

Program Alignment – “The Process”

Project Goal

The model and the process outlined in this document is intended to create technical program alignment between secondary CTE programs (both pathways and career specialties) and first semester courses of the technical programs offered at Idaho's six state technical and community colleges. The priority of this alignment process is to increase the matriculation of high school program concentrators into postsecondary like programs, in order that they might complete the postsecondary CTE program with a degree or industry credential. This increase of students moving from secondary into postsecondary programs will help Idaho meet the State Board of Education's 60% goal and supports the Board's strategy of guaranteed statewide articulation and transfer.

Overview and Alignment History

2012 – Initial Framework Concept: The concept of program alignment began with the Division's internal development of the Program of Study Framework.

2013 – Framework Development: During the professional development summer conference, Dr. Todd Schwarz presented an overview of the framework and described each of the levels of learning a student might accomplish during their tenure in an Idaho CTE program, depending on the type of program in which the student participated. These programs reflect differences of content knowledge; the “Framework” reflected where student learning consistencies existed in the different types of programs, secondary and postsecondary.

2014 – Learning Outcomes and TSAs: Building on the original framework, CTE began updating the standards and student learning outcomes for each of the existing secondary CTE programs. As a result of this process, each program will determine a program-ending Technical Skills Assessment (TSA). The TSA will be developed by identifying each of the most critical student learning outcomes and creating test items to verify a student's understanding of content.

2015 – Postsecondary and TCC Alignment: CTE added a second phase to the process that included the collaboration of postsecondary technical institutions to determine the standards to be included in first semester courses to create Advanced Opportunities and statewide credit transfer. Postsecondary instructors will determine which student learning outcomes meet the expectations of postsecondary program courses and will modify courses to include common learning outcomes for statewide credit transfer.

To accomplish this, postsecondary programs must horizontally align content in first semester (or second semester) program courses. This process will eliminate the need for separate articulation agreements between secondary programs and a specific postsecondary program. Technical Competency or Dual Credit can be awarded by any postsecondary institution offering the particular program.

Benefits

Program alignment will collectively benefit students, secondary and postsecondary faculty, and industry.

Student Benefits

- The skills students learn in high school will easily transfer to any of Idaho's six technical/community colleges as real, non-elective credit
- Students will receive credit at any state technical college in Idaho where the student's program is offered
- Students will gain skills employers have defined as critical
- Students who earn postsecondary credit in high school are more likely to "Go On"

Faculty Benefits

- Secondary teachers know they are teaching industry critical learning outcomes that provide students with the knowledge necessary to "Go On"
- Postsecondary teachers gain confidence in the skills that high school CTE concentrators bring to their programs
- More secondary CTE students are recruited into postsecondary CTE programs
- Secondary and postsecondary teachers benefit from new collaborative training opportunities during CTE professional-development conference

Industry Benefits

- Industry receives a workforce trained with the skills they have determined critical
- Industry plays a very important planning role in the standards development of each pathway

Alignment Process

The program alignment process will not be a one shot implementation. The process for each technical program pathway will be approximately 3-4 years. Emphasis has been placed on several foundational components:

1. Provide advanced learning opportunities for secondary concentrators enrolling in postsecondary programs;
2. Ensure those students enrolling are not repeating coursework already mastered; and
3. Confirm that students receiving credit are proven eligible through a comprehensive process of didactic and practical application assessments.

The process has been broken down into the key events necessary to complete one program pathway's vertical and horizontal alignment. The time span outlined below reflects a program moving through the process without any necessary modifications after the process has begun. Changes to standards or necessary modifications to a program during the process may increase the time span for completion.

1. Development of Secondary Standards and Student Learning Outcomes

A specific technical program is identified for standards updating and review or creation of student learning outcomes. Industry representatives, along with secondary and postsecondary instructors, are invited to meet to determine the program standards. This meeting becomes the basis for a technical program at the secondary level and serves as the foundation for secondary program testing. Industry representatives drive this stage of

the process and work with instructors to identify the current needs of the particular industry occupations supported by the program.

2. Learning Outcomes Validation through the Criticality Survey

Once the technical standards and student learning outcomes have been developed and vetted through the initial development team, the learning outcomes are shared with a larger group of industry representatives through a criticality survey. Industry representatives are asked to rank each learning outcome as to their importance in the workplace. Industry representatives rank each learning outcome by, **Nice to Know** = Helpful, but not critical for all employees; **Need to Know** = Employees should know, or know how to find information; **Critical to Know** = Essential skills and knowledge for all employees. Each learning outcome is scored and reflected in the program Technical Skills Assessment based on the level of criticality established by the representative community. The results of the criticality survey drive the TSA question development and postsecondary horizontal alignment.

