

Copies of Perkins IV State Plans in response to section IV B 2

NOTE: The content and text presented in this handout is as direct a “cut and paste” from each state’s Perkins IV State Plan submission. No edits or alterations have been made to the content.

“You must identify the program areas for which the State has technical skill assessments, the estimated percentage of CTE students who take technical skill assessments, and the State’s plan for increasing the coverage of programs and students reported in future program years.”

Alabama

Technical skill assessments are not currently available from the state level. LEAs are encouraged to utilize business and industry validated credentials for all program concentrators. Technical skill assessments to be developed according to the bronze, silver, gold procedures will be used in all 16 career clusters for the pathways that are developed in the state. There are to be two phases of the development process.

During Phase I, all concentrators will be assessed using the bronze standard.

During Phase II, program areas with identified credentials will provide the baseline for technical skill attainment.

During the 2008 reporting period, using the Alabama Career Readiness Credential indicators in the Alabama Courses of Study, Gold, Silver, and Bronze indicators will be utilized as a baseline growth model for Alabama.

Beginning with the 2009 school year, Alabama will participate in the OVAE-sponsored methods for meeting this requirement. Student third-party credentials will be identified for reporting.

Alaska

Alaska does not have a statewide system of technical skill assessments that are available for use in meeting the accountability requirements according to the current guidance. Individual secondary and postsecondary programs have been voluntarily working toward industry certifications and credentials under Perkins III, and sharing their experiences with the rest of the CTE community.

Identification of appropriate technical assessments is part of the process for developing approved Programs of Study and will therefore involve secondary, postsecondary and industry partners in these decisions. CTE program of study task forces will work with local and state student assessment personnel to identify criteria for approving locally-selected assessments, and choosing state-recommended assessments for state level programs of study. This identification process will be phased-in during the first year of this plan, and annually reviewed and amended as necessary in order to support continuous improvement of the curriculum review and Programs of Study process.

Alaska does not have non-Perkins funded state level resources available to support establishment of a statewide technical assessments system or expansion of the current locally-initiated strategy.

State staff will continue to work with the Next Steps Working Group and future Data Quality Institutes in pursuit of cost-effective partnerships with other states to address this issue in valid and reliable means.

Arizona

Under Perkins III, secondary technical skill proficiency was assessed by teachers using standard competency tracking tools to measure attainment in CTE program areas. A limited number of CTE Concentrators were taking State licensing exams (i.e., health occupation areas) or industry developed exams, but Arizona did not collect results on either type of assessment.

In preparation for increased accountability in federal and State reporting requirements, Arizona is implementing the Arizona Skill Standards Assessment System (see appendix AH and AI) in partnership with Arizona State University Workforce Education and Development office and Vocational Technical Education Consortium of States (VTECS). The assessment system is a Web-based tool that will allow students to take assessments quickly and easily and provide immediate feedback to teachers and administrators about the results of the assessment. The primary focus of the system is to certify and document student skill attainment of industry validated technical knowledge and skills through online end-of-program assessments. The Assessment System will serve students in:

- (i). WIA One Stop Centers
- (ii). Comprehensive High Schools
- (iii). Joint Technological Education Districts
- (iv). Postsecondary Education (where there are no existing assessments) Arizona Skill Standards Assessment System requires leadership at all levels. Each level plays a vital role in the system. The newly created Arizona Skills Standards Commission consists of business and industry partners who will preside over the standards and assessment process. These major chief executive officers and vice presidents will provide leadership for “value added” recognition of certificates obtained by successfully completing the online assessments. The Commission will be instrumental in reviewing, revising or developing CTE program standards and assessments that are in alignment with appropriate industry validated requirements.

The major function of the Stakeholders’ Committee will be to ensure the usability of the system. Membership will be made up of the following users of the system:

- (v). JTED superintendents
- (vi). Local CTE directors
- (vii). Teacher representatives from major program areas
- (viii). Postsecondary deans
- (ix). One-Stop and DES representatives from the WIA system Arizona intends to require secondary Concentrators who have completed the State-designated sequence of instruction in a CTE Program to take the online assessment as part of their course requirement. Since this is a new concept for teachers and students, Arizona expects to begin in 2008-2009 with 60 percent of the CTE Concentrators participating in the online assessment for identified programs. Arizona intends to increase this percentage annually.

The chart on the following pages provides the current list of CTE programs and Arizona’s plan to adapt, adopt or develop annually technical skill proficiency assessments for all secondary CTE

programs during the duration of Perkins IV through 2012-2013. Arizona CTE will implement valid and reliable measures as defined by OVAE by using:

(x). State-developed exam(s) tied to industry standards using Arizona Skill Standards Assessment System

(xi). State credentialing or licensing exam(s)

(xii). National industry-developed exam(s) for occupational specialties

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Proposed Implementation Plan for Secondary
Technical Skills Assessment

Arkansas

Secondary

During the 2006-07 school year, approximately 75% of all CTE concentrators were represented in the technical skill performance indicator with at least one assessment score. Since technical skill attainment is based on end-of-course assessments, each concentrator will have multiple assessment scores throughout their program of study. An average of all scores is used for the technical skill performance indicator. At the current time, there are 146 core courses within all programs of study. The core courses are those that all students who are concentrators must take. During 2006-07, 30 of the core courses were tested (20%). The state plans to develop additional assessments so that by 2009, 25% of the core courses will be assessed; by 2010, 50%; by 2011, 75%; and by 2012, 100%. As the assessments are developed, the core courses that the most students take will be considered first – therefore, the percentage of concentrators with assessments will always be much higher than the percentage of core courses assessed. As noted, even though only 20% of the core courses were assessed in 2007, almost 75% of the concentrators were represented in those course assessments.

Postsecondary

There are 164 different programs of study in 42 different pathways offered at the postsecondary level and there is no statewide assessment for CTE programs at this time. Currently the technical skill attainment of postsecondary CTE students is based upon GPA attained in CTE coursework. In addition to GPA, some programs administer certification or licensure tests but there is great variance in this approach. This variance occurs because not all programs have such testing, testing is voluntary and paid for by the student, or the student takes the test after having exited the college with performance results unknown to the institution.

At the direction of the Governor, Arkansas has adopted the WorkKeys assessment as its measure for workforce readiness and is implementing several initiatives related to the use of this system. For example, the Arkansas Economic Development Commission and the Arkansas Department of Workforce Services have begun issuing workforce readiness certificates at the bronze, silver and gold levels based upon WorkKeys assessment results. Importantly, the state is also currently determining whether a combination of KeyTrain instruction and WorkKeys assessment is more effective at reducing college remediation rates than traditional developmental education. Because of the desire for an integrated approach, ADHE will use the WorkKeys assessment as its measure for technical skill attainment beginning with program year 2011-2012. In the interim, overall GPA will be used to measure technical skill attainment.

California

Secondary, Adult, and Postsecondary Response

Though a number of LEAs currently use technical skill assessments for the purpose of issuing certificates of occupational proficiency and certifying program completion, the state has not yet developed or formally adopted technical skill assessments for its occupational programs. Nor has a system been developed for identifying the number of CTE program concentrators who have taken the available assessments. Prompted by the emerging accountability requirements of Perkins IV and the needed CTE assessment and accountability actions presented in Chapter Three, the state will assign high priority to the identification and implementation of a viable statewide system for assessing, certifying, and reporting CTE program concentrators who have achieved industry-recognized skill and knowledge standards. The identification process will address and deliberate a myriad of issues related to skill assessments, including but not limited to the following:

- Should the assessments be industry-specific or based on basic skills common to a career cluster?
- Should the assessments be determined at the state level or at the local level by established program advisory committees?
- May the assessment requirement be satisfied by successful completion of CTE programs based on industry-validated content?
- Should the assessments be based on student performance of required skills, demonstrated knowledge of the required skills, or both?
- Who should administer the assessments — teachers, industry advisory persons, or contracted agencies?
- Should successful completion of the assessments result in the receipt of industry-recognized and accepted certificates? If so, what information and whose signature should be on the certificates? Also, what strategies are recommended to obtain industry support for the certification process?

Colorado

Currently Colorado has no program areas for which the State has technical skill assessments.

In a recent survey of local programs we did find that a small number of programs are using various industry assessments (Included in table at end of section). However, per student data is not yet accessible. We estimate that less than 5% of students are completing a valid and reliable technical skills assessment.

Colorado is working toward collecting student achievement data on technical assessments that are aligned with industry-recognized standards where available and appropriate. As this data becomes available at the per-student-record level, programs will be asked to report it.

However, Colorado is hesitant about the current capacity of this data to accurately reflect CTE program quality because early surveys indicate the following limitations:

- Availability of per-student results of these assessments may be quite minimal since many industry test-givers consider the data to belong to the students.
- Most industry-recognized standards assessments are taken by students after they complete a postsecondary certificate or degree so the results relate to program completers rather than program concentrators.

- The content of most industry-recognized standards assessments is designed for postsecondary level learning. Initial surveys seem to reflect only a few industry based assessments relevant to knowledge and skills attainable at the secondary level.
- Industry-recognized standards assessments provided at the secondary level may cause two problems:
 - Students’ belief that since they passed the assessment, no advanced education is necessary.
 - Secondary CTE program focus on technical skills with less time devoted to academic skill attainment.

