Career and Technical Education
Program of Study Application (Perkins Eligible)
2011 Version

Directions—please enter information into ALL the fields in this application. (If you have technical problems with this application, contact Ron Dodge—503-947-5653, ron.dodge@ode.state.or.us.)

Secondary School ID Number: 1186
Secondary School Name: Aloha HS
Community College Name: Portland Community College
Additional/Alternate College Name:

CTE POS—Title: Architectural drafting / Construction
Career Area: Industrial Engineering Systems—IE
Cluster Area: IEs—Construction
Focus Area:
Secondary CIP Code & Title: 4600 (4 digit) CONSTRUCTION TECHNOLOGY
Community College CIP & Title: 15.1001 (6 digit) Construction Engineering Technology/Technician.

Secondary Program Title: Construction Technology
Community College Program Title: Building Construction Technology
Community College Award: Associate of Applied Science
Secondary School/District Administrator: Sue Irwin sue_irwin@beavton.k12.or.us
Secondary Curriculum Coordinator: Vicki Lukich Victoria.Lukick@beavton.k12.or.us
Regional Coordinator/Contact: 2A--Lynn Wilson-Dean Lynn.wilsodean@pcc.edu
Community College Contact: Kendra Cawley Kcawley@pcc.edu
Secondary Lead teacher: Dennis Larsen Dennis_larsen@beavton.k12.or.us
Teacher CTE Endorsement: IEs--Construction Technology 10/19/2012
Enter email
College Lead or Department Chair: Garrison, Kirk A kgarriso@pcc.edu
Enter email
Secondary CTE POS Visual Hyperlink: (or include a hardcopy of visual in Addendum B) http://spot.pcc.edu/pavtec/HS%20POS%20Roadmap%20Templates/
☐ No link, but included in Addendum B
CC CTE POS/Pathway Visual Hyperlink: (or include a hardcopy of visual in Addendum B) http://www.pcc.edu/programs/bldg-construction/
☐ No link, but included in Addendum B

Submit complete application materials by email to your CTE Regional Coordinator. (Regional Coordinator: Email application and addenda to this mailbox—POS.Application@state.or.us)
**CTE POS Course Lists—Secondary**

Please list the CTE Program of Study Secondary Courses below. “Core Courses” are those in which the CTE teacher will:
- Teach with intent and purpose the CTE POS knowledge and skills identified in the CTE POS’ Skill Set
- Assess and record student achievement of those standards
- If your secondary school does not have course numbers, contact Ilene Spencer
- It is expected that it will take at least 2 credits to complete a skill set and prepare the student for the technical skill assessment.

### Secondary Core CTE Courses

<table>
<thead>
<tr>
<th>TSA* Required</th>
<th>School Course #</th>
<th>Secondary Course Name</th>
<th># of Credits</th>
<th>5-digit NCES Code</th>
<th>Course Description (brief)</th>
<th>Teacher Name</th>
<th><strong>CN? Articulating College</strong></th>
<th>College Course #</th>
<th>College Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A541</td>
<td>Drafting 1</td>
<td>0.5</td>
<td>21102</td>
<td>DRAFTING 1 Drafting 1 will give students an opportunity to learn and practice skills relating to technical illustration, mechanical drawing/design, and beginning architectural drafting. Students will work in pencil as well as the latest version of AutoCAD. Students working in groups as well as individually will solve design/drawing problems that are meant as training for real world scenarios. Students may work at their own pace as packets will be provided that guide them through the various stages of beginning drafting. These include 3-view draing, dimensioning, cross-sections, auxiliary views, pictorial, and technical; sketching, Junior/Senior students</td>
<td>Larsen</td>
<td>Yes</td>
<td>PCC</td>
<td>DRF 126</td>
</tr>
</tbody>
</table>
may earn transferable college credit from PCC.

<table>
<thead>
<tr>
<th>☐</th>
<th>A532</th>
<th>Drafting 2</th>
<th>0.5</th>
<th>21101</th>
<th>DRAFTING 2</th>
<th>Larsen</th>
<th>☒</th>
<th>PCC</th>
<th>DRF 133</th>
<th>Intermediate Drafting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Drafting 2 builds on the material learned in Drafting 1. Students will work on a variety of drawings that explore engineering, design, architecture, and interior design. When a student completes the Drafting 2 course, they should leave with a portfolio of professional drawings that would demonstrate to a potential employer their proficiency in drafting. Students will work on conventional drafting tables and hone their skills on the latest version of AutoCad. Students will also be given the opportunity to work with state-of-the-art 3-D programs such as AutoCad Inventor, Volo View, and 3-D Vis, among others. Juniors and Seniors have the opportunity to receive transferable credit from PCC (CMET 113-Engineering Technology Graphics - 3 credits).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐</td>
<td>A5412</td>
<td>Arch Drafting 1A</td>
<td>0.5</td>
<td>21102</td>
<td>This course is for drafting students who desire to increase their skills in residential architectural drawing. Students will learn</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Larsen</td>
<td>☐</td>
<td>PCC</td>
<td>ARCH 111</td>
<td>Working Drawings 1</td>
<td></td>
</tr>
</tbody>
</table>

CTE POS Application—June 2010
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Catalog Number</th>
<th>Description</th>
</tr>
</thead>
</table>
| A5421       | Arch Drafting 1B              | 0.5     | 21103          | ARCHITECTURAL DESIGN I  
Second half of course -  
This course is for drafting students who desire to increase their skills in residential architectural drawing. Students will learn about materials used in residential construction, designing energy efficient homes, estimating building costs, making structural calculations, applying building codes and site surveying and layout. Using this information, students will then design and draw a complete set of plans. Students will also draw a perspective drawing of the exterior of the house and/or construct a scale model. Students will use the latest version of AutoCad to draw most of their plans. Several state of the art 3-D programs will also be available to students. This class may be repeated for credit. Juniors and seniors have the opportunity for transferable college credit through PCC (ARC 111 - 2 credits). |

Larsen | PCC | ARCH 111 | Working Drawings 1 |
costs, making structural calculations, applying building codes and site surveying and layout. Using this information, students will then design and draw a complete set of plans. Students will also draw a perspective drawing of the exterior of the house and/or construct a scale model. Students will use the latest version of AutoCad to draw most of their plans. Several state of the art 3-D programs will also be available to students. This class may be repeated for credit. Juniors and seniors have the opportunity for transferable college credit through PCC (ARC 111 - 2 credits).

