Oregon Perkins V Planning: Needs Assessment

May 2019

The Strengthening Career and Technical Education for the 21st Century Act (Perkins V) offers an excellent opportunity to leverage the growing public interest in Career Technical Education (CTE) for the purposes of expanding and improving CTE programs of study (POS), further engaging and aligning with partners and related systems, and better ensuring that all Oregonians have access to high-quality education that leads to rewarding career opportunities and provides for economic mobility.

To make the best use of the opportunities for innovation afforded by Perkins V, CTE leaders from the Oregon Department of Education (ODE) and the Office of Community Colleges and Workforce Development (CCWD) have contracted with Advance CTE to facilitate stakeholder engagement, planning for the new legislation and broader CTE systems improvement.

This needs assessment is a first step in that process. It uses multiple research methods to capture the strengths, gaps and areas needing improvement in the Oregon CTE system, as perceived by stakeholders from across the state and by CTE experts from Advance CTE and its partner, the Association for Career and Technical Education® (ACTE®).

This needs assessment describes a number of strengths of CTE in Oregon, including investment in secondary CTE and high school reform efforts, rigorous processes for developing local POS and for preparing high-quality teachers, and a commitment to access and equity facilitated by robust data. It also describes areas where improvement is needed and where alignment and engagement could be strengthened, and it recommends strategies for further exploration and discussion with stakeholders.

This report is organized into the following sections:

- Research Process;
- Survey Findings;
- Strengths of CTE in Oregon;
- Opportunities for Improvement:
    1. Work-based learning,
    2. Career guidance and development, particularly for younger students,
    3. Local POS processes and improvement,

4. Statewide secondary-postsecondary alignment, supported by increased postsecondary funding, and
5. Data and accountability;

- Leveraging Perkins V for State CTE Goals;
- Conclusion;
- Appendix A: Survey Distribution and Limitations;
- Appendix B: Complete Survey Results;
- Appendix C: Interview Protocols; and
- Appendix D: Stakeholder Contacts.

Research Process

ACTE, with support from Advance CTE, conducted this needs assessment from mid-March to late April 2019. The needs assessment used multiple research methods to triangulate findings:

- An online survey distributed via email to CTE networks around the state;
- Interviews with 12 individuals identified by the State CTE Director and state CTE staff, including individuals representing state, regional and local secondary and postsecondary CTE as well as individuals representing community colleges and one person representing the business community;
- A literature review of online and print CTE, education and workforce development documents produced by ODE, CCWD and other Oregon state agencies and of resources by third-party organizations addressing Oregon CTE and the broader economic and social context in Oregon; and
- Discussion points gleaned from the in-person stakeholder meeting facilitated by ACTE and Advance CTE staff.

Highlights of the survey research are described below, and research findings are incorporated throughout this document. More details on the research process and complete survey findings can be found in the appendices.

Survey Findings

Demographics

Of 513 complete responses, most respondents (34 percent) were secondary CTE teachers, followed by:

- Business and industry representatives (13 percent);
- Postsecondary CTE instructors (10 percent);
- Local K-12/higher education representatives from outside CTE (9 percent);
- Secondary CTE administrators (8 percent); and
- Postsecondary CTE administrators/deans (7 percent).

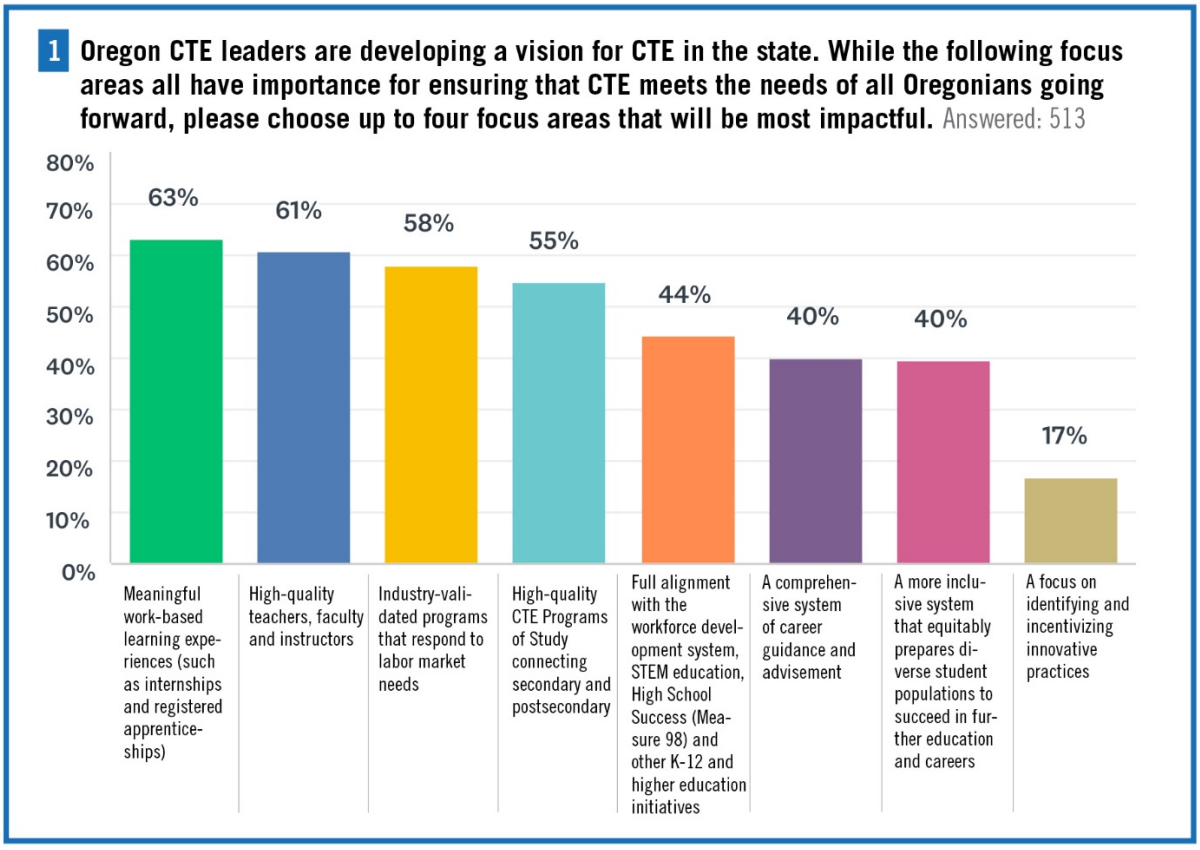
Other sub-groups of respondents did not provide enough responses to allow for statistically significant comparisons. More data on respondents can be found in the appendices.

Thirty-eight percent of respondents described themselves as working in a rural area, followed by individuals working in an area that combines rural, urban and/or suburban characteristics (35 percent), a suburban area (16 percent) or an urban area (12 percent).

Vision of CTE — Most Impactful

When asked which focus areas will be most impactful for ensuring that CTE meets the needs of Oregonians, more than 50 percent of respondents identified the following four areas:

- Meaningful work-based learning experiences, such as internships and registered apprenticeships (63 percent);
- High-quality teachers, faculty and instructors (61 percent);
- Industry-validated programs that respond to labor market needs (58 percent); and
- High-quality CTE POS connecting secondary and postsecondary (55 percent).



Vision of CTE — Most in Need of Improvement

When asked which focus areas need the most improvement to ensure that CTE meets the needs of Oregonians, respondents most frequently selected work-based learning. Almost half of respondents (45 percent) identified this area as "needs significant improvement." Other areas identified by respondents included:

- A comprehensive system of career guidance and advisement (34 percent "needs significant improvement");
- Industry-validated programs that respond to labor market needs (33 percent "needs significant improvement");
- A more inclusive system that equitably prepares diverse student populations (31 percent "needs significant improvement"); and
- Full alignment with other workforce and education systems (30 percent "needs significant improvement").

Program Implementation

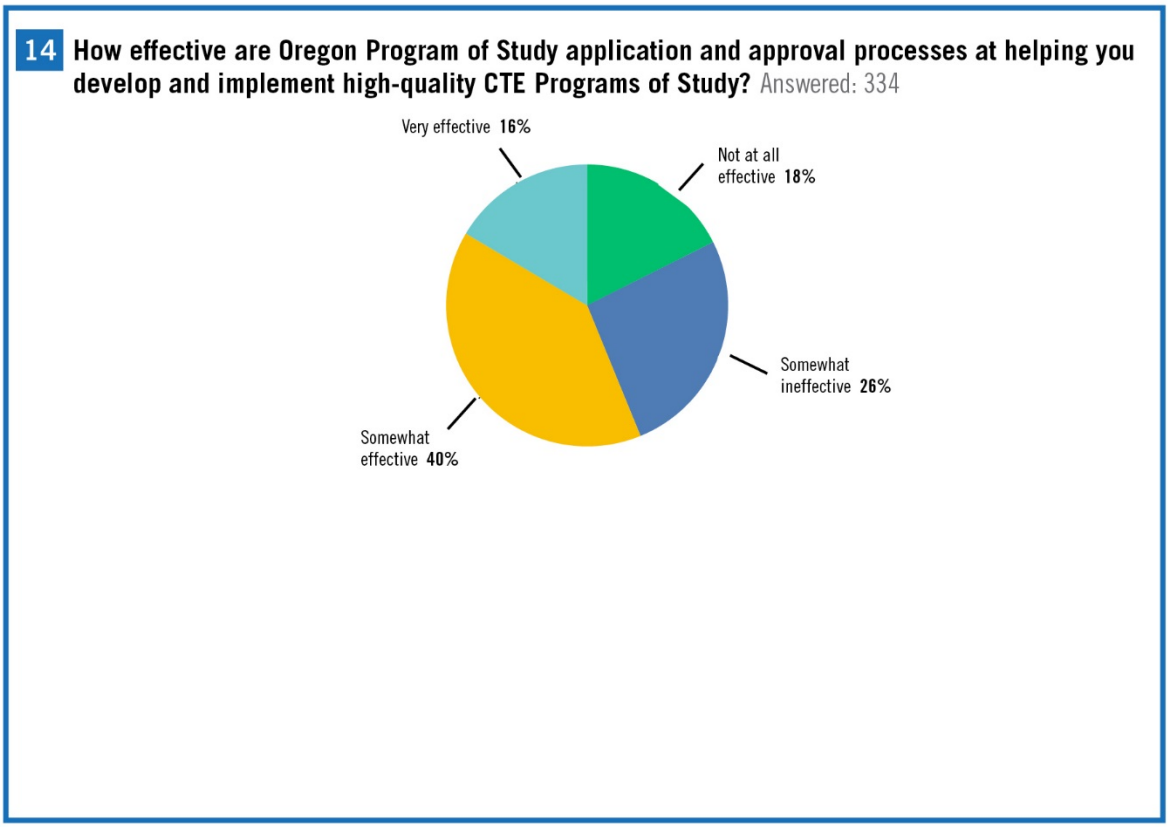
The next set of questions asked representatives from within the CTE system, including CTE teachers; CTE administrators; career counselors; and local, state and regional CTE staff, about the state of CTE program implementation for key elements such as standards-aligned curriculum, sequencing and articulation, career development, experiential learning and business partnerships and prepared and effective educators. Through skip logic, respondents such as business and community partners and education and workforce respondents from outside CTE were taken to the next section on Transition, Alignment and Engagement.

CTE providers were fairly positive about the current state of CTE program implementation, particularly in regard to skills integration in the curriculum and teacher qualifications and skills. However, a few areas were identified as having been less well achieved:

- Access to middle school career exploration (24 percent "not at all achieved");
- Work-based learning opportunities (18 percent "not at all achieved");
- Access to career and technical student organizations (CTSOs) (17 percent "not at all achieved");
- Access to job search and placement services (16 percent "not at all achieved"); and
- Ease of credit transfer (15 percent "not at all achieved").

When asked which proposed secondary program quality indicator would be most relevant for the state to choose for Perkins V, 35 percent of respondents chose work-based learning participation, compared to 18 percent who chose postsecondary credit attainment and 17 percent who chose recognized postsecondary credential attainment. (The remainder chose "I don't know/Not applicable" or "Other").

POS application and approval processes were rated as “somewhat effective” or “very effective” by only 56 percent of respondents. To improve the effectiveness of these processes, respondents recommended streamlining POS and New Program applications (58 percent), streamlining renewal processes (49 percent), streamlining update processes (46 percent), and providing more support for secondary-postsecondary alignment (45 percent).



