of former students and learned many had continued their studies in a variety of majors at one of four universities. Over 50% had obtained their EIPA or NIC certification within two years of graduating. The freelance interpreter earns at least $35/hr in Oregon and Washington—more with the certification. In K-12, EIPA-certified interpreters make $17 to $21/hr with benefits. Nationally, the average salary is $37,317; in Oregon, it was a more impressive $40,516 in 2015. The 10-year forecast is for 29% occupational growth. WLD students have had no problem getting hired in small shops and in the large ship-building sector, but the SAC has five years' worth of student data yet to be analyzed. If funds existed, they would like to hire someone to help make sense of the data, and would like to work with IE to develop a mailer to send to its graduates.
7E CTE Only	D&C completion rates; and known barriers keeping students from completing their programs	At the time of their last program reviews, the recession was ending and enrollments (or admissions applications) were just starting to taper off. However, in the case of DA, a smaller cohort in 2013 had a completion rate that rivaled those of the two largest cohorts (in FY 2011 and 2012). CADD's completion rates ebbed in 2010 or 2011 but made a comeback in 2014-2015. AMT and DST spoke to steady retention rates over the past five years, with DST graduating 75% of its students 2011-2015 and expecting another 7% from those cohorts to finish in 2016. DT, whose average cohort size is 21.33, graduated as few as 11 (in 2015) and as many as 15 (2014 and 2012). EET's completion rate nearly doubled, with 52 graduates in 2011 and 96 in 2015; the EET Certificate is the most-awarded diploma (102 in five years). ID also boasted high rates of completers, having conferred 20 AAS degrees and 19 certificates in 2015 alone. FP graduated as few as 34 students in 2009 and as many as 53 in 2013. Its new certificate is expected to be a large draw for students without prior fire service, just as the AAS numbers will wane as fewer in-service fire fighters enroll. NRS completion rates were skewed by the high number of students taking stop-outs between 2012 and 2015 (51). As few as 67% and as many as 78% of its last four cohorts completed in two years, but invariably 9 to 14 stop-outs from each cohort returned in a future year. SLIP typically saw 12 to 16 of its 22 to 24 first-year students continue on to the second year. There has been a marked increase in the Deaf Studies Certificate since the last review, and many DS completers go on to pursue an AGS or AAOT degree. Financial issues were identified by 8 SACs as the primary reason students do not finish their programs. Academic challenges or program rigor followed on the heels of financial reasons, and personal/family challenges were also named as frequent barriers. Finding the program isn't a good fit and/or changing one's major were mentioned as barriers by 4 SACs. Failure to complete MTH 65, WR 121, and/or Gen Ed requirements; getting hired away before graduation; and poor health were each identified by a couple of SACs as completion barriers.
7F CTE Only	Pathways for students to continue education in the subject area	Once employed, DA and DT graduates can be promoted to leads, trainers, and office managers. They can pursue specialty practice certifications or return to PCC to pursue the other dental programs or continue their education to become denturists (DT) or dentists (both). A member of DA's Advisory Committee, a local dentist, graduated from its program. DT grads also do well in small business, with many grads going on to open their own labs.

		EET graduates can transfer into BSEET programs at OIT or other institutions. DST graduates have found ready, living-wage positions upon graduation and relatively few have chosen to pursue bachelor's degrees. For that reason, the SAC hasn't invested a lot of time and effort in developing continuing education pathways. The AMT degree is adequate for entry- to intermediate-level employment, but students who wish to advance higher need further education. PCC offers courses that may serve their professional development needs, or students may pursue bachelor's degrees in management, accounting, or aviation law. Though they are more expensive than the BAS degrees offered at OIT and SOU, the aviation-focused programs offered through Embry Riddle Aeronautical University have greater appeal for PCC's grads. WLD, like AMT, is a continuing education site for graduates and others who wish to upgrade or recertify in the industry. The BAS degrees offered at OIT and SOU, tailored for AAS graduates, are ideal for those who may wish to pursue a bachelor's. Students who earn the AAS in Fire Protection Technology have simultaneously completed all of the requirements for NFPA Fire Officer 2. Those who desire a four-year degree can complete EOU's online Fire Service Administration degree. CADD is a terminal certificate. Grads can participate in continuing education programs offered by their future employers. The SAC desires to create new pathways that would allow students coming out of the program to transition into PCC's AAS degrees in Civil Engineering Tech, Mechanical Engineering Tech, or Machine Manufacturing Tech. NRS graduates can take advantage of automatic admission into OHSU's BSN program, or transfer into Linfield's program via an articulation agreement. Once employed as nurses, there are a number of RN-to-BSN options as well. ID has articulation agreements with Marylhurst University and with the Art Institute of Portland that allow transfer of 18 to 24 PCC credits, respectively, and hopes to have an agreement with OSU down the road. Fewer students are transferring into four-year programs. One reason could be the desire to continue in residential design (PCC's focus) as opposed to commercial design (popular at the four-year schools). Pursuing professional certifications and joining the largest and most respected industry associations also opens more pathways. The new bachelor's degree requirement for national certification means more SLIP graduates will be looking at four-year programs. Anticipating this, the SAC already "established articulation agreements with Marylhurst University and Portland State University…[and] are pursuing articulation agreements with Western Oregon University and Gallaudet University…" Other options post-PCC include a school-to-work program through Video Relay Service, mentoring from experienced and certified interpreters, and a wide variety of workshops offered online, locally, regionally, and nationally.