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>CRN</th>
<th>Instructor</th>
<th>Campus</th>
<th>Department</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A5421</td>
<td>Arch Drafting 2A</td>
<td>0.5</td>
<td>21103</td>
<td>Larsem</td>
<td>PCC</td>
<td>ARCH 101</td>
<td>ARCHITECTURAL DESIGN II STUDENTS WILL LEARN ABOUT MATERIALS USED IN COMMERCIAL/RESIDENTIAL DESIGN. Advanced AutoCAD skills. Work in teams to complete project. Will leave class with a professional portfolio.</td>
</tr>
<tr>
<td>A5422</td>
<td>Arch Drafting 2B</td>
<td>0.5</td>
<td>21103</td>
<td>Larsen</td>
<td>PCC</td>
<td>ARCH 101</td>
<td>ARCHITECTURAL DESIGN II STUDENTS WILL LEARN ABOUT MATERIALS USED IN COMMERCIAL/RESIDENTIAL DESIGN. Advanced AutoCAD skills. Work in teams to complete project. Will leave class with a professional portfolio.</td>
</tr>
</tbody>
</table>
**Trial Design.** Advanced AutoCAD skills. Work in teams to complete project. Will leave class with a professional portfolio.

*TSA required—Technical Skill Assessment required course—required courses that, when completed, trigger TSA assessment eligibility for the student

**CN = College Now—course identification as College Now or articulated courses
### CTE POS Course Lists—Post-Secondary

**Post-secondary Core CTE Courses:** List all courses that complete delivery of the identified Skill Set—those included in the Course/Skill Set crosswalk matrix

<table>
<thead>
<tr>
<th>Name of Certificate or Degree Program</th>
<th>Enter name of college program</th>
<th>Degree or Certificate:</th>
<th>Select certificate or degree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>College Course #</strong></td>
<td><strong>Post-Secondary Course Name</strong></td>
<td><strong>Number of Credits</strong></td>
<td><strong>College Now?</strong></td>
</tr>
<tr>
<td>DRF 126</td>
<td>Introduction to AutoCAD</td>
<td>3.0</td>
<td>☒</td>
</tr>
<tr>
<td>DRF 136</td>
<td>Intermediate AutoCAD</td>
<td>3.0</td>
<td>☒</td>
</tr>
<tr>
<td>ARCH 111</td>
<td>ARCH 111 Working Drawings I</td>
<td>3.0</td>
<td>☒</td>
</tr>
<tr>
<td>ARCH 101</td>
<td>ARCH 101 Architectural Graphics I</td>
<td>3.0</td>
<td>☒</td>
</tr>
</tbody>
</table>

*CN = College Now—course identification as College Now (or articulated courses)*
DIRECTIONS:

- The lists of “Required elements for evaluation” at the end of each section below are documents expected to be included as addenda with this application.
- The Oregon Benchmarks (in the Accountability & Assessment section below) represent statewide goals that Oregon has set to ensure progress towards federal and state requirements.
- Expandable space is provided for comments. This can be filled from the “Strengths” and “Challenges” sections of the POS Application Guide found on the website.
- Attach appropriate documentation as described in the Addendum part of each Element section.

Element 1: Standards & Content

- A. Relevant, rigorous standards-based content aligned with challenging academic standards;
- B. Shared secondary and post-secondary technical content which incorporates the knowledge and skills identified in the Oregon Skill Sets or other industry-based standards, which are validated through national and state employer input;
- C. The program is of sufficient size, scope and sequence to include curriculum and instruction leading to student attainment of academic and technical knowledge and skills for high school graduation, college entry, and careers within high wage, high demand fields.
- D. Systemic approach to CTE using industry-based academic and technical knowledge and skills where student performance is demonstrated through valid and reliable assessments aligned to industry standards; and
- E. Assure secondary and post-secondary students are prepared for high demand and high wage careers and occupations that are responsive to regional, state or global employment trends.
- F. Safety and drug-free workplace expectations are an integral, explicit and mandatory part of the CTE instructional program. Laboratory spaces with power equipment model a safe and clean learning environment. Available safety certification is required for students, as appropriate.
- G. Based on the Program Design and instructional plan where each student will:
  - Recognize connections between academic and technical content;
  - Meet diploma requirements, post-secondary entry requirements, and certificate/degree requirements;
  - Demonstrate mastery of academic and technical content that is aligned with industry standards;
  - Apply learning through authentic experiences, and
  - Build confidence to compete in high wage, and/or high demand occupations.

Comments and additional information: Please address the questions for both the Secondary Partner and the Post-Secondary Partner found in the "Areas of Strength" and Priority Concerns" worksheet at the end of this section of the Readiness and Sustainability Tool:

Students earn up to 15 transferable college credits through Portland Community College while participating in the Architecture / Drafting program at Aloha HS. Students use the latest versions of AutoCAD software and several others. These courses meet the Oregon Skill Sets as well as meet several of the district goals toward literacy and the development of math skills. Students completing the courses complete an Extended Application Project that meets the state and district requirements for graduation.

A concern at the secondary level is fitting articulated students into a program that has been filled with students. Secondary students at PCC, that have articulated a high school class may not have an open slot available if they don’t start at the beginning of fall term. One way to eliminate this problem will be to bring the connection with the PCC class closer through alignment and communication with the community college instructors.

The academic community at Portland Community College (PCC) has developed and approved PCC Core Outcomes that are common to graduates of all PCC programs and aligned with general education goals. Core outcomes cover six areas—communication, community and environmental responsibility, critical thinking and problem solving, cultural awareness, professional competence and self-reflection.