Transition, Alignment and Engagement

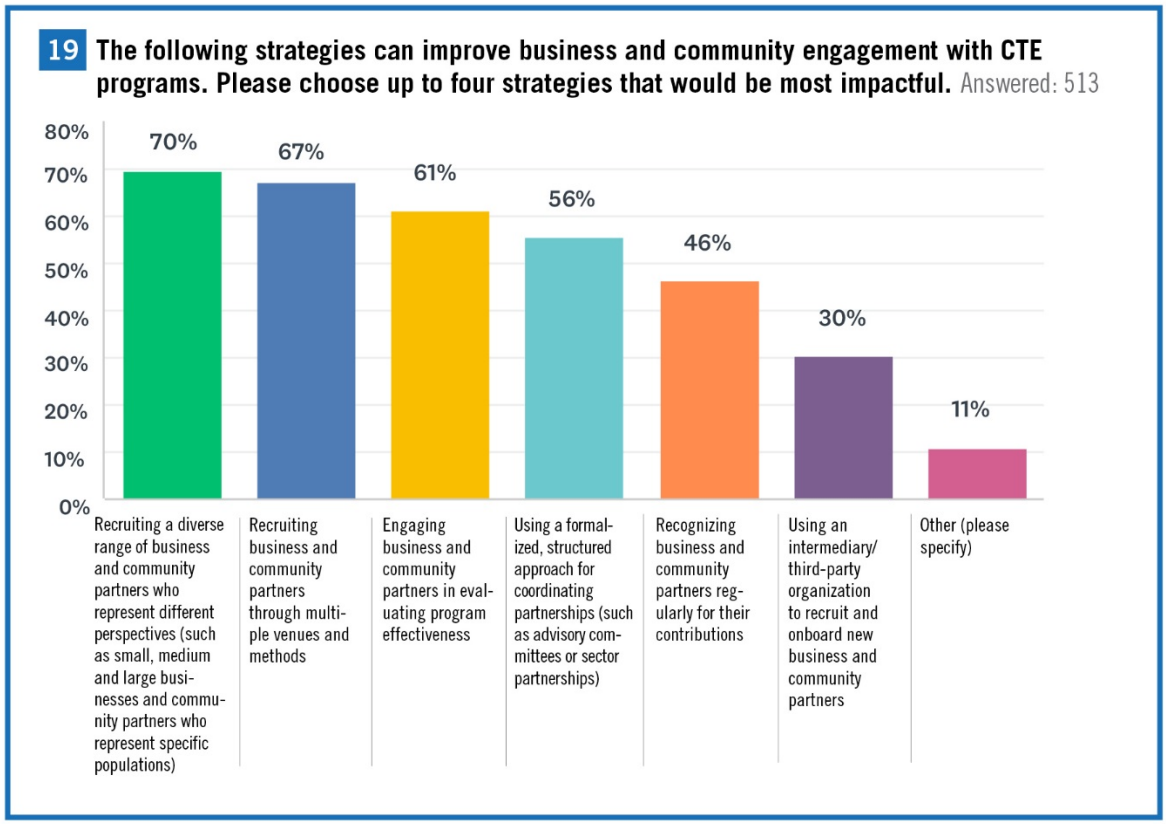
Among learner levels, the only relationship that was rated as fairly well aligned is between high school and for-credit postsecondary CTE (66 percent rated them as “somewhat aligned” or “very aligned”). However, responses to the previous question about how to improve the effectiveness of POS processes indicate that more work is needed to support this alignment. The weakest alignment was between middle school career exploration and high school CTE (26 percent rated them as “somewhat aligned” or “very aligned”).

Respondents rated alignment between CTE and other education initiatives — such as High School Success (HSS)/Measure 98, higher education/four-year college programs, the Every Student Succeeds Act (ESSA) and STEM Hubs) as fairly strong. Weaker alignment was identified between CTE and Workforce Innovation and Opportunity Act (WIOA) youth programs (29 percent “somewhat aligned” or

"very aligned"), completion and credit recovery programs (32 percent "somewhat aligned" or "very aligned"), adult basic skills programs (33 percent "somewhat aligned" or "very aligned"), and WIOA adult programs (39 percent "somewhat aligned" or "very aligned").

In response to a question about the level of engagement between CTE and potential partners, the weakest engagement was identified with parents (40 percent "somewhat engaged" or "very engaged"). The strongest engagement was identified with local employers (59 percent "somewhat engaged" or "very engaged"), although this response leaves room for improvement.

Among strategies to improve engagement with employers and the community, respondents most valued recruiting a diverse range of partners who represent different perspectives (70 percent), followed by using varied methods and venues for partner recruitment (67 percent); engaging partners in evaluating program effectiveness (61 percent); and using formalized, structured approaches to coordinating partnerships (56 percent).



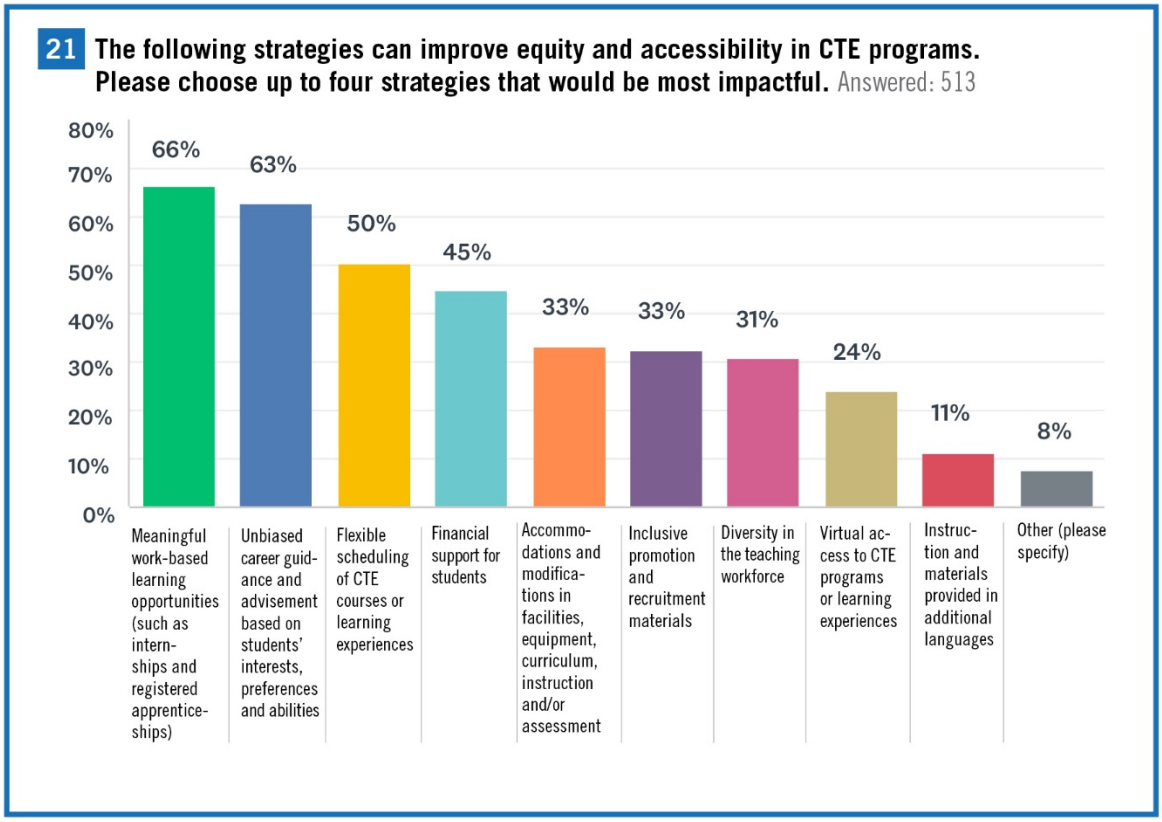
Equity and Accessibility

Among special populations and disadvantaged groups, respondents reported that equity and accessibility has been least achieved for the currently incarcerated (26 percent "somewhat achieved"

or "substantially achieved"), followed by opportunity youth (29 percent "somewhat achieved" or "substantially achieved"), unemployed/underemployed adults (39 percent "somewhat achieved" or "substantially achieved"), and the homeless (41 percent "somewhat achieved" or "substantially achieved").

Equity and accessibility were perceived to have been most achieved for people from economically disadvantaged families (70 percent "somewhat achieved" or "substantially achieved"). In addition, respondents rated equity and accessibility for the following groups as fairly well achieved: people in rural communities (64 percent "somewhat achieved" or "substantially achieved") and people preparing for career fields that are non-traditional for their gender (60 percent "somewhat achieved" or "substantially achieved").

The most popular strategies for improving equity and accessibility were meaningful work-based learning (66 percent), unbiased career guidance (63 percent), flexible scheduling (50 percent), and student financial support (45 percent).



Concepts of Equity

It is worth noting that, among survey respondents, those from rural areas were much less likely to rate the development of a more inclusive system that equitably prepares diverse student populations as important. Nor did they identify this area as one that needs improvement. In addition, survey respondents who commented on equity challenges and strategies focused their commentary more on general access topics — such as the need for career guidance, program alignment to the local labor market, and more CTE courses and programs generally — than on equity.

We believe this finding reveals a disconnect between the way state leaders define equity and accessibility and the way practitioners conceptualize these topics. It indicates a need to embed equity strategies across activities, programs and strategic conversations, rather than treating equity as a stand-alone topic.

State Activities

State CTE leaders will receive a portion of Perkins V funding to allocate among a list of required activities (with options for additional activities). When asked which of these pre-defined activities should take priority, the majority of respondents chose teacher and staff recruitment, preparation and retention (78 percent), followed by technical assistance and supports for CTE programs and institutions (62 percent), preparing people for careers that are non-traditional for their gender (58 percent), and recruiting special populations into CTE programs (53 percent).

More generally, the survey asked an open-ended question about the most important actions or decisions that Oregon CTE leaders could take to support and improve CTE across the state. A total of 371 respondents shared their thoughts. The most frequent topic mentioned was the need for more funding for CTE programs, followed by the need for resources and support for CTE educators, particularly professional development and higher pay. This result aligns with the survey findings described above about how to direct state leadership funds.

Respondents also addressed the need for equity and inclusion in CTE programs, more engagement and alignment with business and industry partners, and more access to intensive work-based learning. The following table lists the topics that appeared most frequently in responses to the open-ended comment question and the number of comments per topic.

Table 1: Topics addressed in survey comments and number of comments per topic

Topic	Number of Comments
Funding	84
Educator development, quality and support	62
Equity and access	39
Business and industry partnerships	36
Work-based learning	34
Career guidance and awareness	21
Elementary/middle school CTE/career exploration	20
Secondary-postsecondary alignment	18
Streamlining of processes and paperwork	15
Labor market alignment AND promotion and messaging of CTE	13

Research Sub-Group Differences

While many of the results were similar across sub-groups of respondents, there were a few significant differences:

- Rural respondents rated equity as less impactful when developing a vision of CTE and as needing less improvement.
- Urban respondents were less positive about current access to work-based learning and CTSOs.
- Postsecondary CTE instructors were more positive about current industry engagement and work-based learning access in their programs than secondary CTE teachers and less positive about quality teaching, affordable options for earning credit at the next level and systems alignment. They were more interested in virtual access to CTE programs as an equity strategy.
- CTE partners saw greater room for improvement in systems alignment than CTE providers. In addition, local representatives of education programs outside of CTE were less positive about current levels of equity and accessibility for a variety of student populations. Business and industry partners were less positive about current local employer engagement and parental engagement than CTE providers.
- Respondent sub-groups varied in their perceptions of equity and access, particularly how well people from economically disadvantaged families have been included in CTE: Secondary CTE

teachers and rural respondents rated this as more achieved than postsecondary CTE instructors, urban and suburban respondents, and local representatives of education programs outside of CTE.

Strengths of CTE in Oregon

Our research demonstrated a number of strengths in Oregon's CTE system that should be celebrated and can be leveraged for future improvements.

- *Secondary CTE and high school reform investments have benefited CTE students*

Secondary CTE in Oregon has benefited from investment in recent years through Secondary Career Pathways Grants and CTE Revitalization Grants, which have both incentivized CTE, and through HSS/Measure 98 funding, which has been directed to CTE as well as to dropout prevention and college-level opportunities. These funding sources have poured millions of dollars into hundreds of CTE programs, reaching thousands of CTE students. In parallel, secondary CTE student participation and concentration numbers grew from 2014 to 2017.

This investment has been accompanied by increasingly rigorous high school graduation requirements. These requirements incorporate CTE: Three of the 24 required credits can be used for CTE as well as arts and language. In addition, career-related learning experiences (such as work-based and service learning) are required, and each student must have an Education Plan and Profile (EPP) that addresses career planning.

