



Criteria for State-Approved Technical Skill Assessments

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The Carl D. Perkins Career and Technical Education Act of 2006 sets an expectation that career and technical education concentrators are assessed for their attainment of technical skills using valid and reliable assessment instruments aligned with industry standards where available and appropriate. Minnesota has undertaken a state process for identifying core competencies and determining state-approved assessments tools for technical skill attainment in the programs of study in the 79 career pathways.

Name:
High School/ College:
Career Pathway(s):
Assessment:
Date:

Below is a list of criteria to be used to recommend the state-approved technical skill assessments in the following career pathway(s):

Table with 3 columns: Criteria, Yes, No. Rows include: Has relevance to the career pathway occupations, Measures the recommended technical skill core competencies of students at secondary level, Measures the recommended technical skill core competencies of students at postsecondary level, Addresses at least 70 percent of core competencies in career pathway, Produces data that takes into account how the levels of performance identified by the local compare with other locals and compare with other states, Measures what it intends to measure—validity, Produces results that are consistent for a test or measuring device—reliability, Uses proctor during assessment if required by vendor, Is aligned to industry-recognized standards where available and appropriate. Often addressed by using examinations tied to industry or trade certifications, but may also be addressed through alignment with state or national industry or trade standards.

Comments/Rationale:



Validity and Reliability

Technical skill assessments must be free of bias and distortion. Validity and reliability are two concepts that are important for defining and measuring assessment instruments that do not include bias and distortion.

Validity refers to the accuracy of an assessment—whether or not it measures what it intends to measure.

Some of these characteristics include:

- The content of the test matches at least 70 percent of the technical skill core competencies as determined by the state process.
- The scores on the test are in agreement with or predict an external criterion (i.e. industry validated).
- The assessment corresponds to other variables, as predicted by some rationale or theory.

Reliability refers to the extent to which assessments are consistent.

Some of these characteristics include:

- An assessment could be given twice to a class of students, separated by days, weeks, or months, and produce similar results. The stability of the assessment (i.e. the correlation between the scores at Time 1 and 2) determines the reliability of the assessment.
- Another measure of reliability is the internal consistency of the items. For example, if an assessment is created to measure students' ability to solve a particular problem, one should be able to assume that if a student gets an item correct, he or she will also get other, similar items correct.