CTE students at PCC are assessed on their ability to demonstrate certificate and AAS degree outcomes for their program area of concentration. The current methods of assessment may include one or more of the following: oral or written examinations, quizzes, written assignments, visual inspection techniques, safe work habits, task performance, and work relations.
CTE Program of Study (Perkins Eligible)…2011 Application (continued)

PCC’s Curriculum Support Office is in the process of gathering all current CTE Program Outcomes and publishing them to a website under their respective certificates and AAS degrees (http://www.pcc.edu/resources/academic/degree-outcome/index.html).

In the PAVTEC Work Sessions that included both PCC and secondary school staff, academic (reading, writing and math) entrance expectations of PCC and specifically PCC CTE programs were discussed and cross walked with high school course curricula. The curricula of the high school’s CTE Programs of Study, combined with the school’s diploma requirements, are designed to prepare students to meet or exceed those expectations.

Students in PCC’s three building arts programs (Architectural Design and Drafting, Building Inspection Technology, and Interior Design) are “testing” a new approach to bridge the relationship between what they are learning in their two-term introductory to algebra classes (Math 60 and 65) with the requirements of their technical program work. The programs are offering sections of Math 60 and 65 during 2010-2011 that are only for students in the three building arts programs. The plan is for the “test” to help all students in the program and also help those who have struggled with math in the past by providing additional support, a cohort environment, required study group time, and using examples and problem sets that are related to students’ future career choices.

Addendum A: Skill Standards/Content/Course Crosswalk

**Directions:** Create an Addendum A folder for properly identified examples of the items listed below:

<table>
<thead>
<tr>
<th>Required documentation for Element 1:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify industry validated technical skill standards/skill sets; list all Knowledge and Skill Statements for the Cluster, and include Focus Area KS statements if appropriate (Performance Indicators are not necessary for this documentation)</td>
</tr>
<tr>
<td>Standards-to-course crosswalk/mapping—Please use the Excel spreadsheet posted online at (<a href="http://www.ode.state.or.us/teachlearn/pte/poseexampleskillmatrixfield.xls">http://www.ode.state.or.us/teachlearn/pte/poseexampleskillmatrixfield.xls</a>), or use one you’ve created locally to crosswalk the identified Skill Set against the listed courses. All courses identified in the secondary and postsecondary course lists on pages 2 and 3 should be included.</td>
</tr>
</tbody>
</table>
Element 2: Alignment & Articulation

- A. An expectation that the elements defined in the Perkins Act will ensure a greater depth and breadth of student learning through the alignment and integration of challenging academic and technical standards in curriculum, instruction and assessment. [Sec.122(c)(1) & Sec. 134(b)(3)]
- B. A unified, cohesive sequence of content among secondary and post-secondary partners; a non-duplicative sequence of courses or learning experiences; students receive credit for prior learning whenever possible.
- C. Alignment of content between secondary and post-secondary education may include course articulation or other ways to acquire Post-secondary education credits (e.g. Oregon’s Credit for Proficiency, Dual Credit, etc.).
- D. Articulation agreements are developed, implemented and supported at the institutional level to ensure long-term sustainability and cross-sector cooperation.
- E. Based on the program design and instructional plan, each student will:
  - Not need to take a remedial course;
  - Continually progress in knowledge and skills when ready;
  - Earn high school or college credit based on performance; and
  - Make the connection between educational preparation and entry into a career.

Comments and additional information: Please address the questions for both the Secondary Partner and the Post-Secondary Partner found in the "Areas of Strength" and Priority Concerns" worksheet at the end of this section of the Readiness and Sustainability Tool.

Students in the Aloha High School CTE Architecture / Drafting / Construction program benefit from the Perkins funds through the purchase of the latest AutoCAD software. The instructor also attends meetings & classes to keep up with the latest developments & uses of the tools. As students proceed through the courses they build a knowledge base that helps them succeed at the next level. The next level may be an entry level career position or post secondary education. Many students take advantage of the articulation of college credits by continuing on at the community college or university.

I know my students are successful when they complete a Career Pathway / Extended Application allowing them to graduate. Several scholarships may be available for successful students.

Concerns exist in that there is a gap between when a student graduates from high school and when they enroll in PCC drafting programs. This gap can be filled by working closer with the community college partner. Time to accomplish this has been arranged by our BSD Perkins facilitator, Sue Irwin.

CTE students count on their secondary academics and exposure to possible careers to help shape their futures. In this unstable economic climate, it is more important than ever to match secondary Programs of Study with post-secondary certificates or degrees that lead to high-wage, high-skill, and high-demand jobs based on updated regional or state labor market information.

Dual credit classes provide an opportunity for high school CTE students to transition smoothly from high school to college, in a non-duplicative program of study. Articulated courses also help in shortening time-to-completion of a degree or certificate. Having dual credit available to high school programs is a motivator for students to not only stay in school, but it also motivates students to do well in their classes as articulated courses are directly tied to a college transcript. Dual credit courses offer a broader, stronger high school curriculum and assists with increasing student readiness for college level work.

Dual credit facilitates productive interaction between high schools and the college for curriculum development while enhancing college-school-community relations. In addition, articulation
agreements reduce the redundancy of courses between high school and college. Coordinated curriculum helps to assure students meet college standards.

The college’s dual credit staff continues to work with high school CTE teachers to make sure students are properly registered for dual credit, and that grades are recorded for dual credit offerings. Dual credit registration is now on-line at the college so this will help facilitate the process for student’s to register and participate.

Allowing high school students to receive college credit for CTE high school courses that meet college standards is an important part of students’ successful transition to either post-secondary education or higher starting salaries. By providing specific guidance to meet college-level requirements, credit articulation agreements also help support higher quality secondary CTE courses and more qualified CTE teachers. It is important to acknowledge that a lot of barriers still exist that apply to awarding college credit for high school courses. Even when curriculum is aligned, there are issues relating to course delivery and/or instructor qualifications that are “deal-breakers” for dual credit. For Portland Community College, adherence to the faculty-defined Instructor Qualifications is tremendously important for maintaining accreditation standards. On the other hand, when students take a high school course that is substantially the same as a college course, there is reasonable concern that student effort may be duplicative.