Nonetheless, part of Colorado’s resources will be used to collect and report all available data. At this time, with postsecondary technical assessments, only a small amount of data, if any, will be available for postsecondary CTE concentrators. Colorado will redesign our postsecondary follow-up surveys to query program completers regarding what industry-based assessments they completed and their results. CCCS staff and postsecondary field partners will continue to research how and when test results might be provided to the State directly from industry-assessment providers or how and when test results might be provided by postsecondary faculty. Until this system can be established for a substantial indication of the quality of Colorado’s postsecondary Career and Technical Education programs, Colorado will report Postsecondary Technical Skills Assessment as per the measurement definition in Section IV of the Colorado five-year plan. Postsecondary CTE programs are already required to meet valid and reliable assessment standards through regional accreditation systems. Also, postsecondary CTE program quality is market-driven, providing an already existing powerful force for student outcomes. Therefore, the bulk of CCCS resources will focus on development of secondary CTE student attainment measurement systems.

For secondary CTE programs, Colorado agrees with Congress’ concern of assuring that all CTE students attain both academic skills and technical skills and Colorado agrees that the ultimate determination of this attainment can only be measured with valid and reliable assessments, preferably third-party assessments to assure authenticity. CCCS is very interested in the academic skills of CTE concentrators in terms of how CTE programs impacted student improvement of academic skills. Colorado also agrees that secondary CTE programs must be aligned with industry-recognized standards.

CCCS staff has studied a brief written by Dr. Joselito Lualhati, Principal and Director of Workforce Analysis, Strategy & Solutions of The Global Skills Exchange (GSX), titled “*Approaches to Industry Alignment*,” published in August, 2007. This paper describes three approaches to industry alignment: Content, Assessment, and Instruction. The author concludes, “...aligning with industry calls for making sure that curriculum elements – content, instruction, and assessment – are designed and implemented to bring about industry-relevant outcomes (student proficiency on industry-relevant knowledge and skills). This means three things regarding the application of the three alignment approaches described in this brief.”

The three CCCS beliefs related to addressing the Perkins secondary CTE student technical skills attainment core performance indicators are:

1. “Aligning with industry requires CTE programs to have core capabilities in both curriculum design and development and faculty development.”

2. “A CTE program that wants to maximize the impact of aligning with industry needs to apply all three alignment approaches.”
3. “The questions presented in the tables....represent key issues CTE programs need to address when aligning with industry using, content, instruction, or assessment. Although there is no ‘right’ answer to these questions as different circumstances may require different answers, not having an answer to a question may reflect that a CTE program has yet to address this issue. In turn, this means that a CTE program may not be taking full advantage of its use of a particular alignment approach.”

CCCS staff has begun to research strategies and processes that will allow the development of valid and reliable academic and technical assessments relevant to high school level competencies. To best serve as quality improvement tools for CTE, these secondary level assessments must truly measure both the students’ abilities to be successful in their 21st Century careers and in their pursuit of advanced education. However, the development of this type of assessment must be carefully forged. Limited resources within the State, limited funding from the Federal Perkins awards, and even possible cuts to the Federal Perkins awards, mandates that Colorado be very careful about the quality and sustainability of its strategies. Additionally, the “Test Construction Workshop” (based in the Center on Education and Training for Employment in the College of Education and Human Ecology at the Ohio State University) highlights ten essential steps to the construction of valid and reliable assessments:

1. Determine Test Purpose
2. Define Content Domain (Practice/Job Analysis, Skill Standards)
3. Create/Evaluate Test Blueprint
4. Write, Manage, and Evaluate Items (and Item Writers)
5. Set Cutoff Scores
6. Develop, Evaluate, Refine Test Forms
7. Use Reliability, Validity, Fairness as Quality Yardsticks
8. Interpret and Report Scores to Stakeholders
9. Maintain Testing System
10. Evaluate Tests: Own and Others

These “steps” are complex and require formal training to properly implement. (Step 2, Defining Content Domain, can be done by building on work already completed by CCCS staff [www.coloradocte.com] and existing program standards can be revisited in a style related to defining content for assessment purposes and supplemented with the instruction domain.) Also, these steps represent one perspective and CCCS staff agrees that other methods of assessment development should also be explored, such as the concepts presented in “*Understanding by Design*,” by Grant Wiggins and Jay McTighe (Association for Supervision and Curriculum Development, Alexandria, VA, 2005). You must identify the program areas for which the State has technical skill assessments, the estimated percentage of CTE students who take technical skill assessments, and the State’s plan for increasing the coverage of programs and students reported in future program years.

Connecticut

Assessment

The SDE, through research and analysis of all high schools CTE courses, has identified common course titles in CTE, leading to the establishment of 18 areas of concentration. Each of these areas is aligned with national performance standards and competencies. Statewide committees

of CTE teachers, business and industry professionals for each area of concentration were required to review and validate the state performance standards and competencies that are the foundation of each test, along with the academic foundation standards. In accordance with the federal Carl D. Perkins legislation, the SDE mandates that every public high school receiving funding from the Perkins grant will test each CTE student who reaches the threshold of a concentrator. Connecticut has developed its own state CTE assessments for each area of concentration, fully-based on the national and state performance standards and competencies.

In Connecticut's comprehensive high schools, CTE has traditionally been a vast array of elective courses from seven basic CTE program areas including; Agriculture Education, Business and Finance Education, Cooperative Work Education, Family and Consumer Sciences, Marketing Education, Medical Careers and Technology Education. Under Career Pathways, the seven basic CTE program areas have been aligned to the 16 federally-recognized career clusters and the state-established 34 career pathways. In addition, the 18 areas of assessment are matched to the 34 pathways. In some cases, one category assessment may test multiple pathways (see **Figure 4** on page 32). Through research focused on the course titles of all CTE courses in all high schools, the SDE identified 18 general categories of CTE offerings. These categories represent the largest classification of CTE instruction in each program area. It is important to note that these categories of courses overlap traditional CTE program areas. In accordance with the Carl D. Perkins legislation, Connecticut has labeled these categories as areas of concentration. All secondary schools are encouraged to increase the number of concentrators each year. Since the advent of the statewide CTE assessment program in 2000, the number of Connecticut CTE concentrators has increased each year. These are the current CTE areas of concentration, all aligned with Connecticut performance standards and competencies with a comprehensive assessment as part of the Connecticut CTE Statewide Assessment:

- Accounting
- Agriculture Mechanics
- Animal Science
- Aquaculture and Marine-Related Technologies
- Automotive Technology
- Business Management
- Computer Aided Drafting and Design
- Computer Information Systems
- Cooperative Work Education
- Natural Resources and Environmental
- Plant Science
- Early Childhood Education and Services
- Nutrition, Food Production and Services
- Textiles and Design
- Marketing Education
- Medical Careers Education
- Pre-Engineering Technology
- Video Production Systems

Delaware

Technical Skill Assessment

The DEDOE CTE work group is in the process of identifying program areas for which technical skill assessments are currently available. The following assessments will be acceptable throughout the plan period:

- Federal or state regulatory agency-developed assessment instrument leading to licensure;
- Industry-developed assessment instrument leading to industry certification;
- Third-party-developed assessment instrument leading to award of state certification of proficiency in pathway area based on state CTE curriculum standards.

Technical Skill Assessment Phase-In

The DEDOE intends to increase the number of program areas for which assessments are identified over the length of the 5-year plan. CTE areas will have acceptable (as defined above) assessments.

Additional information will be provided as final guidance is obtained from OVAE.

District of Columbia

DC State Standards of Quality mandate that all State Approved Programs of Study (POS) be organized around nationally-validated, industry-driven, competency-based program standards and corresponding academic and technical skill assessments. No assessments are in place at the present time; SOCTE plans to promulgate a five-year schedule for State approval of the 60 planned POS and the adoption of matching assessments (12 per year).

Florida

The Division of Workforce Education has collected data from secondary and postsecondary eligible recipients on program and student-level industry certification currently in use. It is estimated that approximately 10% of Florida's secondary and postsecondary career and technical education programs are regulated by federal or state standards. In addition, numerous *Gold Standard* technical skill assessments developed by third-party agencies to assess national standards for every career cluster have been identified. (*Gold Standard* assessments include national/international credentialing or certification exams, state credentialing or licensing exams, industry developed exams for occupations/specialties, third-party exams measuring technical skills.) Analysis by Division of Workforce Education staff indicates that, at this time, at least one *Gold Standard* assessment exists for at least one career and technical education program in 15 of the 16 career clusters at both the secondary and postsecondary levels.

Presently, student-level data is not readily available on student participation in federal or state regulated programs due to participant privacy issues and the inability of regulatory agencies to release this information to FLDOE. Since a valid and reliable data source is not available, the Division of Workforce Education is unable to report the estimated percentage of career and technical education students who take technical skill assessments. Baseline data currently being collected will assist in the planning efforts to increase the percentage of programs with technical skill assessments and the percentage of students being assessed.

To evaluate the attainment of technical skills for both secondary and postsecondary students, Florida will use a combination of *Gold Standard* assessments and *Bronze Standard* non-assessment indicators of student achievement.