In conjunction with these high school reform efforts, Oregon high school graduation rates have increased, and CTE concentrators have the highest graduation rates of any students: 93 percent for the class of 2018 (Hammond, "Oregon graduation rate nears 80 percent after 2nd year of solid gains," The Oregonian, January 24, 2019).

However, as evidenced by survey comments, these sources of funding have not reached all programs or student populations, nor can they ameliorate the chronic underfunding of Oregon education that became apparent through our literature review. In fact, education funding has been the subject of much attention in the state this spring.

- *POS implementation is well underway*

Oregon has made great strides in meaningfully connecting secondary and postsecondary CTE through POS at the local level, as evidenced by our literature review and the generally positive ratings given to POS by survey respondents.

More than 50 percent of respondents rated high-quality POS connecting secondary and postsecondary as important for the vision of CTE in Oregon, and respondents rated high-quality POS as less in need of improvement than most other program components. In addition, 66 percent of respondents rated high school and for-credit postsecondary CTE as "somewhat aligned" or "very aligned."

Our literature review showed that policies and procedures are in place that inject rigor into local POS development, including required sign-off by secondary and postsecondary administrators on POS application and approval forms and required documentation showing the matrix of courses in a POS across secondary and postsecondary education, as well as a POS roadmap or similar visual, a list of technical skill assessments, articulation agreements, career counseling and planning documents, and teacher professional development plans. In addition, a Readiness and Sustainability Evaluation Tool and a POS quality rubric that is currently in draft format offer a good start on quality assessment of POS.

- *Processes support CTE educator quality*

More than 60 percent of respondents identified high-quality teachers, faculty and instructors as important for the vision of CTE in Oregon, and the majority of respondents gave a high rating to current teacher quality.

Our literature review found examples of rigorous policies and procedures in secondary CTE licensing and development, including the recently redesigned licensure pathway for new teachers from industry. Several interviewees commented positively on these licensure procedures, although they acknowledged the need for clearer communication about the requirements and the options available for meeting those requirements.

In addition, approved POS must put in place, and report on, an overall professional development plan for all CTE educators, and Perkins-eligible entities must use 10 percent of their funds to provide professional development inclusive of all CTE staff. Criteria in the POS self-assessment tool also support rigorous teacher qualifications and access to professional development, and the state has provided targeted professional development around key topics such as academic integration and equity.

Despite these policies, CTE teacher shortages remain an issue in Oregon, as in other states. One reason is the higher income that industry experts can earn working in the private sector, which corresponds with survey commentary on the need for higher teacher pay. The state has taken steps to address teacher shortages by allowing retired educators to return to work while protecting their retirement funds and by providing more preparation options and support for new CTE teachers from industry.

- *Oregon has a strong equity focus supported by a robust data system*

The Equity Lens has been adopted as a guiding document for Oregon education. This equity focus is prevalent throughout the literature we reviewed and the meetings we facilitated. It is illustrated by a data system that allows for disaggregation by such variables as race/ethnicity, gender and special population status. In addition, the state plan for Perkins IV and the draft transition plan for Perkins V describe the use of data for equity gap analysis, processes used by state staff to verify the efficacy of local strategies for serving special populations, and targeted technical assistance for CTE programs based on equity gaps or civil rights violations.

In addition, the state staff member with responsibility for coordinating special population services has facilitated local and regional professional development and program improvement through the National Alliance for Partnerships in Equity's Program Improvement Process for Equity model, and is in the process of examining data on the participation and outcomes of students with disabilities. Indeed, state data show positive post-school outcomes for students with disabilities through CTE: In the class of 2016, CTE concentrators with disabilities were 16 percent more likely to be employed after high school and 22 percent more likely to attend college than their peers not in CTE.

These strategies form a strong foundation for future equity efforts. The next steps are to take a more nuanced look at equity and accessibility as they vary in suburban, urban and rural environments (geography was correlated with differing survey responses about how much improvement is needed in equity and accessibility) and at the equitable provision of specific CTE program elements such as work-based learning and career development. Findings about and recommendations for equity and accessibility strategies are embedded throughout this document.

- *Other strengths*

While the following topics did not up emerge as major areas of interest in our research, we did want to highlight two more strengths of the CTE system in Oregon. One is the regional structure, which is considered by many to be a best practice for engaging industry more efficiently and effectively and for aligning CTE programs to labor market need. In fact, many states are considering taking a regional approach for the purposes of the Perkins V comprehensive local needs assessment.

In addition, several interviewees highlighted WIOA-supported Integrated Education and Training for adults at community colleges as a promising practice that could benefit from additional investment.

Opportunities for Improvement

While Oregon's CTE system has much to celebrate, this needs assessment identified several areas of the system that could benefit from additional attention and consideration by both state CTE leaders and engaged stakeholders.

Work-based learning

- *Stakeholders think work-based learning is important, particularly as an equity strategy, but needs significant improvement*

Meaningful work-based learning experiences for students emerged through our research as both highly important for the future of CTE in Oregon and as needing more improvement than any other aspect of the CTE system. Secondary CTE teachers; business, community and education partners; and respondents from urban areas were particularly concerned with improving and expanding meaningful work-based learning experiences.

Meaningful work-based learning experiences was also the number one strategy identified for improving equity and accessibility. In addition, twice as many respondents chose work-based learning participation as their first choice for the Perkins V secondary program quality measure than either of the other options: attainment of postsecondary credit or attainment of a recognized postsecondary credential. When encouraged to comment about the most important actions or decisions that Oregon CTE leaders could take to support and improve CTE across the state, more than 30 respondents cited the need for more work-based learning, particularly the need for more intensive experiences such as apprenticeships and internships.

Interviewees also expressed interest in and concern about work-based learning in the state, acknowledging the challenge of bringing work-based learning to scale. They described the need for state resources and support, as well as the need to be creative and flexible by considering school-based and virtual models and by helping business and industry overcome fears about liability.

- *Common terminology and additional guidance are needed*

ODE has, in recent years, taken steps to bring more attention to work-based learning by creating an education specialist position to coordinate work-based learning within and across ODE, CCWD, the Bureau of Labor and Industries, and the Oregon Employment Department, among other duties.

However, more work is needed. The Advance CTE Policy Benchmark Tool on Program of Study Approval, completed by state CTE staff in 2017, describes a lack of program approval policies related to work-based learning on the state level, and our literature review identified few resources on the ODE website or in other materials. Work-based learning has not been significantly addressed in Perkins IV state plan updates or in POS application and approval. While these forms describe the need for student acquisition of skills, knowledge and experience that can come through work-based learning, work-based learning itself is not included in the program self-assessment or in required documentation. The draft program quality rubric shared by ODE staff does address work-based learning, but with few specifics.

In addition, the education specialist for work-based learning described to us collaboration that happens predominantly one on one, rather than among all four agencies with a stake in this process. She also described differences across agencies in terminology — such as apprenticeship, registered apprenticeship, training, internship, and paid and unpaid work experiences — that lead to confusion within the system and for consumers.

- *Guidance is needed on the full range of work-based learning experiences and on weighting for accountability purposes*

The lack of materials and support extends to a lack of guidance on designing experiences for different age groups, different purposes and varied contexts, such as rural and urban districts. Based on our literature review and conversations with stakeholders, we believe that ODE could benefit from developing a more formal description of work-based learning that acknowledges how widely work-based learning experiences vary in their intensity and purpose: from broad exposure to a variety of careers to in-depth exploration and technical skill attainment in a particular career to the development and practice of cross-cutting employability or professional skills.

These diverse experiences also need to be considered as work-based learning is measured. Oregon's locally provided data on work-based learning participation are a great start to using this metric for accountability. However, the data are unweighted, counting less intensive experiences such as field trips and job shadows the same as internships and apprenticeships. This lack of differentiation affects the value of this metric for Oregon graduation requirements and will be particularly important to address if the state decides to use work-based learning participation as the secondary program quality indicator.

Recommendations

- Bring together stakeholders in work-based learning to develop common terminology and messaging.
- Define the purposes of work-based learning at different learner levels, and develop weighting for accountability.
- Further recognize work-based learning in POS application, approval and renewal materials and quality rubrics.
- Provide more state guidance on work-based learning, including program examples, templates, professional development and technical assistance.
- Consider piloting innovative models of work-based learning, such as virtual and simulated work-based learning, that can expand access to more students.

Career guidance and development, particularly for younger students

- *Stakeholders think career guidance is an important equity strategy but needs significant improvement*

Respondents identified a comprehensive system of career guidance and advisement as the element of CTE programs second-most in need of improvement, behind only work-based learning (which is itself a tool for career development). In addition, 40 percent of respondents identified this topic as one that would have significant impact if addressed.

The interest in this strategy was particularly evident as a way to address equity issues within CTE: Survey respondents rated unbiased career guidance and advisement very highly as an equity strategy. Local leaders interviewed during the research process also echoed this equity theme, with exposure to different career areas highlighted as a particularly important strategy, especially for recruiting students into careers that are non-traditional for their gender and bringing young people of color into science, technology, engineering and mathematics (STEM) careers.

- *More alignment is needed across systems to develop a comprehensive career guidance system*

While the foundations of a comprehensive system are in place through a number of state initiatives, such as the required EPP, Oregon's Framework for Comprehensive School Counseling Programs, and ESSA and HSS/Measure 98 provisions, more alignment and investment is needed to develop a coherent system that is accessible to all students.

For example, the Oregon Counseling Framework references career development but lacks significant focus on this topic. And while the EPP Guide states that "each school district in Oregon is expected to have a comprehensive school counseling program (CSCP) in place that includes individual planning to assist each student in setting and achieving academic, career, and social-emotional goals and in pursuing community involvement and post high school interests and plans," findings from the survey, interviews and stakeholder convening suggest that these programs are not achieving their full potential at the local level.

- *More guidance is needed for programs, counselors and educators providing career development*

Within CTE-specific resources, clearer criteria for operationalizing career development are needed. POS application and approval materials include language about access to guidance and career planning. However, statements such as "each student will be able to … receive consistent and informed messages and career and possible financial options for postsecondary" are vague and lack clear measures for determining compliance. The POS quality rubric that is under development goes further and could be used to strengthen local efforts around career development.

Counselors and educators also need more support and professional development. Two interviewees noted the lack of time and resources that counselors have for addressing career development, among their numerous responsibilities. This is a problem in many states (Advance CTE & American School Counselor Association, The State of Career Technical Education: Career Advising and Development, 2018). In some cases, additional staff such as career coaches may be needed.

- *Younger students need more career exploration opportunities*

Our research repeatedly found the need to provide students with more exposure to careers at younger ages — particularly in middle school. This theme was very common in comments on the stakeholder survey and a key component of discussions during the stakeholder convening. Several interviewees, including leaders from secondary and postsecondary in diverse positions across the state, emphasized the need to begin CTE and career planning in middle school.

There are some promising examples of middle school CTE in the state, such as the new interactive career exploration system in Salem-Keizer and Oregon State University's mentorship in the classroom, but these efforts are scattered. More widespread attention, support from the state and models of best practices are needed. Whatever strategies are adopted, any career exploration or CTE programs offered in the middle grades must align to POS opportunities at the high school level.

- *The Career Information System is not as effective as it could be*

The Career Information System (CIS) produced by the University of Oregon includes a significant amount of data that could be useful across the career development spectrum, including employment outlook and wages, the knowledge and skills required for specific occupations, and information on postsecondary POS.

However, the system has been described as "clunky," and Oregon leaders report spotty use across the state. The information could be extremely valuable if the interface were improved and both counselors and educators had more professional development on its appropriate use.

Recommendations

- Engage stakeholders to review state policies and initiatives around career development, and determine areas of greater alignment and investment.
- Provide greater specificity around standards for career development within POS application and program quality review processes.
- Provide professional development for school counselors and other educators on career development.
  - Leverage EPP requirements and connections to other state and federal policies to deliver more professional development.
  - Ensure that professional development includes an equity focus so that guidance is inclusive and unbiased.
- Support the development or expansion of middle school career exploration opportunities.
  - Consider piloting promising middle school career exploration models or scaling current, isolated efforts.
- Improve the CIS to make it more interactive and user friendly.

Local POS processes and improvement

- *POS processes focus on compliance rather than on program improvement*

Oregon has made impressive progress under Perkins IV in supporting the development of local POS. However, this development has been accompanied by paperwork and requirements that have focused on compliance rather than on facilitating program quality and improvement. Survey respondents rated POS application and approval processes as only slightly more effective than not, with 56 percent identifying them as "very effective" or "somewhat effective."