In addition to the Institutional Articulation Agreements described above, course-to-course credit articulation agreements are in place for many courses, and will continue to be developed. Updated agreements are prepared annually in the fall by the college’s dual credit staff and signed by appropriate secondary and post-secondary staff.

**Addendum B: Alignment/Articulation Documentation**

**Directions:** Create an Addendum B folder for properly identified examples of: 1) Evidence of partnerships and/or institutional collaboration, 2) alignment or articulation documentation, 3) POS visuals, including documentation created by any CTE POS partners, especially those created jointly.

**Required documentation for Element 2:**

- Provide evidence of institutional partnerships and collaboration
- Articulation agreement between secondary and post-secondary institutions, showing alignment of standards
- Provide a CTE POS visual (road map, diagram, chart of courses through college) showing courses and activities available at secondary, multiple entry points at post-secondary, multiple exit points and bridged pathway options, as appropriate; CTE POS visual should illustrate clearly for student, the pathway focus of CTE POS, as well as options related to the CTE POS—(Note: If you have included a hyperlink to these visuals on Page 1 of this application, you do not need to include a copy in this Addendum)
Element 3: Accountability & Assessment

A. Business, community and education partners, such as an Advisory Committee, participate in evaluating program vision, goals and priorities such as:
   - Assist in CTE program of study development and validation of industry skill standards for curriculum content and technical skill assessment, where appropriate,
   - Play an active role in curriculum development, implementation and program evaluation,
   - Participate in the CTE teacher recruitment, instructor appraisal process and ongoing faculty professional development.

B. Each Perkins-eligible CTE program of study’s performance shall be measured against the set of Perkins-required performance measures as described in Perkins IV Measurement Definitions. [Perkins Section 113 (2)(A-B)].

C. Perkins performance data is used for data-driven, CTE program of study improvement decisions (See page 12 of this document)

D. Based on the Program Design and instructional plan each where each student:
   - Monitors their own progress through their demonstration of attaining standards
   - Demonstrates their technical and academic proficiency in meaningful ways
   - Adapts their program to meet their personal goals based on industry requirements and performance outcomes

Comments and additional information: Please address the questions for both the Secondary Partner and the Post-Secondary Partner found in the "Areas of Strength" and Priority Concerns" worksheet at the end of this section of the Readiness and Sustainability Tool.

Students completing the CTE Architecture / Drafting program at Aloha high school will leave the course with a portfolio that meets the district requirement for an extended application. Students will present their portfolios to a panel of experts that will evaluate their work using industry standards. Each student will complete an Extended Application project as part of the presentation / portfolio. CTE students are encouraged to keep in touch with the CTE instructors through social media. Graduates that continue in the field are encouraged to come back and work with current students, helping them to make connections with careers and post secondary education. Perkins / CTE students achieve a majority of the Oregon Skills sets in preparation for graduation. Upon completion of the courses students will have the opportunity to meet the NCCER certification standards providing them with a certificate that will open career and post secondary opportunities.

We are currently working with Hillsboro and Sherwood HS as well as Westview HS on the Technical Skills Assessment. It will be complete spring of 2011. The TSA will be implemented in fall of 2011. The scoring guide / rubric we will use to evaluate each students projects at the end of the class. The first implementation of the scoring guide grading system will be Spring 2011. Students will receive their Extended Application (required for graduation) in spring of 2012.

Challenges are promoting the program. Engineering students need to be aware of the advantages of the courses, the college credit and the college prep that the courses offer. A skills competition has been suggested between several of our schools, especially Westview & Aloha. This competition would be offered with cooperation from PCC. Projects would be judged & scored by PCC instructors. Industry connections may be used to reward students.

PCC response:

Instituting "valid and reliable" Technical Skills Assessments across a broad range of Programs of Study is a challenge that continues to need evaluation, development and implementation. In order to meet the ambitious Technical Skills Assessment reporting deadlines, all Perkins-eligible CTE programs at Portland Community College have begun collecting and sharing information about what each CTE program is currently doing for skills assessment, discussing technical challenges that interfere with other comprehensive assessment, reviewing existing and new assessment tools, selecting appropriate tools, matching technical skills assessment with useful industry standards, and sharing strategies about how to address academic deficiencies revealed by skills assessment. Many CTE departments are using current licensure or industry certification exams as their TSA, some are using nationally developed standardized tests, and others are creating their own assessments.
Directions: Create an Addendum C folder for properly identified examples of: accountability and assessment documentation.

Required documentation for Element 3: Please provide in Addendum C (see end of Application)

- Provide a plan for technical skill assessments
- Provide student data sheet with all columns filled in (see next page)
- Use of student data to develop CTE POS plan (answer questions on the page following the Student Data Sheet below, for both secondary and post-secondary components)
- When answering the questions that follow the data sheets below, be sure to address how this CTE POS will positively impact those student data in your schools.
Element 3 (continued: Student Data)

## Prior CTE Student Performance Data Analysis

### Secondary Student Data Analysis—part 1

An analysis of prior CTE concentrator performance will help identify any performance measures that may need to be addressed to increase concentrator academic and technical skill attainment, as well as the other performance indicators. The analysis of prior CTE concentrator performance data may guide you toward identifying appropriate priority goals and strategies for CTE program improvement.

Prior CTE Concentrator Performance Reports with student performance targets are available at [CTE Student Data Reports](#).

In the fields below, enter the student data you have for prior year student data for up to 3 prior years. Also, enter this year’s Target Performance goals, as well as actual Current Year School Wide Performance Data.