The Florida Department of Education will use standardized criteria (see Appendix F) to determine the appropriateness of the assessment instrument to measure technical skill proficiency. The following *Gold Standard* assessments will be acceptable in any case throughout the plan period:

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 product
4. third-party-developed assessment instrument leading to award of state certification of proficiency in the area of study (May only be used if none of the first three types of Gold Standard assessments are available)

Georgia

Secondary

There are currently no identified technical skill assessments for students in secondary CTE. However, the GaDOE is in the process of identifying existing and/or developing end-of-pathway assessments for each career pathway. GaDOE will identify and/or develop assessments to assist in measuring technical skill attainment of CTE concentrators. The end-of-pathway assessment identification/development process began work during the 2007-2008 school year. Currently, there are eight pathways undergoing the process which includes formation of subject matter expert panels, researching existing assessments, identification of appropriate assessments and piloting assessments. A phase-in process will be developed to ensure complete coverage of all identified pathways over the next five years based on funding. Approximately ten pathways annually will be identified for identification/development. It is estimated that less than 1% of the state's CTE students will take technical skill assessments during the 2008-2009 school year.

Postsecondary

The GDTAE has technical skill assessments in all program areas. One hundred percent (100%) of all students are assessed. The GDTAE has state standards for the grading scale used and for the competencies covered in all courses. These competencies are determined by state technical committees in each program area. The technical committees are composed of industry representatives as well as instructors and state staff. These standards are reviewed every three years. Every technical college also has a local advisory committee in each program area. These committees are composed of local industry representatives, who give feedback on the competencies taught in all courses. Performance Accountability Reviews (on-site peer reviews) ensure that these competencies are being taught and that the statewide grading scale is being followed.

Hawaii

Secondary level: All students completing a PofS will be assessed. PofS assessments will be locally developed when national industry assessments are not available—but all assessments must be approved by the appropriate PAC.

Postsecondary level: PofS assessment will occur in each course within a PofS by measuring student attainment of SLOs

Guam

Identification of Technical Skill Assessment Data

Guam Community College is the LEA and SEA administering several secondary CTE programs in the Guam Public School System and postsecondary CTE programs at Guam's only community college that remains "resolute in its commitment to comprehensive assessment by promoting the ongoing pursuit of excellence grounded in the assessment of student learning outcomes." In response to the Western Association of Schools and Colleges' 2000 evaluation report, GCC formed an institutional-level committee, Committee on College Assessment (CCA) Fall 2000, to plan, review, and monitor assessment activities. Today, CCA continues to provide guidance to academic and non-academic departments on GCC's two-year 4-phase assessment cycle that evolved from paper-driven to an online environment. The cycle – grounded in student learning outcomes (SLOs) and administrative unit outcomes (AUOs) – includes the following:

1. Developing an assessment plan that highlights SLOs (including cognitive, affective, and behavioral) or AUO outcomes.
2. Gathering data continuously.
3. Preparing and submitting an assessment report.
4. Implementing assessment results.

The college's years of commitment and realization of assessment milestones culminated in June 2006 with the Accrediting Commission for Community and Junior College reaffirming GCC's accreditation to Spring 2012. Commission President, Barbara Beno, wrote "the College is commended for its response to the recommendations of the previous evaluation team and for the extensive assessment process and infrastructure that places GCC in the forefront in meeting the assessment expectation of the 2002 Standards."⁴

A survey was conducted of CTE programs on technical skill attainment measures currently utilized and although GCC received accolades for its assessment model, the table below (list of CTE secondary and postsecondary (AA, AS, Certificate) programs) reflects the need to establish a statewide system for measuring technical skill attainment. Information on GCC's assessment model and process may be viewed in its entirety at www.guamcc.edu.

CTE Program	Associate Degree/ Certificate/ Secondary	Program/Course	Skill Assessment	
			Tool (Exam): National/Local/Faculty	N=Student Taking Exam
Accounting	AS	Hospitality Industry Accounting,	Educational Institute of the American Hotel & Lodging Association	N=11; 6=achieved 70%

		AC225		or better
Automotive Body	Secondary	Automotive, VEME071A	Faculty developed test	Not Available
Automotive Technology	Secondary	Engine Tune Up	Faculty developed test	Not Available
Automotive Technology	AS/Certificate	Introduction to Automotive Service Technology, AST100	Faculty developed test	N=25; 20=achieved 70% or better
Computer Networking	AS	Program	Electronics Technician Association CAT5 Wiring & Testing Certification Test and Fiber Optic Installer Certification Test	N=106; 92=passed
Computer Science	AS/Certificate	Advanced RPG II, CS252	Faculty developed checklist	N=28; 27=achieved 70% or better
Construction Trades	Secondary	Carpentry 2A/B	Faculty developed test	Not available
Cosmetology	Certificate	Salon II, CM202	Milady's Standard Student Progress	Not available
Criminal Justice	AS/Certificate	Criminal Justice Internship, CJ290	Faculty Developed Checklist	Not Available
Culinary Arts	AA	Sanitation and Safety, HS203	* National Restaurant Association Educational Foundation Food Production _ American Hotel & Lodging * Association Educational Institute Exam Food Safety & Sanitation	Not Available
Early Childhood Education	AA/Certificate	Early Childhood Education Practicum, CD292	Faculty developed checklist and rating sheet	Not available
Education	AA/Certificate			Not available
Electronics & Computer Networking	Secondary	Networking II, VEEE066	CISCO Networking Academy	N=71; 50=achieved 70% or better
Hospitality	AS	Hospitality	American Hotel &	Not available

Industry Management		Industry Computer Systems, HS268	Lodging Association Educational Institute Exam Food Safety & Sanitation	
Lodging Management	Secondary	Program	Faculty developed evaluation	Not available
Marketing	Secondary	Marketing IIB, VEMK061	Faculty developed test	Not available
Marketing	AS		Faculty developed test	Not available
Medical Assisting	AS/Certificate		Faculty developed lab test	Not available
Nursing Assisting	Secondary	Nursing Assisting, NU101	Faculty developed checklist	Not available
Office Technology	AS/Certificate	Machine Transcription, OA240	Faculty developed checklist and test	Not available
ProStart	Secondary	ProStart II, VETT065	Faculty developed checklist	Not available
Practical Nursing	Certificate	Program	Faculty developed checklist	N=12; 9=achieved 53% or better
Supervision and Management	AS/Certificate	* Management Skill Development, SM220 * E-Commerce Management, SM211	Faculty developed test	* N=10; 10=achieved 70% or better * N=17; 15=achieved 70% or better
Systems Technology	Certificate	Computer Networking IV, EE268	Faculty developed test	N=8; 8=achieved 80% or better
Visual Communications	Secondary	Visual Communications, VEVC054	Faculty Developed Test	Not available
Visual Communications	AS	Macintosh Applications, CS152	Faculty developed test	Not available

The need to further develop GCC's assessment model (i.e., career and technical skill attainment) and provide Guam a competent workforce comes at a pivotal time as Guam prepares for the arrival of military personnel because of an agreement between the U.S. and Japan to downsize and transfer 8,000 U.S. Marines and 9,000 dependents within the next seven years to Guam. The transfer will require Guam to upgrade various industries – primarily construction related careers – in the next five to eight years as the military strengthens its capacity in the Pacific region. Thus developing a competent workforce is embedded in GCC's Institutional Strategic Master Plan (ISMP) scheduled for completion July 2008. To ensure alignment of State goals and objectives,

Guam's State Director for CTE and adult education and many of the individuals (faculty, staff, students, administrators, and key stakeholders) involved in the development of Guam's Career and Technical Education Five-Year State Plan, 2008-2013, were involved in the development of the ISMP.

Idaho

The Idaho state policies regarding secondary and postsecondary PTE programs are posted at www.pte.idaho.gov/. Idaho does not currently have a statewide system of measuring technical skill attainment. The technical skill attainment measures used for Perkins 3 will not meet the Perkins 4 requirements.

At all levels, there is a growing expectation for students to demonstrate competence in what they have been taught. In 2008-2009, the Idaho Division of Professional-Technical Education (IDPTE) will implement a mandatory requirement for all state approved PTE programs to administer state approved technical assessment(s). This will provide students who are more adequately and consistently prepared for postsecondary education or workforce entry.

The Idaho Division of Professional-Technical Education (SDPTE) has surveyed state approved programs in secondary Professional-Technical Schools and Technical colleges on technical skill attainment measures currently utilized. The results of this survey are listed below. A survey of programs located in comprehensive high schools will be conducted this spring.

Career Cluster	No. of Secondary Programs with Assessment at this Level		No. of Postsecondary Programs with Assessment at this Level	
	Gold	Not Gold	Gold	Not Gold
Agriculture, Food and Natural Resources	0	6	1	10
Architecture and Construction	5	7	18	24
Arts, Audio-Visual Technology and Communications	1	6	0	10
Business, Management and Administration	1	0	2	35
Education and Training	1	2	0	8
Finance	2	0	0	0
Government and Public Administration	0	0	0	0
Health Science	13	15	27	14
Hospitality and Tourism	0	1	4	14
Human Services	0	1	5	20
Information Technology	25	4	5	20
Law, Public Safety, Corrections and Security	0	0	10	12
Manufacturing	5	6	6	25
Marketing, Sales and Service	0	7	0	4
Science, Technology, Engineering and Mathematics	2	6	1	14
Transportation, Distribution and Logistics	9	4	16	12
TOTAL ALL CAREER CLUSTERS	64	65	92	203

This inventory of technical assessments is the first step in the implementation of the mandatory requirement for all state approved PTE programs to administer state approved technical assessment(s). It is expected that 95% of each school programs concentrators will complete a technical skill assessment.