While a few of the CTE representatives we interviewed noted that the procedures for application and approval create rigor and expressed support for holding POS to high standards, survey respondents suggested streamlining processes and paperwork. More important for the CTE leaders we spoke to was the need for a shift in mentality from compliance to program quality and improvement — this need was mentioned by several people. One interviewee suggested that the renewal process could be leveraged not merely as an update, but as a process for improving programs and aiming higher.

Similarly, our literature review uncovered a rigorous application and approval process, with a number of documents required for initial application and approval but a lack of focus on quality and program improvement. The materials related to quality that do exist — the Readiness and Sustainability Evaluation Tool and the draft quality rubric — offer a good start but could use improvement.

For instance, some of the Readiness and Sustainability Evaluation Tool criteria lack specificity. The statement "Students have the opportunity to learn in a contextual career related environment that allows them to … demonstrate their technical and academic proficiency in meaningful ways" can have a multitude of meanings. This lack of specificity may influence POS to check off criteria without sufficient evidence. Criteria in this tool also differ in scope; some criteria address very broad concepts, and some are much more specific.

- *Secondary-postsecondary collaboration depends on personal connections*

The local collaboration that exists between secondary and postsecondary in POS development, as described by interviewees, can be rigorous and thoughtful or can be little more than checking a box. These relationships can be made more difficult by geographic distance. Several interviewees described a lack of involvement in POS from the postsecondary partner, in part because of different policies for course approval on each side. According to ODE staff, POS application and approval forms primarily document course alignment and ensure that the secondary side of the POS incorporates elements such as technical skill assessments and industry advisory boards. Approved postsecondary certificate/degree programs already include these elements, so they have less responsibility in this process.

In situations in which POS collaboration has worked well, interviewees credited the strength of one-on-one relationships between the personnel involved, rather than any systemic or structural forces. In addition, interviews uncovered a few instances in which POS development has occurred without substantive involvement from administrators, despite the requirement for secondary and postsecondary administrators to sign off on the forms.

- *Regional coordinators are overwhelmed with POS development, among other responsibilities*

Regional coordinators are key in POS development, approval and renewal, according to our literature review and several of the people we interviewed. However, these coordinators are overwhelmed with

their responsibilities for developing programs and POS, as well as for bringing new teachers into the CTE system. Lack of knowledge on the part of school-level administrators adds to regional coordinators' duties.

Further evidence comes from the regional coordinators themselves. They recently released materials describing a 39 percent increase in CTE programs from 2014-15 to 2018-19, up to 890 POS, and sharing how the "overwhelming interest in CTE programs of study and high turnover of key leadership roles at state and regional levels has created challenges in supporting this unprecedented growth." To combat these challenges, the regional CTE coordinators recommend investing in structural support for regional coordinators; aligning legislation and policy around common terms and expectations; and "protect[ing] and advanc[ing] Oregon's commitment to high quality CTE programs of study and instructors based on best practice and research" (Oregon's Regional CTE Coordinators: Our Perspective & Policy Recommendations, 2019).

Recommendations

- Consider ways to shift POS processes toward a focus on quality and program improvement, such as by finalizing the draft quality rubric and using it in POS approval and renewal processes in place of the current self-assessment tool.
- Consider ways to make postsecondary involvement in POS approval and renewal more systematic and meaningful, such as by verifying that the appropriate community college dean has been involved in POS development and has signed off on POS forms.
- Provide more support and guidance to regional coordinators on evidence-based practices for POS development.
- Provide more professional development for school-level administrators on POS development.

Statewide secondary-postsecondary alignment, supported by increased postsecondary funding

- *Barriers exist to scaling secondary-postsecondary alignment, including differing terminologies and policies*

While Oregon has made progress in meaningfully connecting local secondary and postsecondary CTE through POS at the local level, the survey responses, our literature review and interviews all indicate that in Oregon, as in other states, the secondary and postsecondary systems have significant differences that curb attempts to scale that alignment.

Our literature review, interviews and stakeholder conversations surfaced a lack of common, statewide policies and terminology. In particular, the Advance CTE Benchmark Tool completed by ODE and CCWD

staff in 2017 described a lack of state policy for course content, alignment, transition and dual enrollment/credit. Several interviewees mentioned that terms have different meanings in secondary and postsecondary. For instance, stakeholders often misunderstand the distinction between the general concept of "career pathways" and the specific Career Pathways Initiative for short-term postsecondary certificates, and they do not fully grasp how POS fit with both initiatives. Interviewees described other disconnects, including a lack of understanding on the secondary side about accreditation requirements as well as duplication in instruction, facilities and equipment among secondary schools and nearby community colleges. One interviewee promoted the idea of sharing facilities and equipment as a way to build alignment and make better use of resources.

Interviewees and stakeholders at the in-person meeting frequently expressed interest in statewide course sequencing and articulation in response to this lack of alignment.

- *Transferring credit and earning college credit in high school are challenging*

Our research found that credit transfer and dual credit/enrollment are areas of concern. As noted above, Oregon lacks policies for credit transfer (primarily among postsecondary institutions), and survey respondents were divided about the ease of credit transfer in the state.

When it comes to earning college credit in high school, postsecondary instructors responding to the survey were much less positive than secondary teachers about how well CTE programs have achieved affordable options for earning credit at the next level. Our literature review turned up several different policies and options, including dual credit, sponsored dual credit, assessment-based learning credit and Expanded Options. Interviewees differed about whether these options are being communicated clearly to students or whether they are overwhelming to students (particularly for students from economically disadvantaged families and students who are aiming to be the first in their family to attend college).

A number of interviewees did agree on the challenges of finding qualified teachers for dual credit courses. Teachers, especially those who come from industry, may lack the required credentials, pedagogical skills and specific technical knowledge that are required on the postsecondary side, where curriculum is less general and more focused. Improvements in Teacher Standards and Practices Commission licensure requirements have helped, but not wholly solved these problems.

- *Alignment gaps are exacerbated by an imbalance in CTE investment between secondary and postsecondary education*

The state Legislature has failed to invest in postsecondary education generally and in community colleges in particular. Postsecondary education is less than 10 percent of the state budget, and inflation-adjusted state appropriations to community colleges are about the same now as they were in the 1999-2001 biennium (Strategic Priorities in Higher Education, 2017-2019, Higher Education

Coordinating Commission (HECC), 2017). This lack of funding affects CTE students, who are 28 percent of community college students in the state. In contrast, secondary CTE has received an influx of state money through CTE Revitalization Grants, Secondary Career Pathway Grants and HSS/Measure 98 funding, which have started to address state funding shortfalls.

Several interviewees described this lack of investment, and the relative disparity in secondary and postsecondary CTE investment, as a major challenge to improving secondary-postsecondary CTE collaboration. While many of these state secondary CTE funding streams encourage or require collaboration with postsecondary, several interviewees stated that this coordination was lacking. High schools have been the primary drivers for using these funds, and community colleges are either left out of the conversation or are not incentivized to collaborate. This situation has contributed to the POS alignment challenges discussed earlier.

Recommendations

- Conduct an audit of differing policies and terminology at the secondary and postsecondary levels related to CTE program alignment, credit transfer and college credit in high school.
  - Establish common terminology and messaging.
- Establish policies and processes for statewide articulation and common course sequencing.
  - Pilot approaches to common course sequencing and statewide articulation, beginning with one or two key industries.
  - Leverage the experience of the agricultural education community, which has already engaged in this process.
- Consider creative alignment examples, such as sharing facilities and equipment.
- Consider ways to increase postsecondary CTE funding, such as through the Perkins reserve fund or a new state funding stream.
  - Leverage the Oregon Business Council, which has on its agenda bolstering community college capacity and creating a funding stream to pay for CTE credential attainment.

Data and accountability

- *Data are needed to show student transitions after CTE program participation*

Oregon has a great deal of data available for CTE and has made strides to provide data in more user-friendly ways through “stoplight” reports and pivot tables that allow for special population disaggregation. In addition, the state is updating its CTE data system and building a state longitudinal data system.

However, gaps in the Oregon CTE data system persist. Notably, we discovered through this research that ODE is not tracking students after high school into employment. Currently, the Perkins secondary placement measure is capturing only students that move into further education, and thus reported placement rates are very low.

While this specific issue must be solved, it is symptomatic of broader challenges in tracking students across systems that surfaced during the stakeholder convening. Participants in the stakeholder convening reported challenges tracking students from secondary to postsecondary and from postsecondary into employment. They described the need for more access to employment and labor market data, as well longitudinal data on the full range of CTE student post-school experiences.

- *New definitions are needed for Perkins V accountability, as part of a broader conversation about measuring what is truly valued*

Oregon has specific decisions to make in response to shifts in the accountability system under Perkins V. These changes offer an opportunity to rethink the data being collected on CTE students.

One definition that will need to be revisited is the definition for "CTE concentrator." In addition, other student population definitions may need to be created or refined to ensure that data are being collected at the times that will allow for appropriate program decision making.

While these definitions are largely technical, other data decisions stemming from Perkins V will require more thought and engagement. Oregon has a data-rich environment, but interviewees and participants in stakeholder meetings shared that more intentionality is needed about what data are collected and valued to create a fuller picture of CTE student achievement. For instance, definitions around "high skill," "high wage" and "in demand" could be revisited to better take into account regional and industry differences and entrepreneurship opportunities.

The state, with careful stakeholder input, will also need to select a secondary program quality measure. Based on survey results, work-based learning participation is the early leader (with 35 percent of respondents choosing this option, twice as many as the other possible measures), but the state's overall CTE strategy should be considered in these discussions. Regardless of which measure is chosen, it will need to be operationally defined in a way that yields valid and actionable data.

- *Stakeholders need better access to data and more training on data use*

While the state has a large amount of data available, attendees of the leadership convening shared that some system stakeholders lack full access to data on the CTE programs and students that interest them. These stakeholders placed a priority on the need for more training on how to use data and make

data-driven decisions, which will be relevant for the Perkins V comprehensive local needs assessment and local applications. In addition, the literature review and interviews uncovered a lack of interactive data that are easy for local users to visualize and interpret.

Recommendations

- Determine how to access data on student placement in employment and implement new data collection and/or matching efforts.
- Continue with the state data system redesign, focusing on alignment among secondary, postsecondary and workforce data and on visualization/interactivity.
  - Ensure that CTE is connected to the new state longitudinal data system.
- Finalize decisions on how to define secondary concentrators and program quality as part of a larger, stakeholder-engaged conversation on what the state values enough to measure.
- Re-examine labor market definitions around terms such as “high skill,” “high wage” and “in demand” as part of stakeholder engagement, taking into account regional and industry differences and entrepreneurship opportunities.
- Provide more training and support to stakeholders about available data and how to use data to make programmatic decisions.
  - Leverage the requirements for the Perkins V comprehensive local needs assessment and local applications.
- Consider how to better present data to stakeholders and the general public to tell the CTE story.

Leveraging Perkins V for State CTE Goals

Many of the recommendations laid out in this needs assessment are systemic ideas that should cut across federal, state and local policy implementation in Oregon — and that could be addressed in a number of ways. However, there are critical decision points and plans that will have to be made as Oregon develops its Perkins V State Plan that can be particularly helpful in addressing the needs identified through our research.

- *Accountability*

The new secondary program quality indicator required in Perkins V opens an avenue for stakeholder engagement around the three options described in law for this indicator: work-based learning, recognized postsecondary credential attainment and postsecondary credit attainment. CTE leaders can engage with representatives from different agencies and populations about these particular topics, two of which we have recommended in this publication as areas needing improvement. Even if a

potential measure is ultimately rejected, the conversation could have benefits for the state CTE system beyond Perkins V. Whatever measure the state selects, further stakeholder engagement will be needed to define and operationalize this metric so that it is valid, reliable and valuable for telling the CTE story.

Other Perkins V definitions and measures offer similar opportunities for broader stakeholder engagement, including definitions of "high skill," "high wage" and "in demand"; student placement measures; and the concentrator definition.

- *Grade-level expansion*

Perkins V continues the option to provide CTE and career exploration in the middle grades but expands this option to allow grant recipients to fund programs as early as grade 5. The state will have to decide whether to take advantage of this new flexibility or focus only on the later middle grades. Similar to the accountability changes outlined above, this revision gives the state the opportunity to engage stakeholders around strategies for middle grades CTE and career development, which is another recommendation that arose from this needs assessment.

- *Comprehensive local needs assessment*

The new requirement for local recipients to conduct a comprehensive local needs assessment, and to base their local application funding decisions on the findings of that assessment, provides a leverage point for further discussions about the usability of the CTE data system and new state longitudinal data system and how to support local recipients in using information for data-driven decision making. In addition, the comprehensive local needs assessment offers opportunities to discuss alignment with other education initiatives. While this area was rated relatively high in the research, it is important to continue to maintain and strengthen these relationships.