<table>
<thead>
<tr>
<th>CTE Performance Indicator</th>
<th>Prior Year CTE Performance</th>
<th>Most Recent School Wide Performance</th>
<th>Most Recent State Wide Performance</th>
<th>Target School Wide Performance</th>
<th>Final Perkins IV Target Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1S1—Academic Attainment <em>(Reading)</em></td>
<td>62.10%</td>
<td>53%</td>
<td>72.26%</td>
<td>60%</td>
<td>100%</td>
</tr>
<tr>
<td>1S2—Academic Attainment <em>(Mathematics)</em></td>
<td>66.67%</td>
<td>45%</td>
<td>66.38%</td>
<td>59%</td>
<td>100%</td>
</tr>
<tr>
<td>1S3—Academic Attainment <em>(Writing)</em></td>
<td>52.54%</td>
<td>57%</td>
<td>58.79%</td>
<td>n/a</td>
<td>100%</td>
</tr>
<tr>
<td>2S1—Technical Skill Attainment</td>
<td>100%</td>
<td>Enter 2S1 Data</td>
<td>95.21%</td>
<td>Enter 2S1 Data</td>
<td></td>
</tr>
<tr>
<td>3S1—High School Completion</td>
<td>99.21%</td>
<td>Enter 3S1 Data</td>
<td>97.49%</td>
<td>Enter 3S1 Data</td>
<td></td>
</tr>
<tr>
<td>4S1—High School Graduation</td>
<td>95.76%</td>
<td>88.2%</td>
<td>97.05%</td>
<td>68.1%</td>
<td>Enter 4S1 Data</td>
</tr>
<tr>
<td>5S1—Secondary Placement</td>
<td>76.36%</td>
<td>Enter 5S1 Data</td>
<td>75.51%</td>
<td>Enter 5S1 Data</td>
<td></td>
</tr>
<tr>
<td>6S1—Nontraditional Participation</td>
<td>42.51%</td>
<td>Enter 6S1 Data</td>
<td>43.07%</td>
<td>Enter 6S1 Data</td>
<td></td>
</tr>
<tr>
<td>6S2—Nontraditional Completion</td>
<td>n/a</td>
<td>Enter 6S2 Data</td>
<td>28.17%</td>
<td>Enter 6S2 Data</td>
<td></td>
</tr>
</tbody>
</table>

*Annual Statewide Academic Targets for All Schools and Districts

<table>
<thead>
<tr>
<th>School Year</th>
<th>Reading</th>
<th>Mathematics</th>
<th>Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-2009</td>
<td>60%</td>
<td>59%</td>
<td>60%</td>
</tr>
<tr>
<td>2009-2010</td>
<td>70%</td>
<td>70%</td>
<td>70%</td>
</tr>
<tr>
<td>2010-2011</td>
<td>80%</td>
<td>80%</td>
<td>80%</td>
</tr>
<tr>
<td>2011-2012</td>
<td>90%</td>
<td>90%</td>
<td>90%</td>
</tr>
<tr>
<td>2012-2013</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>


No “Target School Wide Performance” Data for 2010 – 2011 Using 2009 - 2010
Secondary Student Data Analysis—part 2
Element 3 (continued: Student Data)

Please address the following Guiding Questions for analysis of your CTE performance data listed on the previous page:

1. How does your CTE concentrator performance compare to statewide performance on the CTE performance indicators?

Two out of three of the state performance indicators at Aloha High School are below the statewide performance indicators. Our CTE Math scores are well above the schools scores and just above the statewide scores.

2. What might be the cause of your current performance if it lags behind statewide academic or CTE indicator performance?

Obviously our CTE programs are serving our students well. The population at Aloha is a group that has a low SES. Many of the parents & students are of a culture that doesn’t value an education. It’s our job to change this attitude.

3. How does your program’s CTE concentrator performance data compare with school-wide student performance data?

As expected, for the most part, students in the CTE programs score higher in the data. In writing we are a little behind. We are working on making changes that will facilitate change that improves student success and thus, the scores.

4. Do you have indications that your CTE concentrators continue with their CTE program of study at the post-secondary level? Do any of these students require remediation before they continue with their program?

Students who take that series of classes in a timely manner will need no remediation. They will be ready for an entry level career or to continue at the post secondary level. Student’s who fail the classes or allow a substantial amount of time to pass before continuing on their career/education path, may need some minor remediation.

5. What questions does your student performance data raise?

How can my CTE courses help improve reading, writing & math comprehension? Will the Beaverton School District allow me to teach a Construction / Applied Math class that I know will help students with understanding & test scores? How can I help the other CTE teachers (and non-CTE) to work on improving our students’ scores? How can I convince the counseling dept. that students that take CTE classes score higher on the tests than students who don’t?

6: What action steps will you take through this CTE POS design and implementation to assist students in improving performance?

I will implement a reading & writing curriculum in the subject area. Construction and Drafting / Architecture will include more reading, writing & math including Technical Skills Assessment in these areas. I see a need for the CTE areas in the district to get together and be sure that we are working toward the same general goals. CTE instructors have an opportunity to help students in elective programs improve their overall comprehension / test scores.
**Post-Secondary Student Data Analysis—part 1**

An analysis of prior CTE concentrator performance will help identify any performance measures that may need to be addressed to increase concentrator academic and technical skill attainment, as well as the other performance indicators. The analysis of prior CTE concentrator performance data may guide you toward identifying appropriate priority goals and strategies for CTE program improvement.

Prior CTE Concentrator Performance Reports with student performance targets are available at [CTE Student Data Reports](#).

In the fields below, enter the student data you have for prior year student data for up to 3 prior years. Also, enter this year’s Target Performance goals, as well as actual Current Year School Wide Performance Data.