The State Division of Professional-Technical Education will collaborate with secondary and postsecondary representatives to discuss existing technical measures and strategies for statewide implementation. Initially, the strategy will involve identifying existing national validated, third-party exams that exist for the program areas. It is not anticipated that the State will pursue test development and validation at this time. One possible state developed technical assessment might be state secondary exams for postsecondary entry. Strategies must include programs for which specialized accreditation is available and those programs that do not have an accrediting organization.

It is our intent at this time that the administration of a state-approved technical skill assessment will be a component of the program approval process. State program managers will work with the programs and schools to encourage the implementation of this requirement. Following a brief transition period, programs will be reviewed according the state policy for program approval. This policy is available at:

www.pte.idaho.gov/ppscoord/Policies/Policies.htm#Secondary_Programs.

Illinois

Presently, Illinois does not have any state-approved technical skill assessments in any of the five occupational program areas available in the state. Illinois will be formulating focus groups to develop strategies on finding the appropriate technical skill assessments for the occupational areas.

Indiana

There are several state-identified Technical Skill Assessments (TSAs) for students in secondary CTE programs. However, the number of CTE students who take those assessments is undetermined. Indiana is beginning to gather this baseline data at this time. Indiana will continue to identify and implement additional TSAs in future program years. Recently, *end-of-course* assessments for four secondary CTE courses have been developed, piloted, and revised. However, data is not available for inclusion in this plan. Identification and development of appropriate assessments will be a major focus for Indiana over the next five years. The preferred outcome will be *end-of-pathway* assessments for each POS. IDWD and IDOE will work in conjunction with the postsecondary institutions towards the “Gold Standard” level, as designated by OVAE, by identifying and/or developing assessments and industry-recognized certifications that measure technical skill attainment of CTE concentrators.

Iowa

Iowa has not adopted statewide technical skill assessments for any program area. In 2006, the IDE conducted a survey of high schools and community colleges to gather baseline data on the utilization of industry skill assessments and credentials; however the number of CTE students who take such

Assessments remain indeterminable. The Department is exploring ways to increase the number of CTE students pursuing and completing industry skills credentials. As a part of this process, IDE personnel are participating in a variety of activities including the NSWG's Technical Skills Assessment Study Group, Data Quality Institutes, and other efforts.

The technical skills assessed, the instrument utilized to assess those skills, and proficiency level to be attained to pass the assessment must be approved by a third party. The third party may be a nationally or state recognized industry organization, a provider of reliable and valid third party assessment instruments, or a regional or local advisory committee for the career and technical education program being assessed.

Kansas

Kansas does not currently have any common or state recognized technical skill assessments required at either the secondary or postsecondary level. The current method used to report and monitor technical skill attainment for secondary students involves identifying and reporting of students who have attained proficiency on the technical skill competencies. These technical skills competencies are based on industry standards included on an occupational competency profile that is validated by the local program advisory committee of each program and approved by KSDE.

Postsecondary: Currently, postsecondary institutions voluntarily report aggregate certification and/or licensure pass rate information to KBOR for other state reporting purposes. In cases where licensure or certification is not required for employment, many programs encourage but do not require program graduates to sit for the examination. As postsecondary CTE programs complete the program standardization process, this information will be used to identify specific assessment instrument(s) to be used for evaluating and reporting technical skill attainment of program concentrators for each program area. Data will be collected through institutional follow up surveys of program concentrators and/or directly from assessment vendors, where access is permitted. KBOR staff will develop agreements with state licensing/credentialing agencies and assessment vendors to gain direct access to individual student performance data where possible.

Kentucky

The program areas for which the state has technical skill assessment scores are all secondary programs. These assessments are end of program assessments. Those program assessments are horticulture, livestock, crop, administrative support, retail services, financial services, marketing, hospitality services, culinary and food services, child development, consumer and family management, fashion and interior design, allied health, communications, construction, transportation, manufacturing, and pre-engineering. All program assessments are going to be revised and updated. There were 9,191 senior concentrators out of 18,318 senior concentrators who took the assessment in FY 06 and that represented 50 percent of secondary student

concentrators. There were no postsecondary state or national technical assessments scores available other than occupations that required state licensure such as the health programs. Technical assessments for all students enrolled in career and technical education will be developed and validated by business and industry. Medicaid Nurse Aide and other health state licensure tests results are available.

Louisiana

This section of the plan will describe current efforts to development and promote the use of industry-based credentials in Louisiana, and the State's plan for increasing the coverage of programs and students reported in this indicator in future program years.

IBCs

The Governor's Office of the Workforce Commission established the Louisiana IBCs Council to create and maintain an official IBC focus list of certifications. All occupational training programs in the State have agreed to institute the practice that training programs:

- (a) align career and technical programs with nationally recognized, industry-based skill standards and certifications as the basis for developing competency-based learning objectives, curricula, instructional methods, teaching materials and classroom/worksite activities;
- (b) prepare students to satisfy employer knowledge and skill requirements assessed by related examinations; and
- (c) support initiatives that will enable educational institutions to provide students with the opportunity to take these exams and receive certifications corresponding with their program of study.

Both the LCTCS and LDE are active members of this Council. This assists in aligning secondary and postsecondary CTE LCPs.

Measurement of Secondary Technical Skill Assessment

LDE has already established the use of IBCs in all of the seven focus-area LCPs that have been established for authorized use of Perkins funds. Using IBC's as a basis, the LDE has created an "IBC Matrix" that is approved for use in each of the State's secondary CTE programs. For each CTE program area, a "certifying agency" is identified and the measurement approach is offered. The Matrix is attached to this Plan as Appendix E.

For programs that use IBCs or standards-based assessment, there is a high level of confidence that these assessments are valid and reliable. For programs that do not currently offer an IBC or use externally-developed standards-based assessments, LDE is exploring alternative means to measure Technical Skill Attainment that will be valid and reliable.

LDE will evaluate the possibility of counting the awarding of dual enrollment credit and articulated credits in CTE courses as an alternative measure of technical skill proficiency. Dual enrollment courses and articulated credits are based upon industry-standards, and the acquisition of technical skills is recognized by postsecondary education in the awarding of postsecondary credit. Therefore, this measure will meet a minimum standard of validity and reliability.

Measurement of Postsecondary Technical Skill Attainment

Through the CTE programs offered through LCTCS programs, students have an opportunity to earn a Technical Certificate of Achievement, Certificate of Technical Studies, Diploma or an Associate degree as part of the effort to support Career and Technical Education. These credentials better allow CTE adults and students to move in and out of the school and/or work continuum as the credentials listed build upon each other. These credentials offer students the opportunity to acquire IBCs (See Figure on page 57 of Section IV Narrative).

LCTCS has already established the use of IBCs in many of the seven focus-area LCPs that have been established for authorized use of Perkins funds. For programs that use IBCs or standards based assessments, there is a high level of confidence that these assessments are valid and reliable.

LCTCS is working to determine strategies to increase the percentage of CTE programs in which results from IBCs and standardized assessments can be obtained by the State and entered into the accountability system. In this strategy, LCTCS will work directly with the industry organizations, foundations, and companies that sponsor IBCs that are widely used across a variety of CTE programs.

In working with providers of IBCs, LCTCS will evaluate the possible use of a “release form” that would be signed by an adult community college student which would allow the release of the student’s IBC scores to the college or to LCTCS to input into the accountability system. The option of a voluntary data release form would be reviewed as a possible means to satisfy the confidentiality requirements of the Federal Education Rights and Privacy Act.

Maine

All program areas, and therefore 100 percent of the students, currently engage in local, State, and/or national technical skill assessments with local, State, and/or national level certification where applicable. Programs are currently assessed at the local level and there are no common, statewide technical skill assessments.

Under the direction and guidance of CTE school directors, instructors and directors are examining nationally recognized skills standards and may adopt the standards and the student assessment of those standards. Some of the CTE programs are currently nationally certified, each to national standards, and use the industry recognized national assessments to determine skill attainment. Realizing that all students will need to be assessed for technical skills attainment Maine may choose to use a third party assessment. Maine would accept the industry recognized national standards assessments in lieu of the third party assessment. Maine is waiting for federal guidance on required technical skill assessment.

Maryland

Maryland estimates that currently 10% of students attempt to earn an industry assessment. Maryland’s goal is by 2012, 100% if CTE Concentrators will earn advanced standing through industry certification, licensure, or college credit aligned to their CTE program of study. [See e-mail dated; Friday, 5/9/2008; 3:52 p.m. document chart title - Program Certification chart.doc]

Massachusetts

ESE is currently in the process of developing technical skill assessments for each of the programs that have a Vocational Technical Education Framework as listed in the table below.