- *Reserve fund*

Oregon has used its reserve fund for the past several years to promote the development of POS. While this effort has likely benefited POS development, under Perkins V, state leaders should target the reserve fund toward achieving more specific goals.

The following are examples of priorities that could be explored and incentivized through the use of the reserve fund:

- Work-based learning models;
- Middle school career exploration models;
- Statewide course sequencing and articulation;
- Postsecondary CTE program needs, particularly in rural or under-resourced areas;

- Support for regional coordinators; and
- Data accessibility and use in program decision making.

❖ *State leadership funds*

State leadership funds must be allocated among a pre-defined list of required purposes. Survey respondents rated the following required uses as priorities:

- Teacher recruitment, preparation and retention (78 percent);
- Technical assistance and supports for CTE programs and institutions (62 percent);
- Preparing people for careers that are non-traditional for their gender (58 percent); and
- Recruiting special populations into CTE programs (53 percent).

In addition, a long list of "permissive" uses of state leadership funds provides options to states.

The priorities identified above as potential uses for the reserve fund could also be productively addressed through state leadership funds, as could many of the other recommendations made in this report related to developing new state policies and processes that drive program quality and equitable access.

Conclusion

By harnessing the Perkins V planning process and leveraging other federal and state policies and initiatives, Oregon CTE leaders have an invaluable opportunity to build on the state's investments in secondary CTE and robust data systems as well as ODE's and CCWD's progress in facilitating programs of study, preparing high-quality teachers and using an equity lens.

This needs assessment report describes these strengths as well as CTE program elements and processes in need of more attention and investment, and it recommends strategies for further exploration and discussion during stakeholder engagement. These findings will inform the next stage of Advance CTE's support for Oregon's Perkins V planning, including facilitated workgroups organized to delve further into key topics.

Appendix A

Survey distribution

The survey was administered through SurveyMonkey®. The survey link was distributed via email from Oregon state CTE staff to secondary and postsecondary CTE networks. The email cover letter requested that recipients forward the link to others in their networks.

The survey was open for a little longer than two weeks (April 8-24, 2019). It included up to 23 questions for CTE providers and, through skip logic, 15 questions for partners outside the CTE system. Respondents took, on average, 16 minutes to complete the survey.

The survey generated 513 complete responses out of 608 partial and complete responses. Statistical analysis was provided through SurveyMonkey as well as through inferential statistics in XLSTAT.

Survey limitations

More than one-third of respondents were secondary CTE teachers (34 percent), so these survey results are most representative of their perspective. In addition, we received a significant number of responses from the following groups:

- Business and industry representatives (13 percent);
- Postsecondary CTE instructors (10 percent);
- Local K-12/higher education representatives from outside CTE (9 percent);
- Secondary CTE administrators (8 percent); and
- Postsecondary CTE administrators/deans (7 percent).

We did not receive enough responses from the following groups to allow for statistically significant comparisons:

- Counselor/guidance and career advisement professionals;
- State K-12 or higher education representatives from a sector outside of CTE (such as academic content, STEM or special education);
- Community organization representatives;
- Regional CTE coordinators;
- Local workforce development representatives;
- State or regional staff members; and
- State workforce development representatives.

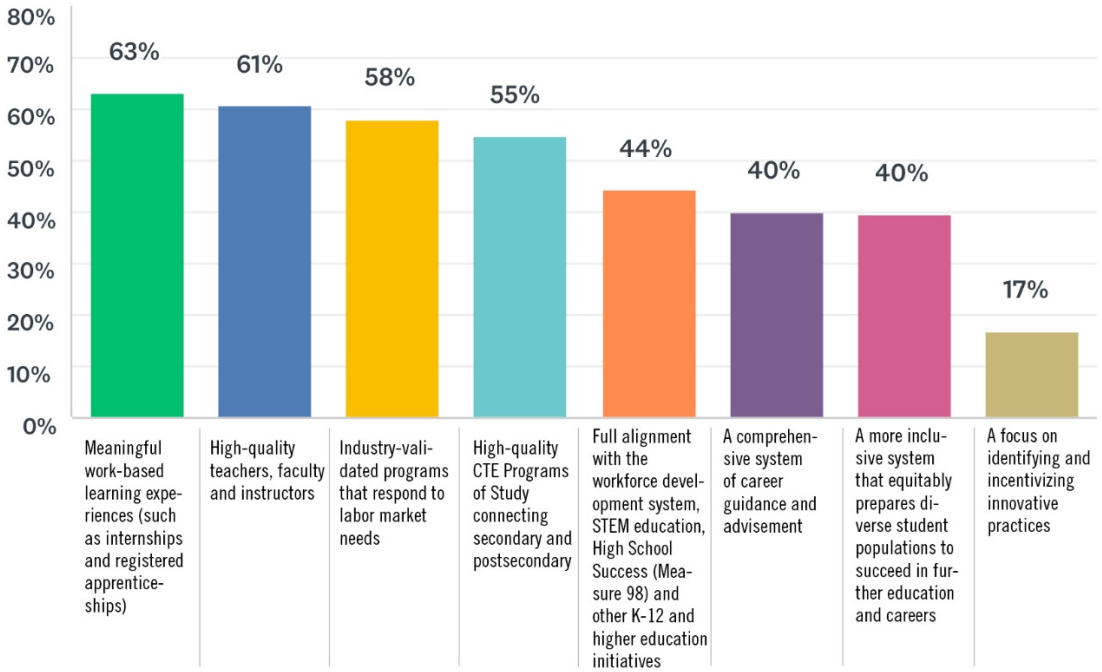
In addition, we do not know the characteristics or perspectives of individuals who received the survey but chose not to complete it. We also do not know whether respondents' attention lagged by the end of the survey, which could affect the validity of responses to later questions.

Finally, as this is our first time conducting this survey, we do not have longitudinal data against which to look for discrepancies.

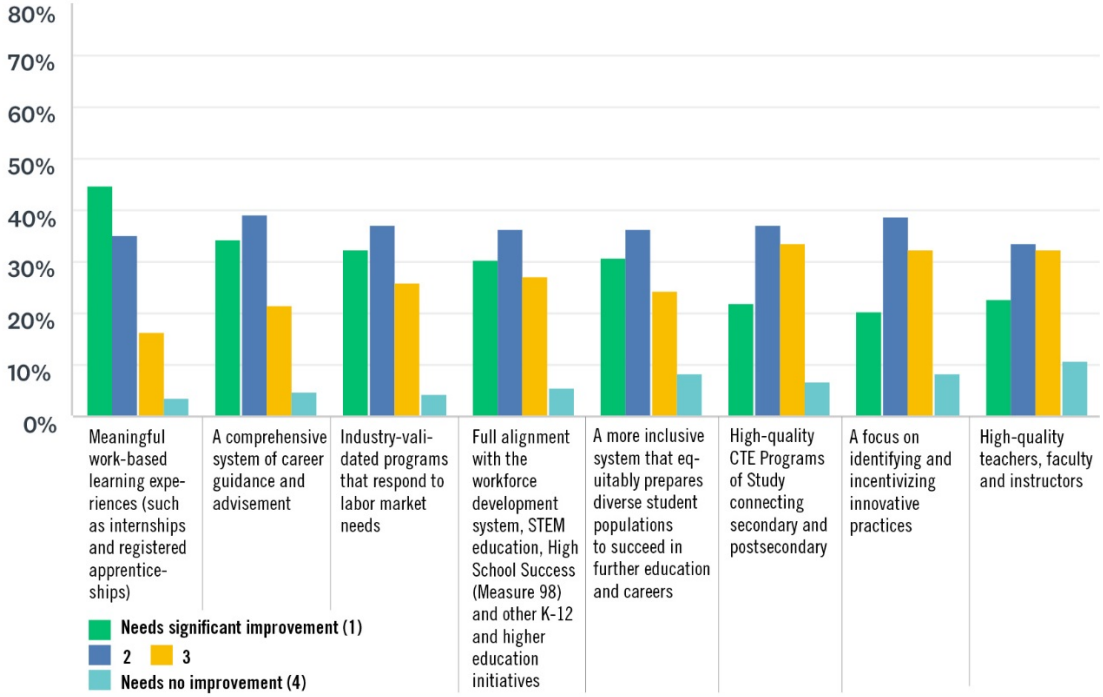
Appendix B

Complete survey results

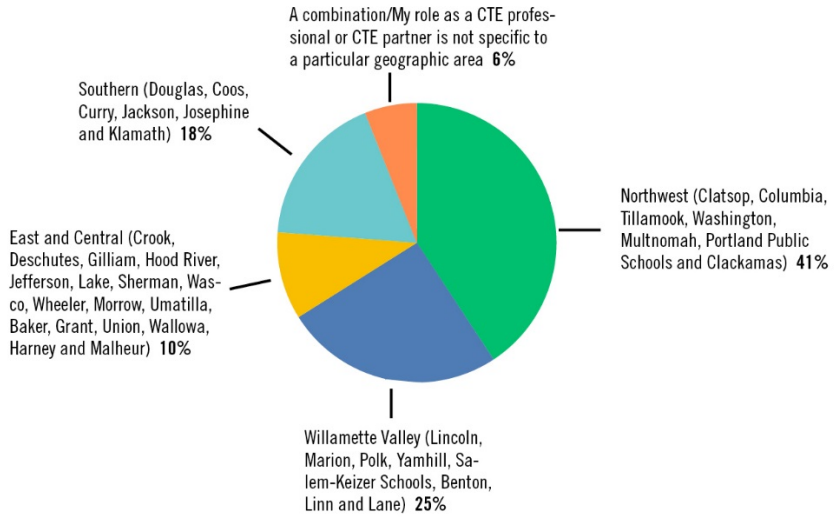
1 **Oregon CTE leaders are developing a vision for CTE in the state. While the following focus areas all have importance for ensuring that CTE meets the needs of all Oregonians going forward, please choose up to four focus areas that will be most impactful.** Answered: 513



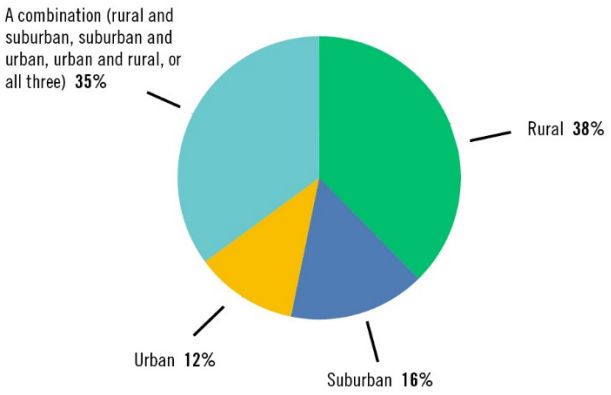
2 **How much improvement is needed in the following focus areas to ensure that CTE meets the needs of all Oregonians going forward?** Answered: 513



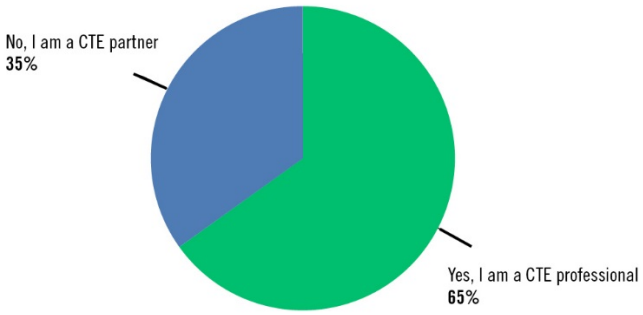
3 **In which of the following geographic areas do you serve as a CTE professional or CTE partner?** Answered: 513



