PROCEDURES FOR APPROVAL OF EVALUATION INSTRUMENTS TO BE USED TO MEASURE TECHNICAL SKILL ATTAINMENT OF CAREER AND TECHNICAL EDUCATION STUDENTS IN FLORIDA

BACKGROUND

Legal Requirements –

Federal – In June 2006, Congress passed the Carl D. Perkins Career and Technical Education Act of 2006. In Section 113 of the Act Congress established state performance measures that include core indicators of performance for CTE students. For secondary students, one of those measures is "*. . . student attainment of career and technical skill proficiencies, including student achievement on technical assessments, that are aligned with industry-recognized standards, if available and appropriate."* Similarly, core performance measures for postsecondary students requires "*. . . student attainment of challenging career and technical skill proficiencies, including student achievement on technical skill assessments, that are aligned with industry-recognized standards, if available and appropriate.*"

State Implementation of Technical Skill Attainment-

As required in the State Plan, Florida developed three distinct approaches to measure technical skill attainment of secondary CTE students, postsecondary CTE students and postsecondary adult-level students.

Secondary Technical Skill Attainment (2S1) is designed to measure the extent to which CTE students are leaving secondary education with validated technical skills. The denominator consists of senior concentrators who left secondary education in the reporting year. The numerator consists of students in the denominator who have earned either an occupational completion point (OCP) or passed a valid and reliable evaluation instrument applicable to their program concentration. The use of occupational completion points as a validation of technical skill attainment will be phased out as the state moves toward third-party assessments, particularly industry certifications, as more valid and reliable measures of technical skill attainment.

Postsecondary Technical Skill Attainment (1P1) (1A1) is designed to measure the extent to which CTE students are leaving postsecondary education with validated technical skills. 1P1 measures the percentage of CTE credit hour concentrators who earned at least 75% of required program hours with a GPA of 2.5 or higher or passed a valid and reliable evaluation instrument applicable to their program area. The clock hour version of this measure, 1A1, is the percentage of CTE clock hour concentrators who achieved at least one OCP in a career certificate or advanced technology diploma program or passed a valid and reliable evaluation instrument applicable to their program area. The use of OCPs, credit accumulation, and GPA as a validation of technical skill attainment will be gradually phased out as the state moves toward third-party assessments, particularly industry certifications, as more valid and reliable measures of technical skill attainment.

Florida's State Plan for the Administration of the Carl D. Perkins Career and Technical Education Act of 2006 identifies the following categories of evaluation instruments as valid and reliable methods to assess technical skill attainment:

1. federal or state regulatory agency-developed assessment instrument leading to licensure
2. industry-developed assessment instrument leading to industry certification
3. proprietary company-developed assessment instrument leading to certification of proficiency in one or more company products
4. third-party-developed assessment instrument

Evaluation Instrument Selection Criteria –
The criteria for adoption of an evaluation instrument are that it be a valid and reliable measurement directly related to the learning outcomes of an occupational program and considered occupationally specific[1].

Department of Education Action –
In December 2006, DOE's Division of Workforce Education (Division) surveyed local school districts in the state to identify the various forms of assessment the districts were using for their career and technical education (CTE) students. The Division conducted a similar survey of community colleges and technical centers in August 2007. Division staff consolidated the results of those surveys and developed two draft inventories, one for use with secondary students and one for use with postsecondary students. The inventories contained evaluation instruments linked to CTE programs being conducted by school districts, community colleges and technical centers.

Staff of the Standards, Benchmarks and Frameworks (SBF) Section reviewed the draft inventories to ensure that listed instruments met the selection criteria. Their recommendations to add, delete or revise the inventories were incorporated into the drafts, and on September 20, 2007 the Division sent out the draft inventories to CTE directors in school districts, community colleges and technical centers for their review. Directors' responses received by October 1, 2007 have been reviewed by SBF staff and, where appropriate, the inventories have been accordingly revised.

APPROVAL PROCEDURES

The Division of Workforce Education will use the following procedures to approve the original lists of evaluation instruments to be included in the secondary and postsecondary technical skill attainment inventories.