Technical assessments may be implemented during the 2009-2010 school year to the high school class of 2010. It is estimated that approximately 5 % of career and technical education concentrators will be reported in Massachusetts' calculation of career and technical concentrators who were assessed. ESE anticipates that the percentage in each ensuing year will increase as a result of efforts to gain necessary funding and efforts to show the value of the assessments to students, business, industry, and ultimately the economy.

Michigan

The state currently does not collect technical skill assessment data for any program area. The state proposes to use CTE grade point average as the measure of technical skill attainment during the transition year. During the next few years, the state will identify, review, and approve technical skill assessments for all program areas. It is anticipated that the first year following the transition year, 10% of students will be reported in the state's calculation of CTE concentrators who took assessments.

The state has already completed development of standards and identification of assessments aligned to the standards. In subsequent years, the state will review the reliability and validity of the available assessments and approve specific assessments for each program area, addressing a few program areas each year, attaining use of valid and reliable skill assessments in all program areas by 2013.

Data on skill assessments is extremely difficult to get from the assessment agencies; however, community colleges will report on those programs for which skill assessments exist and colleges are able to get information (e.g. Nursing).

Minnesota

Under the new law there has been much concern about being able to assess how much and what career and technical education students have learned in terms of actual technical skills. In the past, we were able to use the proxy of graduation, at least at the college level, as sort of a proxy for technical skill attainment. That has satisfied either the U.S. Office of Education and certainly has not satisfied the Congress, which is one reason that in the new law there is a major focus on technical skill attainment and finding ways to measure it.

What this means is that for all the students who graduate or leave our career and technical education programs, both at the high school and the college level, we will need to find some method of measuring what they've learned in terms of technical skills. This is not an easy task and one that all states are grappling with to come up workable measures. We are working on plans right now, but we do not have a clear-cut plan in place.

- What we do know is that there needs to be some – what the U.S. Office of Education is focusing on – some sort of third-party assessment process that is used to assess how much a student has actually learned in terms of the technical skills that are intended to be part of a specific career and technical education program. At the high school level, we expect that that

will take a different focus perhaps than it will at the college level where the college level student is exposed to a great deal more technical content than a student can be exposed to at the high school level.

- Again, we are working on plans for this. We do not have our plans clearly worked out. We have some potential structures that we are beginning to put in place and with the help of the local consortia and various advisory committees, we are hoping that by the end of first year we will have better in this upcoming year of tackling this topic.
- The National State Directors of Career and Technical Education are also working on this issue in concert with the U.S. Office of Education to try to assist states so that there isn't a great deal of duplication of effort and so that we can sort of combine our efforts in trying to find some coordinated ways of assessing this particular accountability measure.
- As you look at the new Perkins law, clearly there was an emphasis in the Perkins act on relationships with business and industry and having business and industry provide a great deal of input into identifying the specific technical skills that were to be gained within career and technical education programs. As we move forward, we will be working with our business and industry partners to help us develop valid and reliable instruments for measuring the attainment of technical skills.
- At the secondary level, while clearly we are not preparing students to the same degree of technical performance we would expect at our post-secondary levels, we need to see alignment in our technical skill assessments at the secondary level with the programs of study that are continuing at the post-secondary level. We will want to include in our work how our technical skill assessments will be aligned between secondary career and technical education and collegiate career and technical education.
- When you go and look at the plan, we are proposing a phased-in process, and we are actually looking five years down the road that we will be trying to increase both student coverage and program coverage as we develop these technical skill assessments systems. The thing that we have to keep in mind, and I think the confusion not only within ours in Minnesota but nationally, is a distinction between attainment and assessment. The assessment is what we are working on right now, but what we do have to report on immediately is attainment as well, and that is our dilemma. We proposed a phased-in process looking forward that we will reach some sort of an equilibrium rate in Minnesota in five years and we will assure the U.S. Department of Education that in the meantime we are increasing both student coverage and program coverage as well.

Mississippi

The Mississippi Assessment Center (MAC) at the Research and Curriculum Unit (RCU), located at Mississippi State University (MSU), has been established for the development, administration, scoring, reporting, and teacher training for the Mississippi Career Planning and Assessment System, Edition 2 (MS-CPAS2). The MAC brings together faculty and staff with demonstrated experience in researching, developing, and disseminating statewide vocational and technical curricula, assessment, professional development, and industry training media. The MAC provides high-quality assessment and professional development 79 aligned with the state curriculum. Alignment occurs from the beginning of the developmental process to the end of the process as teachers and administrators throughout the state are trained in analyzing data and using data to make informed decisions to improve instruction in all program areas. The MAC

also has experience aligning VTE curricula and assessments with national industry standards. The MAC has also conducted job demand research for the state to determine the viability of each program funded by federal dollars. To ensure that each assessment measured technical skill attainment, the MAC implemented research based assessment development strategies that included item bank development, blueprint development, sample items, reliability studies, validity studies, report development, and data mining and school improvement training for administrators and instructors at the secondary and postsecondary levels. Mississippi secondary and postsecondary vocational educators have participated in assessment development since March 2003. Assessments are available in all program areas, and items have been validated with Mississippi students. The MAC is proud to offer a highly qualified team to create an assessment that will be fully aligned with the Mississippi Vocational Curriculum Frameworks 2007. This assessment will validly and reliably test Vocational and Technical Education (VTE) students' progress toward reaching federal and state standards at the appropriate Depth of Knowledge (DOK). By 2008, a sufficient number of items will be tried out to create three operational forms of the test for programs with more than 40 completers statewide and two operational forms of the test for programs with less than 40 completers statewide. The forms will be pre-equated to expedite the delivery of reports.

Missouri

Technical skill assessments are offered in all CTE programs. Currently, Missouri uses a variety of methods to assess technical skill attainment including State and/or Local competency profiles, grade point average, locally-developed assessments and third-party administrator examinations. Beginning in FY09, the State will start phasing in third-party, industry recognized assessments for all CTE programs. Over the next four years, the State anticipates increasing the number of secondary completers taking the industry-recognized skill assessment by 25% each year; with a goal of 100% in four years. Similarly, industry-recognized skill assessments for postsecondary and adult CTE students will increase at a rate of 33% each year for the next three years with a goal of 100%. Missouri will incorporate assessment tools developed by national organizations, such as the American Association of Family and Consumer Sciences (AAFCS), Skills USA, and NOCTI. The State will continually monitor and select/ incorporate new assessments as they become available and if appropriate.

Montana

Secondary and Postsecondary

OPI has conducted a secondary and OCHE is in the process of conducting a postsecondary survey for each Perkins eligible program in the state to determine which programs have technical skill assessments, and which do not. Assessments will be reviewed and validated for reliability. The assessments will be categorized into national, state, or local assessments. In addition to externally developed assessments, Montana will work to determine if other forms of assessments will yield results that meet standards for validity and reliability. Specifically, the state will examine the viability of state-development tests and scoring rubric for observation of demonstrated student skills. These classroom-based assessments would be aligned to generally accepted and industry-recognized skill standards, and would be administered consistently within each CTE program area based on ongoing professional development and monitoring.

A listing of technical assessments for Montana is available upon request.

Nebraska

Nebraska does not currently have a statewide system of measuring technical skill attainment. The current measure of technical skill attainment at the secondary level is, “Concentrators that meet locally developed assessments or criterion referenced tests in Career and Technical Education courses or earning a grade of B or higher in the concentration area program sequence of career and technical courses.”

The current measure being used at the postsecondary level is: “Concentrators that have an accumulative aggregate GPA of 2.0 in all vocational courses with a 1.5 and 2.0 weighting in the state aid funding formula calculations.” The pursuit of developing a statewide system that supports, collects, and develops a cadre of technical skill assessment resources would be pursued.

Nevada

Most technical skill assessments are locally administered and aligned with state skill standards in most secondary CTE areas, and every student completing a secondary career and technical education program must be issued a technical skill competency certificate with the skills attained indicated on the certificate. Although skill testing is local, many career and technical education programs use state or industry-based assessments and certifications.

As noted in the discussion of 1P1 for postsecondary technical skill attainment above in IV.A.3, a survey of Nevada’s public postsecondary institutions will be conducted to determine for each institution: the CTE programs offered for which there are state-issued certifications/licenses; the time at which those certifications are issued in each CTE area; and an estimate of the percentage of CTE students receiving the certification/license at the point at which the certifications/licenses are issued in each CTE area. The results of this study will be reported in future revisions of the State Plan. The ultimate goal is to move toward using state-issued certifications/licenses as an indicator, and then moving on to industry-issued certification.

New Hampshire

New Hampshire’s strategy for introducing quality assessments of student technical skills cannot be projected much beyond the second or third year of the five years that this plan will be in effect. While New Hampshire’s plan involves concrete, specific steps toward the introduction of these assessments, developments at the regional or national level could suggest a different course of action in the coming years.

Regardless of the eventual path New Hampshire takes in implementing the assessments, a critical guiding principle is that students will not have to pay for the assessments either at the secondary or postsecondary level. As a result the assessments may not meet the “gold” standard.