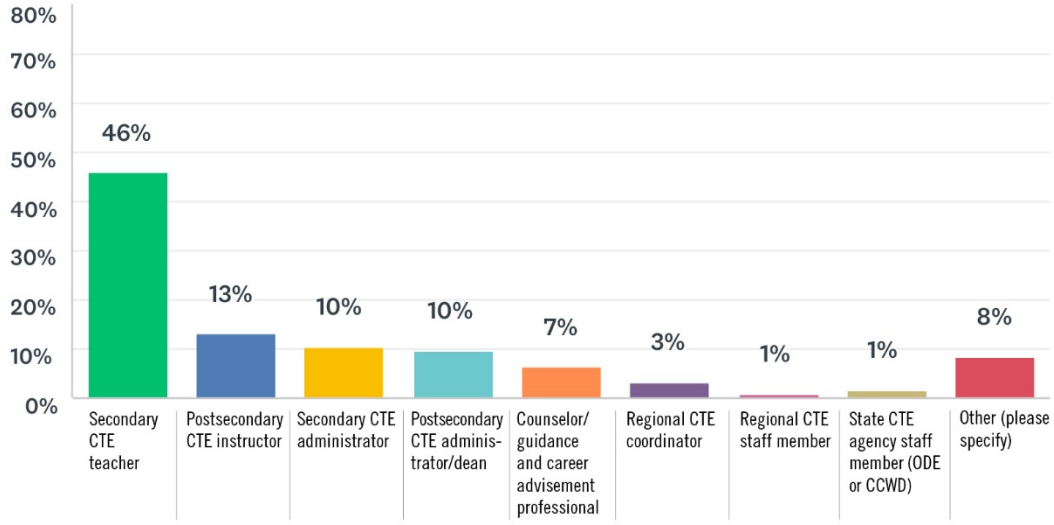
4 **Which of the following best describes the area in which you serve as a CTE professional or CTE partner?** Answered: 513



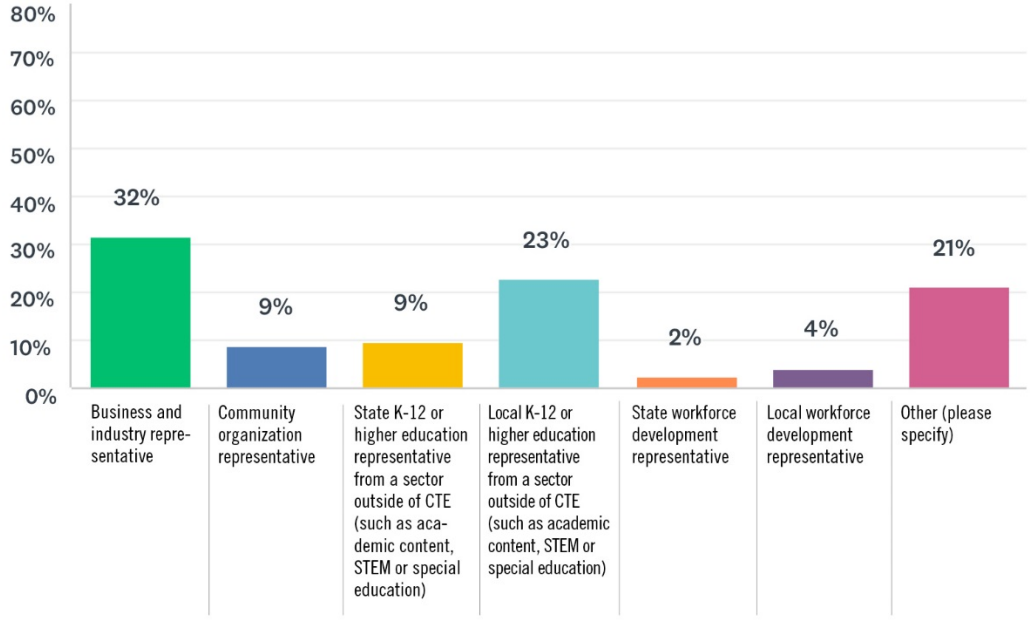
5 **Are you a professional working within the CTE system? (such as a CTE teacher/instructor, CTE administrator/dean, career development and advisement professional, regional CTE coordinator/staff member, or state CTE agency staff member)** Answered: 513



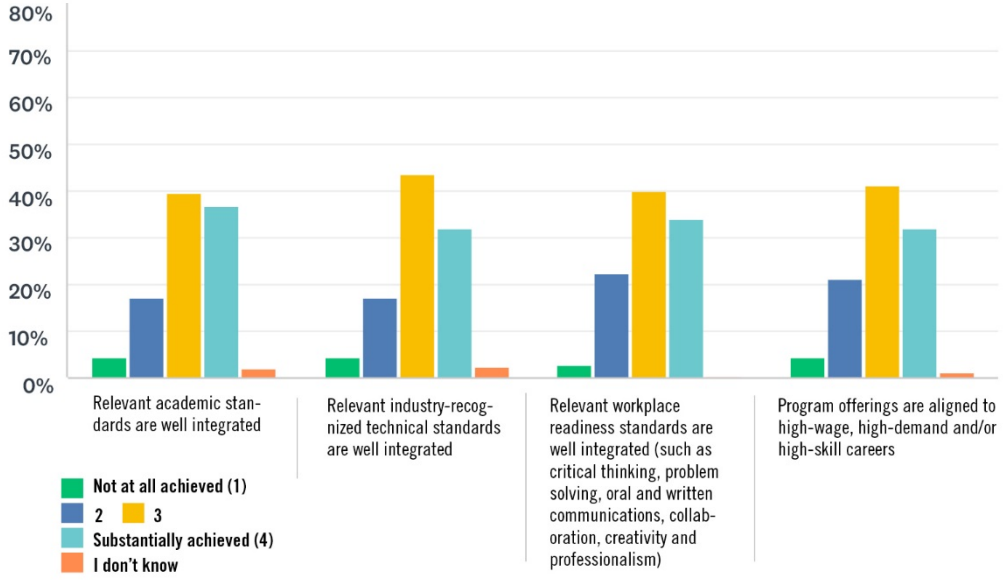
6 Which of the following best describes your role in CTE? Answered: 334



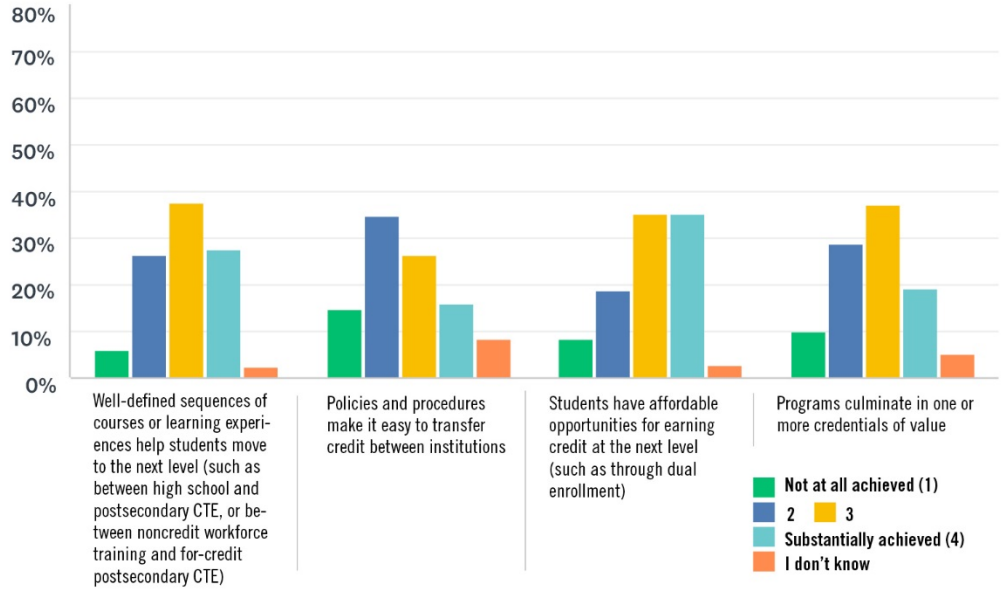
7 Which of the following best describes your role as a CTE partner? Answered: 180



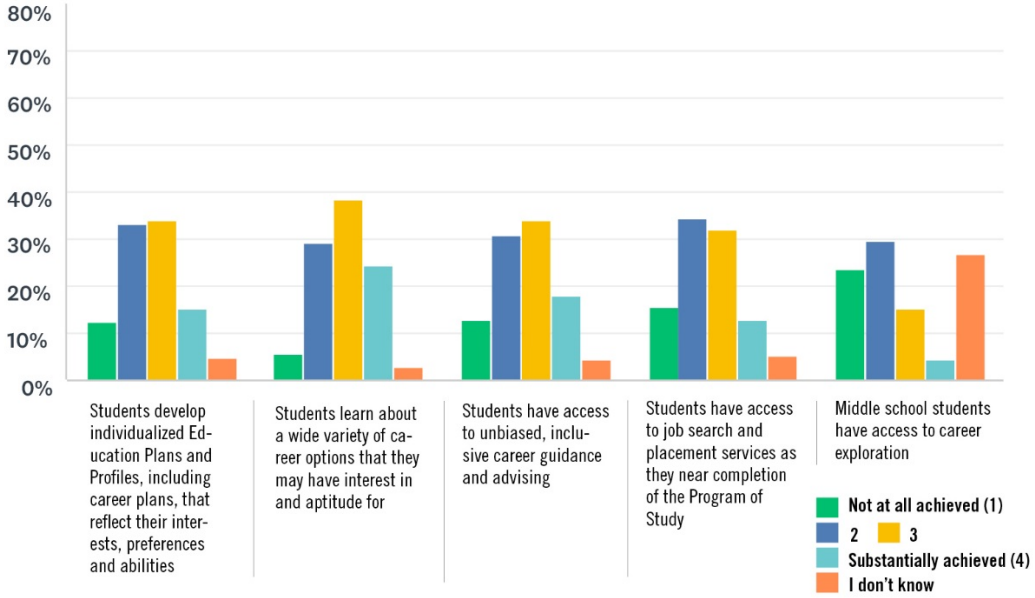
8 **High-quality CTE delivers academic, technical and workplace readiness skills that lead to high-wage, high-demand and/or high-skill careers. How would you rate the level of achievement demonstrated by CTE programs when it comes to the following?** Answered: 334



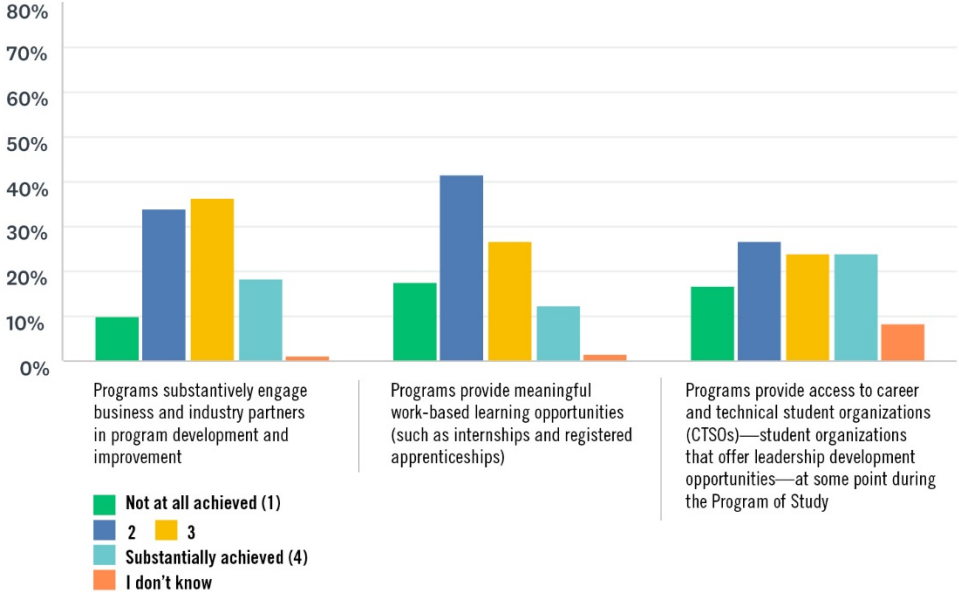
9 **High-quality CTE helps students transition to the next level of education and earn valuable credentials. How would you rate the level of achievement demonstrated by CTE programs when it comes to the following?** Answered: 334