1. Staff of the Standards, Benchmarks and Frameworks (SBF) Section will review listed evaluation instruments using the Evaluation Instrument Validity Worksheet (Appendix 1). An evaluation instrument will be validated if:

[1] An occupationally specific evaluation instrument is an assessment indicating that the recipient has achieved proficiency in technical skills directly related to the goal or goals of one or more occupations listed in the Standard Occupational Classification (SOC) system. An instrument that is generic to a number of occupations (e.g., OSHA, CPR) is not considered to be occupationally specific. Appendix 2 contains a list of known instruments not considered to be occupationally specific.

a. In the professional opinion of the reviewer, the evaluation instrument is occupationally specific to one or more occupations listed in the 2000 Standard Occupational Classification (SOC) System; and

b. To ensure the rigor of evaluation instruments, the following validation thresholds were established:
   - a secondary evaluation instrument must require students to complete a minimum of 150 hours of instruction;
   - a postsecondary adult-level (clock hour programs) evaluation instrument must require students to complete a minimum of 150 hours of instruction;
   - a postsecondary level (college credit programs) evaluation instrument must require students to complete the equivalent of 3 credit hours; and

c. The evaluation instrument is a state or federally regulated professional license; or

d. The certifying agency is accredited by the American National Standards Institute (ANSI) or the National Organization for Competency Assurance (NOCA)[2]; or

e. Based on documentation from the certifying agency, the evaluation instrument is:

   i. Congruent with a nationally or internationally recognized set of professional competencies or credentialing standards for professional practice; or

   ii. Based on an occupational task analysis; or

   iii. Has been tested to ensure results predict job performance; and

   iv. The evaluation instrument has been statistically tested for internal consistency with reliability coefficient (e.g., Chronbach's alpha, Kuder-Richardson Formula 20, or Pearson Product-Moment Correlation Coefficient) scores of .7 or better[3].

2. If validated by SBF staff, the evaluation instrument will be submitted to the Bureau of Accountability and Research (BAR) for review.

3. If approved by BAR, the evaluation instrument will be submitted to the Chancellor of the Division of Workforce Education for final approval. If approved by the Chancellor, the original approved Evaluation Instrument Validation Worksheet will be returned to SBF to be filed and a copy will be sent to BAR.

[2] ANSI and NOCA are organizations that accredit certification programs. Their websites are www.ansi.org and www.noca.org respectively.

[3] Cronbach's Alpha (and Kuder-Richardson Formula 20 for dichotomous, yes/no, true/false, response items) is a measurement of the internal consistency of an exam. It tests if groups of questions meant to measure the same construct are answered consistently by respondents in a single test. The Pearson Product-Moment Correlation Coefficient is used for test-retest method, which is a comparison of two administrations of the same instrument. For all of these tests, the highest value possible is 1.0, and, as a rule of thumb, .6 - .7 is considered adequate, and .8 or higher is good.

4. BAR will ensure that the approved evaluation instrument is added to the technical skill attainment database, updated inventories will be posted each January on the Perkins IV website and notices will be sent notices to:

   - The Division of Community Colleges;
   - Deans of Community College Career and Technical Education Programs;
   - Directors of School District Career and Technical Education Programs;
   - Directors of Technical Education Centers;
   - Workforce Education and District Data Advisory Council (WEDDAC); and
   - Management Information Systems Advisory Task Force (MISATFOR).

Any proposed evaluation instrument not validated by SBF or approved by BAR or the Chancellor will not be included in the technical skill attainment inventories. BAR will notify the requestor if a proposed evaluation instrument is not approved for inclusion in an inventory.

Subsequent Additions, Deletions and Revisions to the Inventories –
Program directors in school districts, technical centers and community colleges, as well as other concerned citizens, may recommend additions of evaluation instruments to be included in the technical skill attainment inventory. The Division will use the procedures previously described to approve additional evaluation instruments submitted in the future by career and technical educators for inclusion in the secondary and postsecondary technical skill attainment inventories.

Technical Skill Attainment Inventory Timeline-
The Division of Workforce Education will release Final Technical Skill Attainment Inventories (secondary, postsecondary level, postsecondary adult level) in conjunction with the release of the Perkins Basic Local Applications in January of each year for projects starting July 1. Recommended additions of evaluation instruments to the upcoming year inventories will be accepted during two submission windows:

- Summer Window – July 1 – August 30
- Fall Window – November 1-30

(The summer and fall submission windows are not applicable to the 2008-2009 inventory and the 2009-2010 inventory.) The following 2008-2013 timeline details the window submissions and posting dates for technical skill attainment inventories.