Beyond this guiding principle, the State will use the first two to three years of the next five years to find available and appropriate assessments for all 52 secondary CTE programs in the State. During the first year, New Hampshire will begin by finding and contacting states that already have extensive assessment systems in place. These might include Virginia, Arizona, North Carolina, Texas, and Georgia. Through these contacts the State will identify assessments that

can be fully adopted or adapted to suit New Hampshire's requirements. By the end of the second year, at least ten programs will be chosen for implementation of the technical skills assessments.

At the start of year two, a schedule of implementation will be established, where assessments for ten programs will be chosen for implementation each year. At the end of the second year and into year three, the five-year schedule of ten programs each year will be reviewed and modified as needed.

The strategy and pace of implementing technical skills assessments will be influenced by developments at regional and national levels. Over the next several years, New Hampshire will participate in a multi-state project in New England that will address many of the same assessment issues. This coalition of states is currently seeking technical assistance from OVAE for the first year. This assistance is expected to help all six states develop a strategy for collaboration within the coalition, finding which areas of assessment may be shared, adopted, or adapted. The inspiration for this multi-state initiative is the New England Common Assessment Program where the academic assessments complying with NCLB requirements are shared by New Hampshire, Vermont, and Rhode Island.

National developments are also expected to influence New Hampshire's work over the next few years. Guidance is expected to be released by OVAE within the next year that will most likely clarify key assessment issues in New Hampshire. The project jointly planned by OVAE, NASCTEC, and ACTE to develop a national database of test-item assessments may also prove significant, particularly if this project results in assessments that may be shared at no cost to the states or to individual students.

Finding postsecondary assessments of technical skills will be much more challenging. Although there may be numerous assessments available and appropriate for the postsecondary level, virtually all assessments will be difficult to implement, either because they require that students and/or postsecondary institutions pay for the assessments, or the assessments do not allow for meaningful accountability evaluation. Because of these serious limitations, the measure of postsecondary student success will be the completion of programs.

New Mexico

The NM PED is aware of the efforts being made by the Next Steps Work Group led by DTI Associates, Inc. as it relates to the development of technical skill assessments and therefore, will continue to be engaged the dialogue and will seek guidance as to how to move the state forward on this indicator.

New Mexico requires industry recognized technical skills assessments as a component of the programs of study (where appropriate and applicable), and strategies that focus on strong leadership and direction for local providers are implemented ensuring that students exited high school with a skill level that ensured employment. This will continue during Perkins IV administration. According to New Mexico's Consolidated Annual Report (CAR) for program year, July 1, 2006 through June 30, 2007, 378 twelfth graders took industry-developed certifications.

New York

Secondary CTE program areas included in New York's program approval process are: Agricultural Education, Business and Marketing Education, Family and Consumer Sciences Education, Health Occupations Education, Technology Education, Technical Education, and Trade Education.

Currently, all secondary CTE programs that have gone through the New York State Board of Regents Approval Process (842) include a technical assessment that is nationally recognized or industry developed". Approximately, 60 percent of approved CTE program concentrators will take a technical assessment. Programs of study, as they are developed, will also include an assessment instrument.

The CTE Data System currently collects information on the number of students taking and passing the assessment associated with their programs.

At present, there are approximately 33,000 postsecondary students who will receive technical skills assessments in allied health and technical programs.

North Carolina

Secondary

Technical Skills Assessments are offered in all eight program areas in North Carolina: Agricultural Education, Business and Information Technology, Career Development, Family and Consumer Sciences Education, Health Occupations Education, Marketing Education, Technology Education, and Trade & Industrial Education. Based on previous experience, during our baseline year (2007-2008), NC estimates reporting technical attainment status for about 60 percent of the more than 500,000 students enrolled in CTE courses. Technical skill assessments have not been available for certain courses, primarily in Information Technology fields, in which students work toward industry-recognized credentials. In addition, assessments are not available for selected high-level courses that generally count as students' fourth technical credit. Also, courses are not included in accountability results for a one-year period following revision of the curriculum to provide an opportunity for validation and reliability testing. Increasing the number of students for whom Technical Attainment results are available will focus on two areas: increasing the number of assessments and increasing the percentage of students who take the assessments:

- Phase in a process during 2008-2009 that utilizes data on student achievement of industry-recognized certifications in addition to or in lieu of certifications, validate their appropriateness for use, determine how they can be paid for, and set up a mechanism for obtaining and using scores.
- Align third- and fourth-level courses to certifications or develop other valid and reliable measures for technical attainment in these courses. This process is to be initiated as the curriculum for each course is revised.
- Develop a system of alternate assessment for certain students with IEPs and collect the results.
- Establish a standard for the percentage of students for whom scores are reported and provide a penalty for eligible recipients who fail to meet this standard.
- Expand the testing program to include all courses in CTE.

Postsecondary

Licensing and certification exam results are provided to the State by the individual licensing agencies in 11 program areas. They are: Aviation Maintenance, Basic Law Enforcement Training, Cosmetic Arts, Dental Hygiene, Emergency Medical Technician, Nursing, Opticianry, Physical Therapist Assistant, Radiologic Technology, Real Estate, and Veterinary Medical Technology. Annually, the number of test takers represents only 8.62% of the CTE enrollment. The percentage is somewhat higher when focusing on the concentrators in CTE who took assessments -11.95%. To increase the number of program areas and students reported in technical attainment, NCCCS will use GPA in those program areas where there is either no State required license/certification or where the licensing agency does not share the information with the colleges. It is important to note, however, that only first-time test takers are reported, state level data are duplicated and include non-curriculum test-takers, and small numbers which may violate students' privacy are not reported. Colleges are able to report non-duplicative, curriculum only data, and therefore this will need to be collected at the college level.

North Dakota

The State Board does not currently have any students taking state developed or approved third-party technical skills assessments that are administered nor scores tracked in an organized and required manner. Different program areas have national certification examinations administered locally, but not from a statewide perspective. Therefore, NDCTE does expect to initially report students in the State's calculation of CTE concentrators who took assessments using grades received during the reporting year in technical skills courses where a "C" or better will constitute successful passing of a technical skills assessment.

During the first year, NDCTE will pilot an assessment in Marketing Education developed in cooperation with MarkEd where industry validated questions have been developed into an item bank to draw from. The assessment will be administered to senior students in all Marketing Education programs, considered concentrators from which a baseline can be established. SkillsUSA is in the process of developing assessments for numerous skill areas, and NDCTE has the intention of adopting these assessments when they become available. In addition, NDCTE is working with the national association American Association of Family and Consumer Sciences (AAFCS) to develop similar assessment tools to administer during the five-year period of the State Plan. NDCTE continues to monitor the progress of MPR Associates in the development of a national item bank where assessment questions are to be developed as a less expensive alternative to other third-party vendors.

By using different assessments each year as they are developed and adopted, the baseline performance measures will need to be adjusted each year as the measures are not comparable from year to year since different assessment tools will be used.

During the five-year State Plan period, NDCTE will evaluate availability and validity of technical assessments through vendors and those used by other states for purposes of implementing statewide technical skills assessments. As more program area technical skills assessments are implemented, the percentage of students reported taking third-party assessments will increase each year with the goal that at the end of the State Plan five-year period all students will be taking valid and reliable third-party assessments where available and appropriate.

Ohio

Secondary Workforce Development Program Assessment

Secondary programs will use a State developed system of career-technical testing called the Ohio Career-Technical Competency Assessment (OCTCA). Beginning in FY08 OCTCA includes third-party, State-developed tests and selected State and industry assessments that are aligned to ODE's Career Field Technical Content Standards. All OCTCA State and industry assessments meet tests of validity, reliability and usability. A listing of current assessments for secondary and adult programs can be found on Appendix C.

The Ohio Department of Education will build on OCTCA by transitioning to a system of career field assessments that measure performance by pathways. It is anticipated that tests will be developed by a third party contractor. However, ODE will take advantage of regional and national partnerships in CTE test development as appropriate. Industry credentialing and licensure examinations will likely complement and contribute to OCTCA tests.

All tests will meet validity and reliability criteria as established by the State, will be developed in collaboration with postsecondary institutions so as to enhance the seamlessness of secondary/postsecondary pathways and the articulation of credit, and will be developed in collaboration with industry representatives to enhance test quality and test recognition among business partners.

All secondary programs will have a required valid and reliable assessment by FY14 and all CTE concentrators leaving school will be reported as to whether they meet established State benchmarks on the test. The State will develop a graduated schedule for reaching this 100 percent goal. One mechanism for achieving this goal will be the requirement of an appropriate assessment for all State-approved POS.

A listing of currently available technical assessments for secondary programs is included in Appendix C.

Postsecondary/Colleges Technical Skill Assessment

During FY08, the Ohio Board of Regents will use the HEI data system to report Technical Skill Assessment by using a combination of information reported at the local level. The standards will vary by program and may use Grade Point Average, passage of a particular course or series of courses, or passage of a locally administered assessment.

Additionally, the Ohio Board of Regents will review the current postsecondary CTE program offerings and Programs of Study. In collaboration with Ohio colleges, the State will identify existing appropriate technical skill assessments that are aligned with industry-recognized standards, CTE program standards and Higher Learning Commission (HLC) accreditation criteria; identify gaps; collaborate with the Ohio Department of Education and agencies in other States to initiate regional/national processes leading to the development of needed technical skill assessments; and implement changes in the HEI data system to collect technical skill assessment data beginning in FY09.