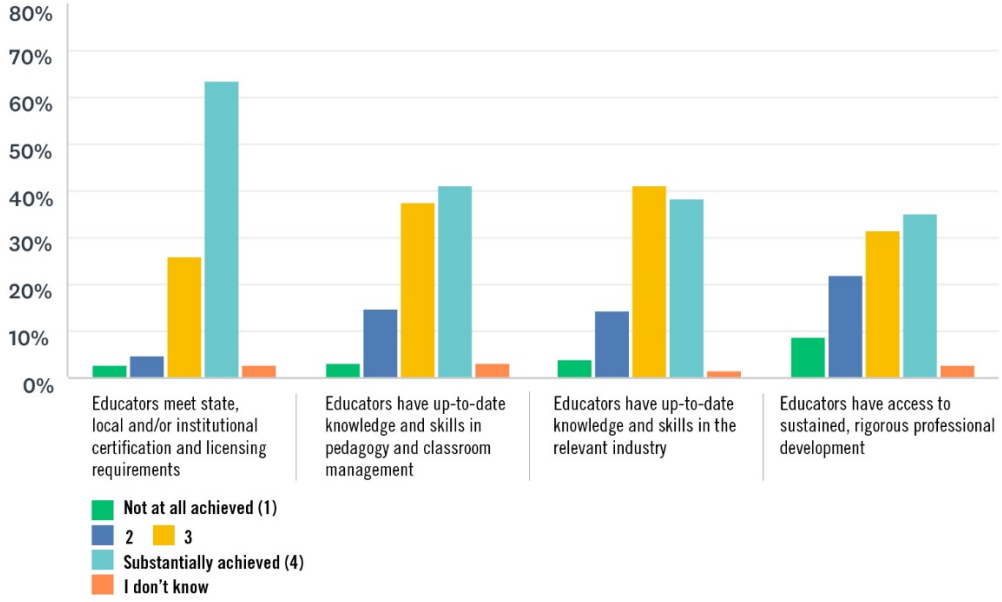
10 **High-quality CTE helps students make informed education and career plans to achieve their goals. How would you rate the level of achievement demonstrated by CTE programs when it comes to the following?** Answered: 334



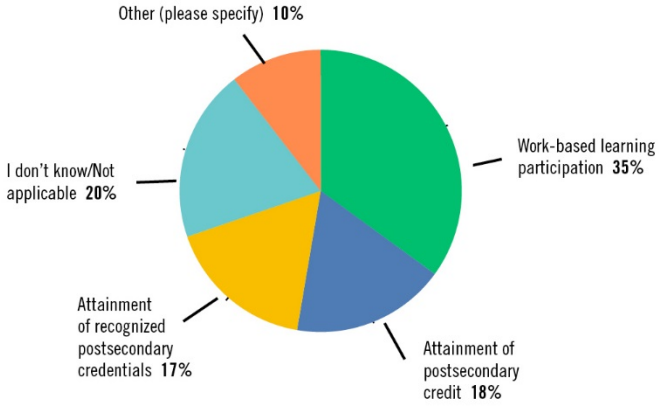
11 **High-quality CTE collaborates with business and industry and offers experiential learning. How would you rate the level of achievement demonstrated by CTE programs when it comes to the following?** Answered: 334



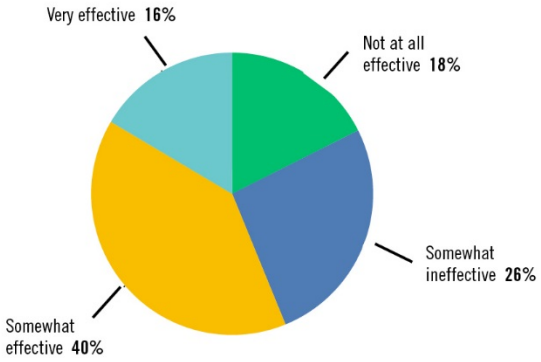
12 **High-quality CTE is delivered by educators (including teachers, faculty and instructors on the secondary, postsecondary and adult levels) with relevant skills and qualifications. How would you rate the level of achievement demonstrated by CTE programs when it comes to the following?** Answered: 334



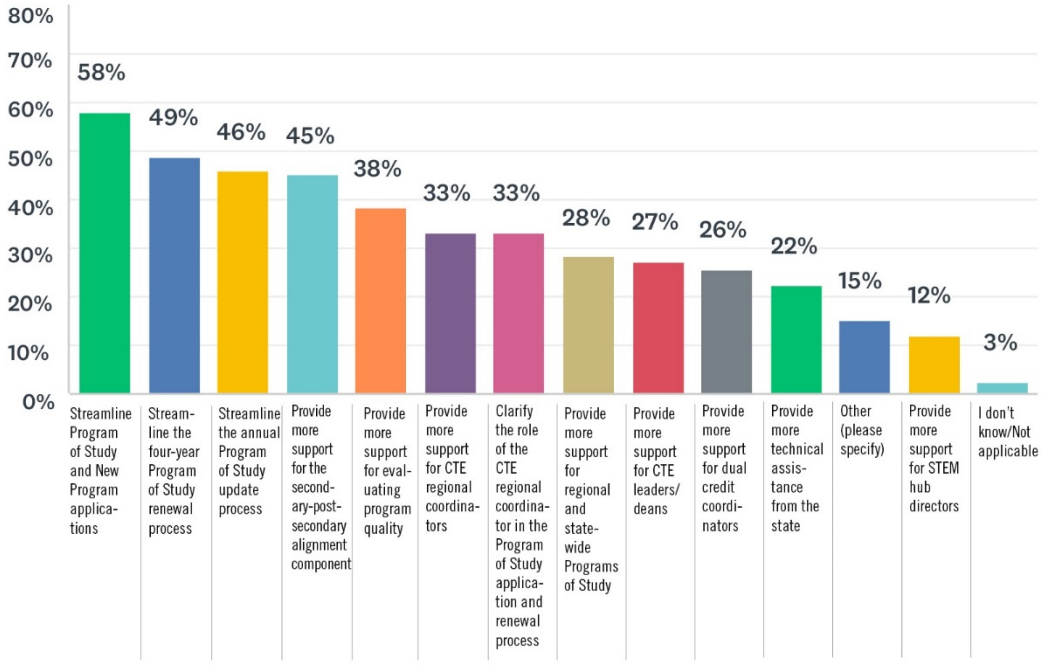
13 **Perkins V includes a new secondary-level accountability indicator designed to measure program quality, to be chosen by each state from a menu of options. Which proposed indicator of secondary program quality is most relevant as a metric for your CTE program(s)?** Answered: 334



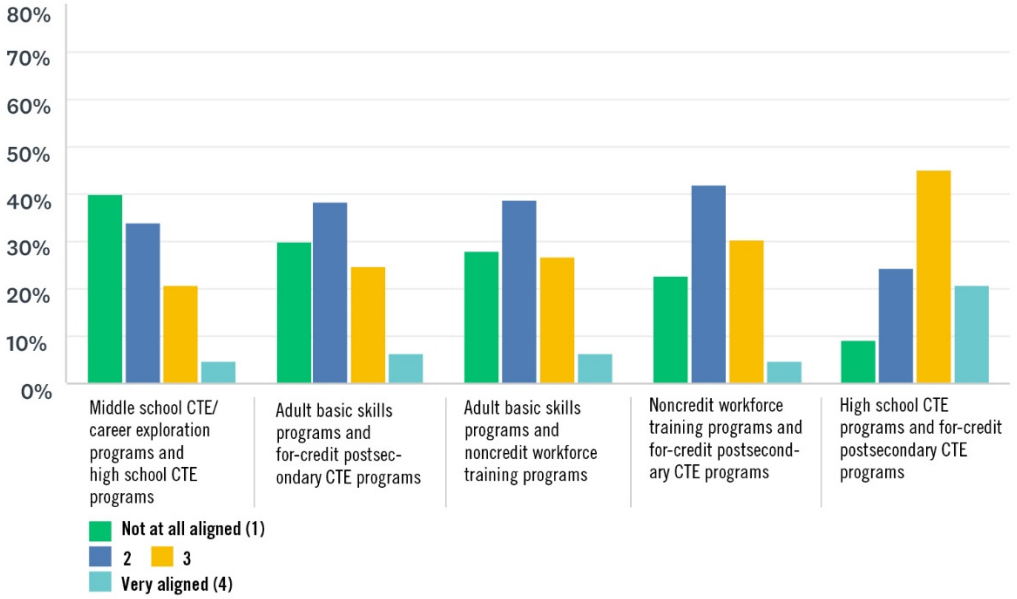
14 **How effective are Oregon Program of Study application and approval processes at helping you develop and implement high-quality CTE Programs of Study?** Answered: 334



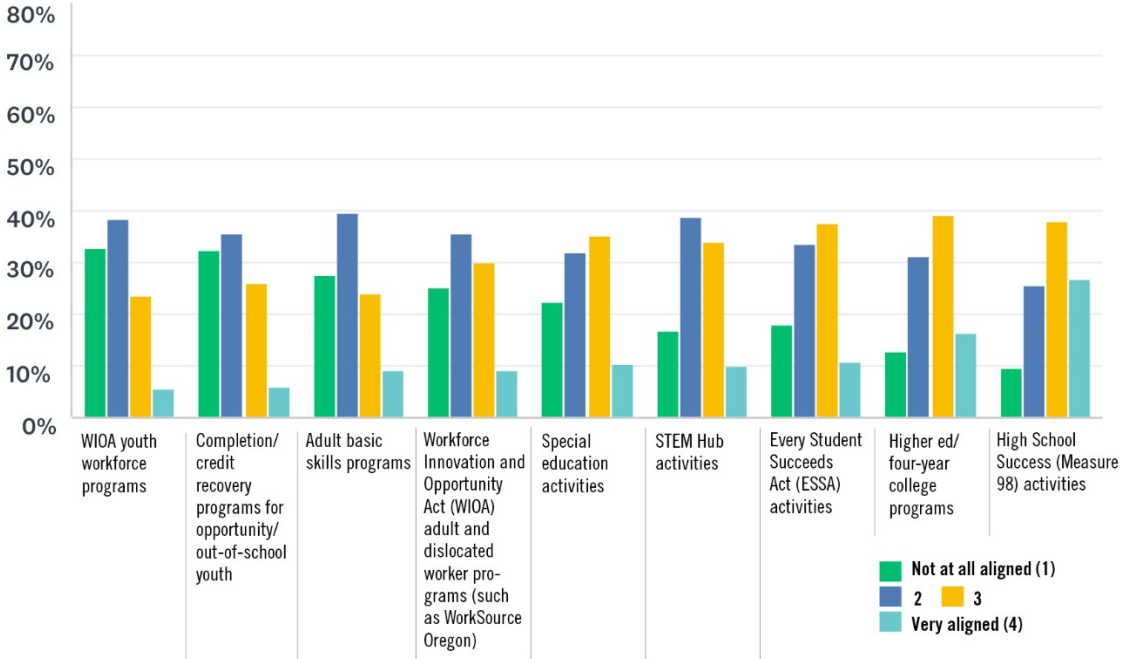
15 **How can Oregon CTE leaders make Program of Study application and approval processes more robust without being too burdensome? Please choose all that apply.** Answered: 117



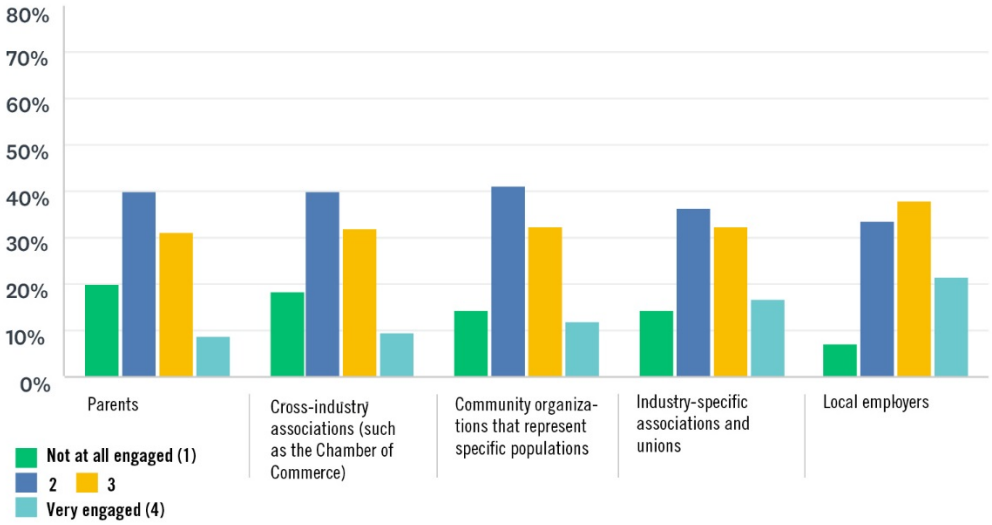
16 **CTE is delivered across multiple learner levels and through for-credit and noncredit programs. How aligned are the following pairs of CTE programs?** Answered: 513