<table>
<thead>
<tr>
<th>CTE Performance Indicator</th>
<th>Year 1 Prior CTE Performance</th>
<th>Year 2 Prior CTE Performance</th>
<th>Year 3 Most Recent CTE Performance</th>
<th>Year 4 Next Target CTE Performance</th>
<th>Year 5 Final Target CTE Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1P1(a)—Technical Skill Attainment (Locally Approved)</td>
<td>97.97%</td>
<td>97.71%</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>1P1(b)—Technical Skill Attainment (State Approved)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1P2—Academic Attainment</td>
<td>95.53%</td>
<td>95.92%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2P1(a)—Credential, Certificate, or Degree Completion</td>
<td>54.85%</td>
<td>60.45%</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2P1(b)—Credential, Certificate, or Degree Completion</td>
<td></td>
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</tr>
<tr>
<td>3P1(a)—Student Retention or Transfer</td>
<td>71.08%</td>
<td></td>
<td></td>
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<tr>
<td>3P1(b)—Student Retention or Transfer</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>4P1(a)—Student Placement</td>
<td>78.95%</td>
<td></td>
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<tr>
<td>4P1(b)—Student Placement</td>
<td></td>
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<tr>
<td>5P1—Nontraditional Participation</td>
<td>22.99%</td>
<td>20.62%</td>
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<tr>
<td>5P2(a)—Nontraditional Completion</td>
<td>19.26%</td>
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<tr>
<td>5P2(b)—Nontraditional Completion</td>
<td>15.18%</td>
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</tbody>
</table>

Data Not Available
Post-Secondary Student Data Analysis—part 2

Please address the following guiding questions for analysis of your institution’s CTE performance data listed on the previous page. These questions are intended for you to address how your program influences, or is effected by, your institution’s CTE performance data:

1. What, if any, questions does your institution’s performance data raise in regard to your program?

Portland Community College met the targets for five of the seven performance measures. On performance measure 3P1, Student Retention or Transfer, we met the target at the 90% threshold. On one performance measure, 5P2, Nontraditional Completion, we did not meet the target or the 90% threshold; however, because the formula was in the process of being evaluated and would be rewritten so that the details of the definition, and the numerator and denominator better aligned with program efforts, we were told not to be concerned with this performance measure until the update was made.

2. Describe any strategies that your program uses to influence CTE performance data at your institution (e.g. tutoring, professional development for educators, etc.).

Given that it can be difficult to track all of the CTE secondary students to all potential post-secondary sites, PCC measures performance by tracking the estimated percentage of students who meet the entry requirements of the aligned post-secondary program at high school graduation.

Portland Community College does measure on a term by term basis the number of entering students who test into developmental education courses. The college can disaggregate this data in many ways (i.e. age, zip code, high school (if provided)) but we are not yet able to link the data to the specific CTE programs that are POS. We are working on a way to mark these programs in our data system. The plan is for this to take place during the 2010-2011 academic year.

Addressed in answer to question 3.

3. Are there strategies/activities that you would like to incorporate, particularly in performance areas that may be below satisfactory level, in your program?

Every summer PCC’s director of Institutional Effectiveness, two members of the data collection and research staff, and the college’s Perkins Title I coordinator meet to review the Perkins performance measures, targets, and data results. The purpose of this meeting is to make sure that we know where we stand to date in regards to Perkins data collection, reporting and outcomes, and what our plans are for following academic year. Even though the college overall was successful in meeting the targets for the performance measures, we continue to develop strategies to better serve students of any particular category (gender, ethnicity, or special populations) who are not meeting the performance measure targets. This way we can make sure that the CTE Perkins-funded advisors and faculty are aware of the groups of participants and concentrators who are not meeting one or more performance measure(s) and make sure that we are providing them additional time, services and resources to improve our overall data results.

4. What actions will you take in your program to positively influence your institution’s CTE student performance?

During fall 2009 through spring 2010 Portland Community College (PCC) and its Institutional Effectiveness Office (research) began looking at how we might improve our in-house data reports regarding the impact of Perkins funds at the college in Perkins-eligible CTE programs. We chose to expend efforts in this direction so that we could make more informative and strategic decisions regarding our use of the Perkins funds and their alignment with the purpose(s) of the grant. We also rewrote in-house data retrieval programs so that they better align with the Perkins’ definitions for CTE students who are enrolled, served or a concentrator in CTE programs at the college. Most important, we have begun the process with the new in-house data reports to have a clearer idea of who we serve in our CTE programs, who is impacted by the Perkins funds, who should we be serving that we are not, and, finally, what is happening longer term to students who enroll in CTE programs (2008-2010 Perkins Student Longitudinal Progress Report). We were also interested in how long it is taking students at the college to make reasonable progress in our CTE programs. The conversations have only begun but the new in-house data is helping us focus on how we utilize and distribute the Perkins funds, what are the demographics and psychographics of the students we serve, what types of shifts do we need to make in our use of the Perkins funds, and are we using the funds at the college most effectively to assure the long term success of Programs of Study and our work with our regional high schools.
Element 4: Student Support Services

x A. Student organizations are an available program component and integrated into CTE programs of study instruction. The student organization structure provides leadership development opportunities that meet the following expectations:
  x Instruction, Career Development and Assessment
  x Community-Based Experiences
  x Organizational Management and Administrative Experiences

x B. All CTE students will have informational guidance support and advising to assist them in progressing through a CTE program of study in an efficient and seamless manner (e.g. Pathway Templates, Education Plan and Profile, Career Information System).

x C. Programs comply with Title VI- Civil Rights Act of 1964; Title IX – Education Amendments of 1972; Section 504 of the Rehabilitation Act of 1973; Vocational Education Programs Guidelines for Eliminating Discrimination and Denial of Services on the Basis of Race, Color, Sex, Religion, National Origin, Age or Disability; Title II of the Americans with Disabilities Acts of 1990.
  x Appropriate access is provided for all students, including non-traditional and special populations.
  x Program provides a non-biased and non-discriminating learning environment (race, color, national origin, gender and disability status).
  x Program facilities provide physical access and instruction that accommodates students with disabilities including various learning styles (e.g. the use of visual, auditory, tactile, and kinesthetic teaching methods, and other appropriate forms of instruction).
  x Program meets the needs of students for whom English is a second language.

x D. Based on the Program Design and instructional plan, each student will be able to:
  x Identify the career path options he/she can follow to a chosen career;
  x Receive consistent and informed messages about career and possible financial options for post-secondary education;
  x Take ownership of their education through maintaining a current education plan and profile and/or portfolio, and
  x Apply skills and traits in a variety of settings including student organizations.