The postsecondary assessment system in Ohio will be driven by the following.

- The HLC directive that assessment is most efficacious when it occurs through a variety of methodologies consistent with an institution's mission

- The expectation that an institution's faculty will determine how learning outcomes are developed, what is to be taught, how students will learn, how that learning will be assessed and how teaching and learning will continuously be improved
- Direction from Ohio, regional and national employers and industry and professional associations
- Alignment between secondary and postsecondary assessment processes
- Federal Perkins criteria for assessment

Postsecondary/Adult Workforce Education (AWE) Technical Skill Assessments

Each student who completes an adult workforce career development program will demonstrate technical knowledge and skill attainment as evidenced by meeting established benchmark scores on State-recognized tests or industry certification and licensure examinations. State-recognized tests will include tests administered through the Ohio Career-Technical Competency Assessment System, other State-recognized assessments based on aligned industry standards and/or State or industry certificate- or license-based assessments. Adult Workforce Education will continue to increase its focus on industry-recognized certificate- or license-based programs, especially those that lead to a nationally recognized State or industry certificate or license. Adult workforce education recipients will be required to assure the State that the credentialing assessments they use are valid and reliable. [A listing of currently available technical assessments for postsecondary programs is included in Appendix C.]

Oklahoma

The Oklahoma State Regents for Higher Education will continue to determine which collegiate program areas have existing valid and reliable technical skill assessments in place. These include nursing and allied health fields for which national or state licensure exams exist and other fields where industry certifications are recognized [attestations] for competence in a specific area. The State Regents will work with the colleges to encourage students to apply for the state's Career Readiness Certificate (CRC), which is based upon ACT's WorkKeys Assessment and administered by the Oklahoma Department of Commerce. [See Appendix L for charts.]

Oregon

Prior to Perkins IV, Oregon has used Grade Point Average (GPA) as the measure for technical skill attainment. Oregon has not monitored eligible recipients on the use of technical skill assessments. We know anecdotally of CTE student technical skill attainment being measured by industry-recognized assessments such as:

- MarkEd for marketing,
- PrintEd for graphics/printing,
- NATEF for automotive,
- ProStart for culinary,
- CNA for health,
- NOCTI assessments in 17 career areas, and
- Technical assessments as part of Cisco and Oracle Academies.

Oregon estimates less than 10% of 2006-2007 CTE concentrator technical skill attainment is being measure formally by technical skill assessments.

Oregon has conducted a regional technical skill assessment pilot during 2006-2007 as “proof of concept” for the use of a standardized assessment protocol to measure technical skill attainment.

Oregon has established an implementation plan for the use of technical skill assessments that follows the guidance developed by the National Next Steps Working Group and the Technical Skills Committee.

Oregon has set the following targets for implementation of technical assessments:

- 2008-2009—final year to use GPA as the measure to report CTE concentrator technical skill attainment.
- 2009-2010—use valid and reliable technical skill assessments that are aligned to industry-based standards to measure and report CTE concentrator technical skill attainment for those CTE concentrators in state-recognized, approved CTE programs of study.
- 2012-2013—100% of CTE concentrators who complete their secondary or postsecondary component of a program of study will demonstrate performance on valid and reliable technical skill assessments that are aligned to industry-based standards.

Pennsylvania

BCTE is in the process of aligning approved program areas to an industry based third party national assessment. Barring unforeseen circumstances, it is expected that 86 percent of CTE concentrators will be the minimum participation rate for all concentrators who will be tested for job readiness in general or industry credentials in particular.

BCTE is continually seeking to add to the list of approved tests for use in assessing student skill attainment. We annually invite industry representatives and test developers to present their assessments for review. The evaluations will be conducted on the basis of the criterion checklist which includes data availability, test security and validity. To date BCTE has recognized three test developers. During the Perkins IV authorization, as program of studies are developed, related assessments will be identified or developed on the basis of industry standards alignment.

Rhode Island

Currently Rhode Island offers limited technical skill assessments in the following areas: Agriculture/Forestry, Animal Sciences, Business Management and Finance, Information Technologies, Family & Consumer Sciences, Law/Public Safety & Security, Culinary Arts, Travel & Tourism, Engineering Technologies, Manufacturing and Processing, Health Occupations, Printing/Graphics and Applied Arts. About 45% of all concentrators in the CTE areas listed above will take available aligned technical skill assessment. Due to access, affordability and availability, RI’s plans to increase the number of areas and assessment participants will be predicated on the technical skill assessment development work being conducted by the National Association of State Directors of CTE in conjunction with OVAE and MPR, Associates. At the same time, the New England states have begun conversations relating to the development or sharing of common assessments.

South Carolina

At the end of the first semester of the 2006–07 school year, approximately 10 percent of CATE students in the Business, Management, and Administration and the Marketing, Sales, and Service career clusters pilot-tested voluntary, online end-of-course assessments developed by South Carolina teachers for twenty-nine CATE courses. The process was repeated at the end of second semester, with 8 percent of students participating. The OCTE will study the feasibility of using assessment items that might be combined for end-of-program assessments to measure student technical skill attainment in the two clusters. During the spring of the 2007–08 school year, three hundred health science technology completers will participate in the national cluster-level foundation assessment, which will be funded through a one-time grant. End-of-program assessments developed by the Center for Agricultural Research and Training, Inc. (CAERT) will be administered in the 2008–09 school year to students in the Agriculture, Food, and Natural Resources career cluster.

The state superintendent of education has directed the SCDE to develop formative and interim assessments that can be used by teachers for program/instructional improvement while decreasing assessments that offer little or no timely feedback, such as those assessments used solely for accountability. In developing or adopting assessments for CATE programs, the OCTE will need to ensure that any new assessments used to measure student technical skill attainment can also be used by teachers to inform instruction. Currently in South Carolina, at least fifty industry-validated assessments are available; however, very limited numbers of secondary CATE students take the assessments—an estimated 10 percent. Few of these industry credentials or certifications cover the content of entire CATE programs, with some of the certifications measuring skills that might take only a week or two of classroom instruction and are, therefore, not appropriate as comprehensive measures of CATE skill attainment.

At the other end of the spectrum are state licensing exams such as those for cosmetology, emergency medical technician (first responder), and certified nursing aide, which are comprehensive measurements and are required for employment. The OCTE will collect data on completion of such licensing exams, though these data cannot, in every case, be reported in the school year in which the student takes his or her final CATE course. In the few cases where industry certification/credentialing is appropriate for secondary students and student-level results can be secured, South Carolina will continue to encourage student participation and will collect the certification results. Heretofore, LEAs have not been required to report on technical skill assessments taken by students; with the technical skill attainment reporting requirement, changes in the state's data collection system will be implemented. A tremendous challenge is determining state-level data system specifications, which must be finalized a full year before the updated system is usable by LEAs, while new assessments continue to be identified over the course of the five-year period covered by the State Plan.

Staff members in the OCTE have participated in monthly OVAE-sponsored conference calls with the technical skill attainment subgroup of the Next Steps Working Group. The work group has been gathering and disseminating information on student technical skill assessments and industry certifications/credentials in order to provide states with direction on how to proceed with measuring student technical skill attainment using valid and reliable assessments. The OCTE staff will continue to participate in the national efforts to gather information that will inform state-level decision-making. If valid and reliable career cluster foundation-level assessments are developed at the national level, South Carolina would consider adopting such

assessments as the recommended method of meeting the technical skill attainment requirement, where industry certifications are not available or appropriate.

For the numerator of the secondary technical skill attainment measure, the OCTE will report concentrators who have completed a CATE program and who have passed technical skill assessments. The baseline for this measure was determined using Virginia's pass rates on individual certifications/credentials that are currently available in South Carolina: 8 percent of the concentrators taking technical skill assessments, increasing to 10 percent the second year and 25 percent the third year. Where no appropriate assessments are yet available, the numerator will include concentrators who complete CATE programs and achieve a final average GPA of at least 2.0 for CATE courses taken that year. The goal for the duration of the State Plan will be to continually report greater numbers of concentrators taking technical skill assessments while reporting fewer numbers of concentrators on the basis of their GPA.

South Carolina will continue gathering data in order to determine the quality and appropriateness of currently available and new assessments, the costs involved, and the potential for pooling resources with other states. Without the advent of free or minimally priced assessments developed nationally, secondary Perkins monies in South Carolina would be insufficient to significantly increase student technical skill assessments. Although the OVAE does not recommend GPA as a viable method of measuring CATE student technical skill achievement, South Carolina contends that student grades, and subsequently GPA, are well-established measures of student achievement at the secondary level:

- GPA reflects grades in all high school courses that award Carnegie units of credit, including both academic and CATE courses.
- A student's GPA determines his or her class rank, which informs college admission, and GPA is a common factor in the awarding of financial aid and scholarships.
- With the implementation of South Carolina's first uniform grading policy in 1999, standardization eliminated various grading scales that heretofore were used in the state's schools.
- In 2007, through the urging of the South Carolina High School Redesign Commission and with increased opportunities for seamless education pathways as framed by the EEDA, scrutiny of GPA scaling for dual credit courses caused further reforms to be instituted to the uniform grading policy by the State Board of Education.
- The South Carolina Education Oversight Committee has approved student GPA for CATE courses as a measure of CATE skill proficiency on the high school and career center report cards used in the state's education accountability system.