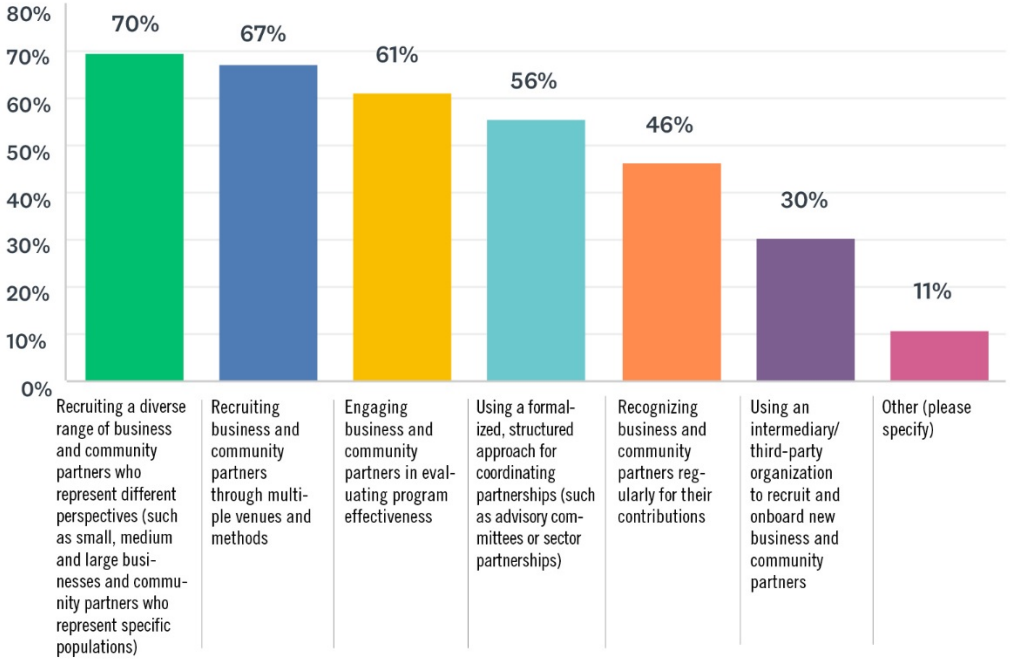
17 **CTE intersects with other education and workforce initiatives and programs. How aligned are CTE programs to the following initiatives and programs?** Answered: 513



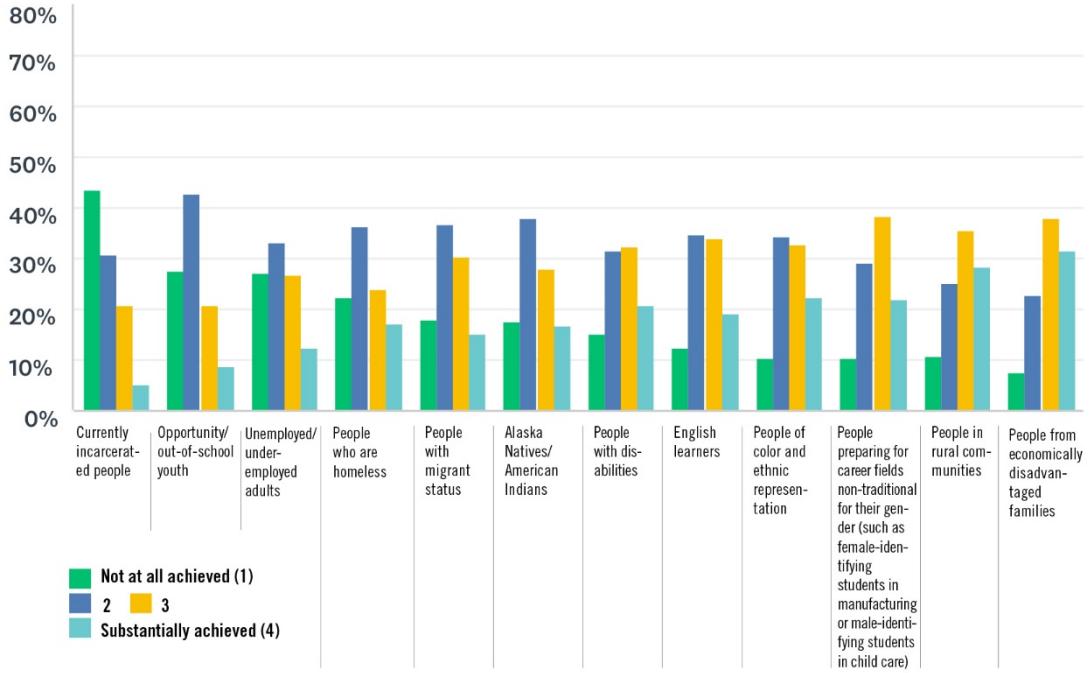
18 **Business and community engagement is critical to delivering high-quality CTE programs. How engaged are CTE programs with the following groups?** Answered: 513



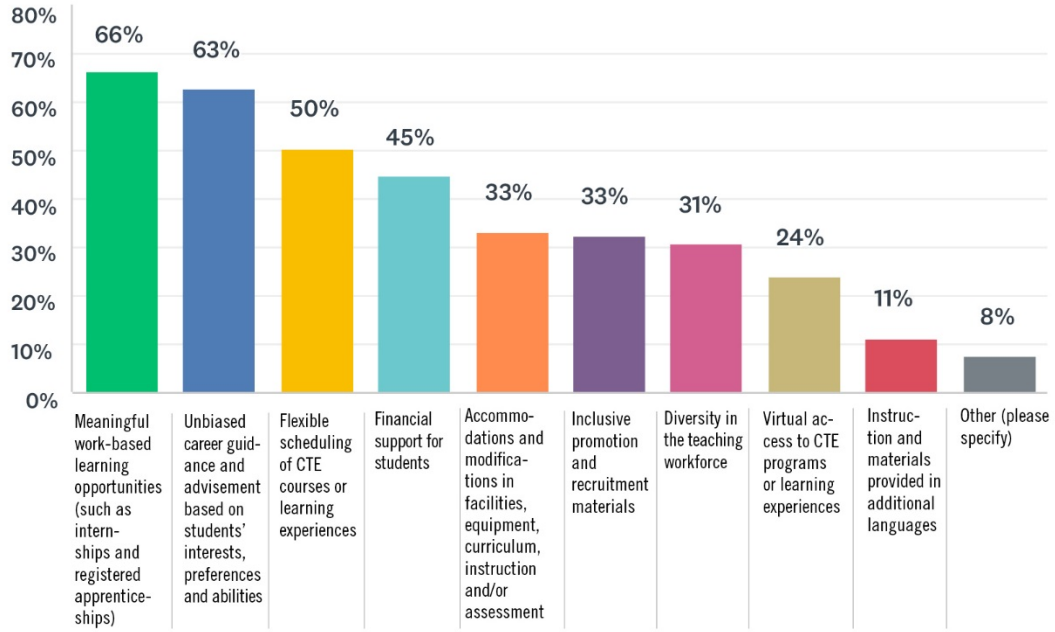
19 **The following strategies can improve business and community engagement with CTE programs. Please choose up to four strategies that would be most impactful.** Answered: 513



20 How well have CTE programs achieved equity and accessibility for the following populations? Answered: 513

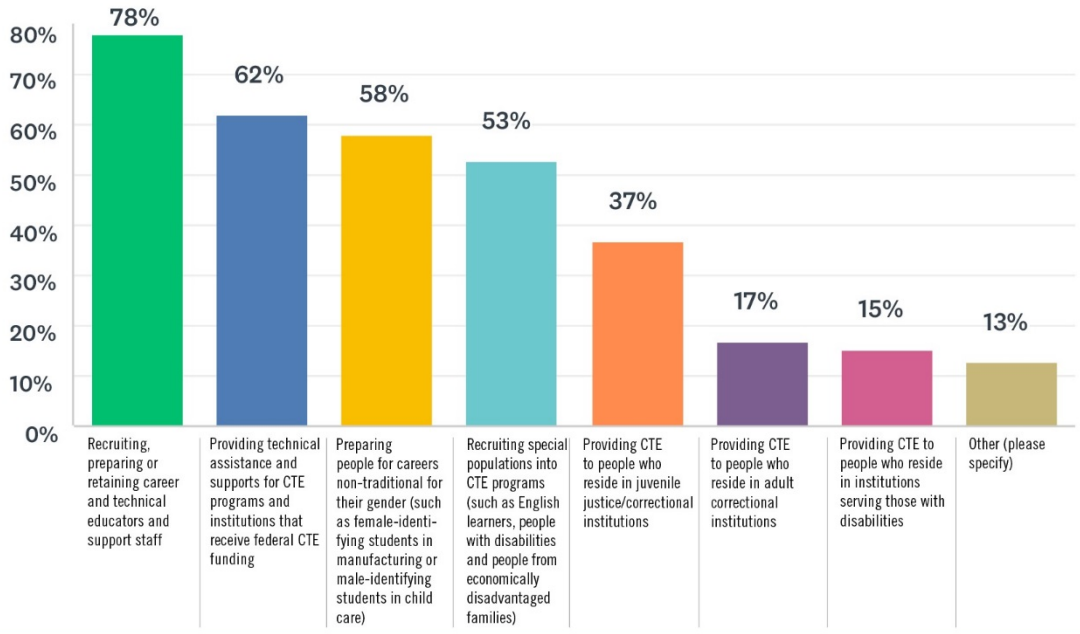


21 The following strategies can improve equity and accessibility in CTE programs. Please choose up to four strategies that would be most impactful. Answered: 513



22 **Certain strategies for equity and accessibility described above will be more effective for some populations than others. Which strategies that you identified as impactful would best support particular populations? (For instance, meaningful work-based learning opportunities might best support opportunity/out-of-school youth, or flexible scheduling of CTE courses or learning experiences might best support unemployed/underemployed adults).** *(Optional)* Answered: 260

23 **Oregon CTE leaders receive a portion of federal CTE (Perkins V) funding to allocate among some, or all, of the following purposes. Please choose up to four purposes that the state should prioritize for investment (bearing in mind that other, non-CTE funding sources may also be used for these purposes).** Answered: 513



24 **What are the most important actions or decisions that Oregon CTE leaders could take to support and improve CTE across the state?** *(Optional)* Answered: 371

Appendix C

Interview protocols

The following interview protocols were used to start the conversation during stakeholder interviews. Interviewee responses to these questions were then used as the basis for more targeted questions that varied from person to person.

CTE provider (internal) protocols

1. Tell me a little bit about yourself and what you do as a CTE professional. How did you get into CTE?

2. Tell me about the CTE programs and students you work with. What are their needs?

3. What are the strongest components of the CTE programs you work with?

4. Where is the most improvement needed in the CTE programs you work with?

5. Are there student populations you have particular trouble reaching? What is needed to better reach these students?

6. What changes would help you more effectively serve students?

7. What are your thoughts on the state taking a larger role in providing guidance and support to local CTE programs?

CTE partner (external) protocols

1. Tell me a little bit about yourself and what you do. What is your background with CTE?

2. Tell me about who you represent. What are their needs?

3. In what areas is CTE in Oregon doing a good job of serving/aligning with/engaging with your constituents and their needs?

4. In what ways is CTE in Oregon failing to serve/align with/engage with your constituents and their needs?

5. What changes do you think are needed to ensure that CTE better serves/better aligns with/better engages with your constituents?

Appendix D

Stakeholder contacts

Stakeholder interviews

April 17, 2019

- Gabby Nunley, Education Specialist — Apprenticeship Liaison and Work-Based Learning, Secondary-Postsecondary Transitions, ODE

April 22, 2019

- Jerry Peacock, CTE Regional Coordinator, Malheur County

April 23, 2019

- Megan Helzerman, CTE Network Liaison, ODE, and Part-Time Instructor, Clackamas Community College

April 24, 2019

- Cam Preus, Executive Director, Oregon Community College Association
- Jim Orth, Assistant Superintendent, Salem-Keizer School District

April 25, 2019

- Duncan Wyse, President, Oregon Business Council, and HECC Commissioner
- Jessica Howard, Campus President, Southeast Branch, Portland Community College

April 26, 2019

- Laura Foley, Director, Secondary-Postsecondary Transitions, ODE, and State CTE Director
- Donna Lewelling, Deputy Director, Office of CCWD, and State Adult Basic Education Director
- Tom Thompson, Education Specialist — STEM and CTE, Secondary-Postsecondary Transitions, ODE
- Lauren Dressen, Program Analyst, ODE
- Debbie Hagan, Director of Secondary Programs, Central Oregon Community College

Stakeholder in-person meeting

Oregon leaders, with assistance and facilitation from Advance CTE and ACTE, convened stakeholders on April 15 and 16 in Salem, OR. Attendees included state, regional and institution-level staff at the secondary and postsecondary levels, along with employers and representatives from state workforce initiatives. During the workshops, attendees discussed a variety of topics, including Perkins V, CTE

program quality, career advising, CTE data and stakeholder engagement. Participants also discussed priorities for the state moving forward.