3. Technical Skills Assessment Development

The results of the criticality survey serve as the blueprint for the TSA. Once the survey is complete, instructors from the original standards development team will reconvene with CTE personnel and representatives from the Career and Technical Education Consortium of States (CTECS) to develop the initial test items for the Technical Skills Assessment (TSA) for the program of study. CTECS facilitates the development of test items, houses the banks of questions and manages the assessment distribution to participating schools. CTECS also manages the results of annual TSAs and makes those results available to participating teachers, school districts and the state division. At the completion of this development phase, a pilot TSA is made available for the spring semester.

4. Pilot Technical Skills Assessment

The TSA pilot will be available during the first spring semester following the initial development of program standards and student learning outcomes. The purpose of the pilot is to determine the quality or reliability of the test items, so it is imperative that as many concentrator participants as possible take the pilot TSA. The pilot TSA is offered to program concentrators at no cost to the participating district and will be accepted as the program TSA for that program year.

5. Postsecondary Program Alignment

Following the initial secondary standards development, participating postsecondary program instructors from similar programs (as identified by CTE) meet to align the first semester of each of their programs. Participants will determine which of the secondary program student learning outcomes are taught in postsecondary program introductory level courses and how each institution might align those courses to be taught in the first semester of the postsecondary program. This alignment will result in consistent postsecondary credit opportunities being offered to all qualifying secondary students upon completion of their coursework. During this alignment process, the instructors will also determine the number of microcertifications that might be offered to lead to the award of Technical Competency Credit. Called "badges," these microcertifications will be created, housed and awarded via the Idaho SkillStack website to eligible students following their successful completion of the required postsecondary assessments. Students achieving postsecondary credit may also apply those credits to any participating postsecondary institution's program.

6. Pilot Technical Skills Assessment Evaluation

The original standards development team will come together at the CTE Summer Conference to evaluate the results of the initial pilot TSA. This process, called item analysis, examines student responses to individual test items (questions) to assess the quality of those items and of the test as a whole. This data helps faculty recognize questions that might not adequately discriminate between students who understand the material and those who do not. Each test item will be reviewed for clarity, distractor quality and scored by its item difficulty index. Necessary item adjustments will be made to ensure assessment quality. Once the TSA is finalized, a temporary cut score will be determined during this initial evaluation process.

7. Postsecondary Course modifications/changes

After the horizontal alignment of postsecondary programs, instructors (with the support of their Deans) will review the results of the Horizontal Alignment and submit any necessary changes to course structure and/or sequence to their institution's curriculum committee for review and approval. CTE will provide a postsecondary institutions with the information regarding the agreed upon courses, course descriptions, assessments, and verification of badge information that will be related to their program. Any agreed upon testing mechanisms (for student TCC) will be designed and reviewed by each program instructor prior to submission or put into practice. The goal will be to get any changes approved for course deployment the following fall semester.

8. Secondary Standards Adoption and Integration

Secondary faculty will begin the integration of the updated learning outcomes into their teaching practices and classroom activities. Concentration on the developed standards and outcomes will prepare secondary students for the new state approved program TSA and future postsecondary credit. Program concentrators will take the new approved TSA in the following spring.

9. State Approved TSA given to Program Concentrators

Each secondary program concentrator will complete the state approved TSA for their program of study. Results of the assessment will be collected by CTECS or the agency administering the assessment and provided to both the school district and CTE. Results from the first TSA will be used to establish the assessment cut score and for activity development for teacher training.

10. Technical Skills Assessment Cut Score Set

During the professional development conference, results from the first TSA will be used to establish the first cut score for students taking future TSAs. The small group created from the initial development group will meet at summer conference and review the results of the initial TSA and work under the guidance of CTECS to establish a cut score. The cut score will establish the minimum passing score for the program TSA and will remain until the next assessment update.

11. Secondary Faculty Training

Using the results from the spring secondary TSA, postsecondary instructors will develop appropriate training sessions and activities that will be delivered to secondary instructors during the CTE professional development Conference. The collaborative training session will initially focus on the specific areas of the program outcomes where secondary students seem to be struggling. Training may also be related to changes to program

expectations and industry needs. The summer training is intended to be interactive and continue to develop a working relationship between secondary and postsecondary faculty.

12. Postsecondary Alignment Adoption

Following the initial summer conference training, the postsecondary programs will begin teaching the newly aligned program of study. Each of the offering institutions will work together to determine appropriate course assessments to ensure consistent expectation across the state of postsecondary credit award for secondary concentrators matriculating into the postsecondary program.

13. Horizontal and Vertical Program Alignment Completed

Matriculating secondary students will be able to receive postsecondary credit for work accomplished during their high school tenure. Successful students receiving Technical Competency Credit verify competency based on assessment completion during the testing window scheduled at the postsecondary institutions. Students will be recognized for their accomplishments through the awarding of SkillStack micro-certification/badges representing postsecondary program credit.

Ongoing Updates and Changes

Each program pathway will be reviewed for potential updates on a regular basis depending on the needs of our industry partners. CTE will facilitate meetings to ensure all standards, student learning outcomes and TSAs along with postsecondary competency credit remain relevant.

Program Alignment: A meaningful head start for CTE students:

<http://cte.idaho.gov/educators/program-alignment/>