Comments and additional information: Please address the questions for both the Secondary Partner and the Post-Secondary Partner found in the "Areas of Strength and Priority Concerns" worksheet at the end of this section of the Readiness and Sustainability Tool.

Students create an education plan & profile their freshman or sophomore years. Andrew Witt our counselor liaison meets with the counseling dept. to promote our programs and explain to as many students as possible the benefits of our programs. Twice a year the counseling dept. meets with junior high students during forecasting to promote our CTE programs. During forecasting we have two after school activities, forecasting night and curriculum night. We spend the evening meeting and talking to parents and students. Tim Moe, our Extended Application specialist has worked hard on putting together a committee that is implementing the EA in Architecture / BCT for the 2012 school year.

The following are resources available to support AHS students in CTE Programs:
Planning guide Aloha High School
Aloha High Applied Arts web site:
http://www.beaverton.k12.or.us/aloha/aa_appliedArts/aa_index.html
Counseling office, Career and student success, College & Career Center
http://www.beaverton.k12.or.us/aloha/a_counseling.html
PCC Student Support Services

Post-secondary Partners:

- How will you work with recruiting and providing services for non-traditional, displaced homemakers, and other special population students for this specific POS?

As a standard for all CTE Programs, Portland Community College (PCC) is committed to providing equal access to all students through the removal of architectural and attitudinal barriers. All CTE programs at the college comply with a number of state and federal guidelines and Acts that require equal opportunities and access for all students. The Americans with Disabilities Act of 1990 (ADA) and the Amendments Act of 2008 is the primary driver of a lot of the decisions and policies with regard to the Disabilities Services Office.

The College’s Disabilities Services Office ensures that students enrolled in CTE programs are provided specialized assistive technology services to accommodate disabilities in their CTE programs. Disability Access Services (DAS) is the district-wide department that provides the accommodations and services. Examples include adaptive equipment and computer technology, alternate media formatting (audio and electronic texts), in-class aides, media captioning, sign language interpreting and transcribing, and test accommodations.

All Career and Technical Education (CTE) programs at Portland Community College (PCC) recognize that promoting the successful participation and preparation of students in CTE programs that meet the non-traditional (NT) criteria is a priority. At the entry point of all CTE programs, students who fit the NT criteria are identified so that all levels of college resources (Perkins Student Resource Specialists, Tutoring Centers, Multicultural Centers, Women’s Resource Centers, etc.) are aware that these students may need additional support in order to be successful in their chosen CTE program. Some of the students encounter few, if any, issues while others require a great deal of support to work through the academic, technical and social barriers. The greatest resources we have found are to align the students with others (mentors) in both the academic setting and workplace who, at one time, had chosen the same path and are now gainfully employed. These individuals are invaluable resources and offer a tremendous amount of support and encouragement on a personal, academic and technical skill level. PCC still struggles in successfully recruiting students for NT CTE fields. Aside from utilizing a number of the available resources available on a local, state and national level, we will also be doing more targeted recruitment from specific programs college-wide that are providing enhanced opportunities to targeted populations: Sylvania ROOTS Program, CAMP (College Assistance Migrant Program), Workforce Network, Talent Search, Gateway to College, MOTT (Moving On Toward Tomorrow), etc. Perkins funding is utilized to identify students who show interest in NT CTE programs at all levels of academic preparation to make sure they are able to quickly access CTE program personnel and other college resources to guarantee that the connections are made early enough to improve chances of CTE program success.

The Women’s Resource Centers at Portland Community College are also an additional avenue for special population students (single parents and displaced homemakers) interested in CTE programs to seek resource information and support both on campus and in the community.

Single parents, displaced homemakers, and women returning to college can take advantage of four programs offered through the college’s Women’s Resource Centers: Project Independence, New Directions, Career Transitions and Life Tracks. The programs are tuition free and provide a variety of skills needed to becoming employed in a family-wage job. The primary goals of the programs are self sufficiency through college preparedness. Students gain access to a variety of educational and training opportunities on the road to becoming economically self sufficient. On-going support is offered after completion of the class. This is the aspect of the program that receives Perkins funding. On-going activities provided might include academic advising, placement assistance, student support services, and community resource referrals. Students are continuously helped with identifying and removing barriers, which impede their success. Classes are offered fall, winter and spring terms.

- How will you provide advising and tutoring services to students in this POS?
Portland Community College uses the majority of its Perkins funding on 19 staff who serve as advisors and employment specialists in the college’s CTE programs. Students entering CTE at the college are able to access these highly trained and specialized advisors for all aspects of their advising needs. Aside from general advising needs, the staff helps students maneuver the financial aid process, resolve child care and housing issues, seek professional services through college or outside resources for medical and mental health needs, and arrange for group or individual tutoring.

**Welding** has become a more comfortable area of growth for women through PCC’s welding department’s expansion of individualized course offerings and the sculpture welding course. These courses get women in the door, and once they get in the shop and try welding, they realize that they can do “this welding stuff,” and many of them decide to make it a career and not just an art form or a hobby.

**Welding** also has a career female welder instructor who has done the job in much more difficult circumstances than in present times, and she serves as a resource and an inspiration to our female students.

There are women in all three AAS degrees of **Building Construction Technology**. However, the physical nature of the hands-on construction somewhat limits how many women enter that field while many women are more comfortable in the design/build/remodel area. The Construction Management degree is drawing a number of women into a career that tends to be more lucrative and less physically taxing. Students have opportunities through the student organizations they’ve formed to do volunteer team projects out in the community with professionals, providing female students a great opportunity taking a turn at being a project manager at a site. This is also a great way for students to make professional contacts in their field.