2008-2009 Finalization of Technical Skill Attainment Inventories

August 29, 2008	Deadline for submission of additions for the 2008-2009 Technical Skill Attainment Inventories.
September 15, 2008	Division of Workforce Education posts Final 2008-2009 Technical Skill Attainment Inventories on the Perkins IV web site

2009-2010 Finalization of Technical Skill Attainment Inventories

November 1-30, 2008	Submission window for additions to the 2009-2010 Technical Skill Attainment Inventories
January 31, 2009	Division of Workforce Education posts Final 2009-2010 Technical Skill Attainment Inventories on the Perkins IV web site

2010-2011 Finalization of Technical Skill Attainment Inventories

July 1 – August 30, 2009	Submission window for additions to the 2010-2011 Technical Skill Attainment Inventories
November 1-30, 2009	Submission window for additions to the 2010-2011 Technical Skill Attainment Inventories
January 31, 2010	Division of Workforce Education posts Final 2010-2011 Technical Skill Attainment Inventories on the Perkins IV web site

2011-2012 Finalization of Technical Skill Attainment Inventories

July 1 – August 30, 2010	Submission window for additions to the 2011-2012 Technical Skill Attainment Inventories
November 1-30, 2010	Submission window for additions to the 2011-2012 Technical Skill Attainment Inventories
January 31, 2011	Division of Workforce Education posts Final 2011-2012 Technical Skill Attainment Inventories on the Perkins IV web site

2012-2013 Finalization of Technical Skill Attainment Inventories

July 1 – August 30, 2011	Submission window for additions to the 2012-2013 Technical Skill Attainment Inventories
November 1-30, 2011	Submission window for additions to the 2012-2013 Technical Skill Attainment Inventories
January 31, 2012	Division of Workforce Education posts Final 2012-2013 Technical Skill Attainment Inventories on the Perkins IV web site

PERIODIC REVIEW AND UPDATE PROCEDURES –

The Division of Workforce Education will periodically review the approved technical skill attainment inventories to ensure that the evaluation instruments included in the inventories remain appropriate for certifying technical skill attainment. The Chancellor may convene a working group of division staff and program directors to conduct an annual review to evaluate the propriety of retaining evaluation instruments in the inventory.

Appendix 1

EVALUATION INSTRUMENT VALIDATION WORKSHEET
(Internal use only)

Program Title: _____ **CIPNumber:**_____
VPC Number: _____ **Secondary Program Number:** _____
Certification Title: _____
Certifying Organization: _____
_____
_____
Website URL: _____
Contact Person's Name: _____
Contact Person's Title: _____
Telephone Number (____)_____
E-mail address: _____

Validity and Reliability (Circle the appropriate answer)**:**

1.		Is the evaluation instrument a state or federally recognized professional license?	Yes	No
		OR		
2.		Is the certifying agency accredited by ANSI or NOCA?	Yes	No
		OR		
3.	a.	Is the evaluation instrument based on an assessment instrument that is congruent with a nationally or internationally recognized set of professional competencies or credentialing standards for professional practice?	Yes	No
		AND		
	b.	Is the evaluation instrument based on an occupational task analysis?	Yes	No
		AND		
	c.	Has the evaluation instrument been tested to ensure that results predict job performance, based on statistical testing, with a reliability coefficient (e.g., Chronbach's alpha, Kuder-Richardson Formula 20, or Pearson Product-Moment Correlation Coefficient) score of .7 or better?	Yes	No

NOTE: Criterion 3 requires "Yes" responses to a., b. and c. in order to recommend inclusion in an inventory.

SBF Validation:
I have reviewed this evaluation instrument and recommend that:

☐ The evaluation instrument should be included in the Secondary Technical Skill Attainment Inventory.

☐ The evaluation instrument should be included in the Postsecondary Technical Skill Attainment Inventory.

☐ The evaluation instrument should not be included in either Technical Skill Attainment Inventory.

☐ In my professional opinion, this evaluation instrument is a valid and reliable measurement directly related to the learning outcomes of an occupational program and is considered occupationally specific. In addition, the evaluation instrument meets the required rigor validation threshold.

Printed Name _____ Signature _____ Date _____

BAR Validation:
I have reviewed the SBF validation of this evaluation instrument.

☐ I concur with the SBF recommendation.

☐ I do not concur with the SBF recommendation.

Printed Name _____ Signature _____ Date _____

Appendix 2

LIST OF KNOWN EVALUATION INSTRUMENTS THAT ARE NOT "OCCUPATIONALLY SPECIFIC"

The following list of known evaluation instruments are generic in nature and may be applicable to a number of occupations listed on the 2000 Standard Occupational Classification (SOC) System. Other generic instruments will be added to this list as they are classified as non-occupationally specific.

These evaluation instruments are inappropriate for measuring technical skill attainment pursuant to the Carl D. Perkins Career and Technical Education Act of 2006.

Certifying Organization	Name of Certification
American Red Cross	Cardiopulmonary Resuscitation (CPR)
American Red Cross	First Aid
Occupational Safety and Health Administration	OSHA 10
National Occupational Competency Testing Institute (NOCTI)	Workplace Readiness
Florida Department of Education	ACT - Ready-to-Work
U. S. Department of Agriculture	Tractor Safety Operation and Driving