**Addendum D: Student Support Services Documentation**

**Directions:** Create an Addendum D folder for properly identified examples of: student support services documentation.

**Required documentation for Element 4: Please provide in Addendum D (see end of Application)**

Give examples (documents, other evidence) of Comprehensive Guidance and Counseling that students will receive. These documents may include:

- Marketing materials for recruitment of non-traditional students to CTE courses
- Tools or skill inventories used to guide course/CTE POS selection
- **Secondary partner:** Documents illustrating relation to Oregon Diploma requirements:
  1. Academic applications (Extended Application)
  2. Education Plan and Profile
  3. Essential Skills
  4. Counseling and guidance materials

- **Post-secondary partner:** Documents illustrating:
  1. Recruitment and servicing of non-traditional CTE students, displaced homemakers, and other special population students
  2. Advising and tutoring practices and procedures
Element 5: Professional Development

x A. Professional development helps teachers and administrators develop and improve standards-based curriculum and learning experiences that address All Aspects of the Industry.

x B. Research and training is provided to help develop appropriate and useful assessment tools and strategies.

x C. Training and guidance is provided to help improve instructional delivery methodology that helps improve student performance and skill acquisition.

x D. Secondary teacher licensure is appropriately aligned with the CTE Program of Study and courses in the CTE POS fall within the appropriate NCES codes for that licensure.

Comments and additional information: Please address the questions for both the Secondary Partner and the Post-Secondary Partner found in the "Areas of Strength" and Priority Concerns" worksheet at the end of this section of the Readiness and Sustainability Tool.

Furl K. & Brian G. from Westview and I are working on aligning our programs. Sue Irwin is allowing us to work together to be sure that our programs offer similar information/curriculum. Software issues have come up, but we are working on making sure students from Westview and Aloha high schools have a similar experience.

Concerns always revolve around time teachers have together and still being in front of the students to make sure they benefit from our expertise.

PCC Response

Since 2009-2010, there has been a continued and increased emphasis on CTE staff and instructors participating in professional development opportunities related to the integration of academics and technical skills into CTE Programs of Study. Appropriate professional development opportunities have been identified and provided to CTE staff and instructors related to their professional development plans and aligned with the professional development needs and opportunities provided by our secondary partners.

PCC supports and promotes its mission, goals and values by continually developing the professional and personal capacity of all members of the community through the efforts of the Office for Staff and Organizational Development. The District Staff Development Office supports PCC’s Staff Development Mission by:

- Advocating, promoting, communicating, and coordinating college-wide staff development opportunities
- Funding specific strategic staff development initiatives and programs
- Providing opportunity for professional and career growth to employees

Addendum E: Professional Development Documentation (optional)

[This documentation may already be included in the documentation of the other 4 Elements.]

Directions: Create an Addendum E folder for properly identified examples of: professional development planning documentation.

Required documentation for additional element: (May be included in other Elements of Application; if not, please provide in Addendum E)

- Outline the Professional Development plan in place for the development and advancement of this POS; requires a secondary and post-secondary response
- Give samples of your regional and local professional development planning documents, both as discreet institutions and as partner institutions; explain how each professional development activity is designed to improve the instructional delivery within this POS
- Sample materials used (or will be used) in professional development events
- Sample presentations used (or will be used) in professional development
- Include relevant regional and local professional development budget items and considerations, especially jointly funded activities. Include both Perkins funds and other funds used for this professional development.
# Certification of Assurance

**Directions:** After filling in all the appropriate fields in this form, print out a copy of this Certification of Assurance page and acquire all the appropriate signatures. All signatures must be on one form, demonstrating the collaboration between all institutions participating in this CTE Program of Study. Mail complete, signed Assurance form to Ilene Spencer at: ODE, 255 Capitol St. NE, Salem, OR 97310

<table>
<thead>
<tr>
<th>Name of CTE POS</th>
<th>Enter Name of CTE POS</th>
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</thead>
<tbody>
<tr>
<td>Name of Secondary School</td>
<td>Enter Name of Secondary School</td>
</tr>
<tr>
<td>Name of Community College</td>
<td>Select Community College</td>
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</tbody>
</table>

## SECONDARY LOCAL SUPPORT and CERTIFICATE OF ASSURANCE

I have reviewed this program application document for clarity, completeness and adherence to program quality standards, and support its approval. I agree that the CTE program area requirements for secondary CTE programs, including appropriate CTE certification for teachers, the rules and regulations for Public Law 101-392, and the requirements contained in the Oregon State Plan for Career and Technical Education will be complied with in the operation of the CTE programs and services offered by the district or through contract between the district and other agencies, institutions, or individuals. I agree to furnish CTE program data as requested by the Oregon Department of Education.

<table>
<thead>
<tr>
<th>School District Administrator Signature</th>
<th>Enter Local Administrator’s Name</th>
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<tbody>
<tr>
<td>Date:</td>
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## LOCAL SUPPORT and CERTIFICATE OF ASSURANCE

The program advisory committee has been involved in the design and development of this program.

<table>
<thead>
<tr>
<th>Advisory Committee Signature</th>
<th>Enter Advisory Committee Member's Name</th>
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<tbody>
<tr>
<td>Date:</td>
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## POST-SECONDARY LOCAL SUPPORT AND CERTIFICATE OF ASSURANCE

This community college has been involved in the design and development of this CTE program of study and agrees to continue collaboration meeting all 4 Core including alignment and articulation and reliable and valid technical skills assessment.

<table>
<thead>
<tr>
<th>Community College Administrator’s Signature</th>
<th>Enter CC Administrator’s Name</th>
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## For Regional Coordinator Use Only

**Recommended Status:**
- ☐ RECOMMENDED FOR STATE APPROVAL (Perkins Eligible) Expiration Date: ____
- ☐ DISAPPROVED (and returned for revision) Date: ____

<table>
<thead>
<tr>
<th>Regional Coordinator Signature</th>
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## For ODE/OCCWD Use Only

**Approval Status:**
- ☐ FINAL ODE APPROVAL (Perkins Eligible) Expiration Date: ____
- ☐ FINAL CCWD APPROVAL Date: ____
- ☐ EII Education Specialist Signature Date: ____
- ☐ OCCWD Education Specialist Signature Date: ____

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CTE POS Application—April 2011  
Oregon Department of Education/CCWD  
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