A very small portion of postsecondary programs in South Carolina currently offer technical skills assessments such as state credentialing or licensing exams, typically used to control entry into a profession. Presently, there are twenty-six industry-validated assessments available that are applicable to the postsecondary degree, diploma, and certificate programs offered at the sixteen technical colleges. The majority of available assessments are administered within the Health Sciences cluster where licensure is required for employment. Currently, for programs where a technical skill assessment is available, an estimated 9.75 percent of students take the assessment.

It should be noted that technical skills assessments are not required for any program's graduation prerequisites. Additionally, for many of the available assessments, the licensing or credentialing agencies do not provide the postsecondary institutions with the disaggregated student information (i.e., gender, ethnicity) that is needed for Perkins reporting. As a result, postsecondary is limited to reporting data on a small fraction of the assessments for indicator 1P1 (technical skill attainment).

Nevertheless, the postsecondary institutions have several local initiatives in place to increase the number of technical skills assessments offered as well as the number of students who take them. The technical colleges are still in the preliminary stages of identification and planning for these assessments, with some colleges further along in the process than others. The SCTCS plans to facilitate discussions among the sixteen colleges in an effort to initiate a joint venture to create statewide assessments for each program area, but contends that this will be an enormous multi-year development project.

In the interim, the SCTCS will develop a phase-in plan to increase the number of available assessments and the number of students who take them. The Health Sciences career cluster would be appropriate as an initial area of focus due to the Allied Health Care initiative to expand and enhance the state's health care workforce and address widespread shortages in nursing and other health professions. At the end of the 2005–06 academic year, twelve of the sixteen colleges reported that an estimated 7.4 percent of students pursuing an Associate Degree of Nursing within the Health Sciences cluster completed technical assessments. For the 2006–07 program year, the SCTCS expects that at least 10 percent of Nursing students in fourteen of the sixteen colleges will complete technical assessments.

The SCTCS staff will make a concerted effort to develop agreements with third-party agencies to gain access to disaggregated student data for additional assessments to be reported in subsequent years. At the end of the 2007–08 program year, the colleges will include an additional report of the Practical Nursing Program pass rates on the National Council Licensure Exam assessments. For the remaining grant period, the SCTCS will work diligently to report additional assessments in programs such as radiography, medical laboratory technician, and respiratory therapy.

South Dakota

No section IV.B2.

Tennessee

No section IV.B2.

Texas

To report 2S1 Technical Skill Attainment, TEA will use valid, reliable industry-recognized licensures and certifications data as reported by eligible recipients. Texas has been reporting the total number of licensures and certifications earned by CTE students as an additional measure for Perkins III. The state will begin collecting 2006-2007 data using the new Perkins IV performance measure definition for Technical Skill Attainment, so this reporting year will be the

first opportunity for Texas to accurately report 2S1 data. Although all programs of study do not have valid, reliable industry certifications and licensures, the goal is to evaluate programs during the CTE vertical alignment process and identify or develop 8 CTE State Plan 2008-2013 11-16-07 additional assessments so that by 2013, all secondary CTE concentrators have a means to validate technical skill attainment.

The THECB currently collects data for all licensure programs and began development of a process to identify the various skill assessments that can be used for technical skill attainment. Through collaboration with other state workforce organizations and industry boards a statewide system is being developed to collect accurate data for assessing technical skill attainment. Many technical programs have embedded industry-recognized credentials within the certificates and degrees. The THECB works with the colleges to develop and update the system to validate the awarding of these credentials. The CBM Reporting system provides data for certificates, degrees, retention transfer, non-traditional participation/completion and participation/success of all special population groups.

Utah

Currently, Utah offers secondary technical skill assessments in every program area in the state Utah. Of those, approximately 60% of CTE participants between grades 9 and 12 take technical skill assessments. As of the beginning of 2008, 73% of Utah's secondary students are now assessed online versus traditional (paper/pencil) methods. For the year ending June 30, 2007, 17,647 concentrators took technical skill assessments in the foundation course of their program of study of concentration, and 12,050 passed the technical skill assessment, for 68.28%. Utah is confident the move towards web-based testing will help with test validity, and increase the numbers of CTE concentrators tested.

Vermont

Vermont CTE has relied primarily on state approved competency lists, teacher developed exams and a state approved proficiency check off list for each program. At the secondary level, we have also worked at establishing industry recognized credentials in a variety of CTE programs. Vermont has not mandated use of specific assessments or industry recognized credentials. This has resulted in only a small portion of students and programs engaging in skill assessments.

During the grant period, Vermont will identify and establish valid and reliable state assessments to measure and document student proficiencies across the state and select program areas. We will focus on high skill/high wage program areas and on programs with high levels of student enrollment. When possible and appropriate, we will use industry assessments.

A minimum of 50% of our programs will have state approved valid and reliable student assessments by 2013.

Virginia

The secondary monitoring system is now part of the Local Plan and Budget Application and will be submitted by local school divisions on an annual basis to the Office of Career and Technical

Education. The local plan and budget must reflect activities/projects that address Perkins Performance Standards and Virginia Performance Standards that have not improved or that do not meet the state-level Perkins Performance Standards. This information will be used to determine the need for technical assistance and/or on-site Perkins evaluation visits. This Performance Assessment replaces the Local Improvement Plan and may become a factor in determining local Federal Program Monitoring visits. The assessment includes the following:

- Negotiated local level performance standards (percentage) for the Academic Attainment in Reading/Language Arts and Mathematics, Technical Skills Attainment, Secondary School Completion, Student Graduation Rates, Secondary Placement, Nontraditional Participation, Nontraditional Completion, Completer, Employee Satisfaction, and Employer Satisfaction.
- Status of local performance standards which includes how many performance standards have not met the goal, why they did not meet the standards, and what was done in prior years to improve the performance. This must be reported by those not meeting standards for the first time, for two successive years, and for three successive years.
- The use of Perkins Funds that lists the number of required items identified beyond the two Virginia requirements for professional development and activities for special populations; the number of required items that address improvement of Perkins Performance Standards that do not meet the state adjusted level of performance; the number of permissive uses of funds; and
- The utilization of grants funded through Perkins that includes the percentage of funds used and the activities funded.

The Performance Assessment must be signed by the local CTE administrator and division superintendent. The assessment will then be reviewed by state CTE staff to identify the appropriate use of funds for program improvement. The CTE staff will then identify school divisions needing technical assistance and/or an on-site visit. School divisions not showing improvement on performance standards will be designated for on-site visits with not less than one-third of school divisions not showing improvement receiving technical assistance and/or on-site visits each year.

Washington

A task force of both secondary and postsecondary will be convened in summer or early fall to strategize technical skill assessments to strategize the technical skills accountability effort, with the intent to enhance students' options and opportunities to leave their CTE programs with the appropriate industry-recognized and accepted certifications, and to be able to report continuous improvement.

West Virginia

Secondary

Currently, 100 percent of all career-technical program completers at the secondary level have completed a minimum of four end of course assessments which determine if the technical skill level of the particular program has been mastered by the student. This practice will continue

under the new Act and will be evaluated to determine if this meets all provisions for technical skill assessment.

Postsecondary

Phase I: During the first phase of developing a technical skill assessment system, the Community and Technical College System of West Virginia will:

- (a) Utilize assessments currently administered that meet the expectations of Perkins IV. These include:
 - i) Licensure examinations required in order to enter a given profession. This includes a majority of the career technical allied health programs.
 - ii) External administered assessments that lead to an industry, national or state recognized credential or certification.
- (b) For those career-technical programs not having a valid licensure or external administered assessment, and if a capstone experience is required, the successful completion of a capstone course at the conclusion of the program will be utilized.
- (c) For those career-technical programs not having an external assessment or a capstone course experience, program completion meeting the established standards for awarding a certificate or degree will be utilized.

Phase II: To comply with the provisions of Perkins IV, the West Virginia Council for Community and Technical College Education will implement planning to move all career-technical programs to an external assessment process by 2013. The plan includes:

(1) *Assessment: National/State Licensure Examination*

Implementation Date: 7/1/08 – 6/30/09

Implementation Process:

Current national or state licensure examinations administered by a licensing board or other third party will be utilized to determine technical skill competencies. Currently, 26% of the career-technical program completers are required to complete a national or state licensure examination.

Validity:

The occupational license assessment is specific to the occupation as determined by a state or national licensure board that is comprised of individuals knowledgeable of the occupation and the skills one must have to be successful in the field. The assessment is constantly monitored and updated to ensure the assessment measures the current proficiencies demanded by the occupation.

Reliability:

Licensure examinations provide reliable documentation of the skill proficiency for a given occupation and are administered by a third party utilizing the same scoring guides, rating scale and process for administering the assessment.

Assessments to be utilized:

American Massage Therapy Association Exam
American Physical Therapy Association Exam
American Registry of Radiologic Technologists Exam
Certified Legal Assistant Exam
Certified Management Accountant Exam
Certified Respiratory Therapist Exam
CISCO Certified Network Associate
Federal Aviation Administration Exam
Journeyman License
Medical Laboratory Technician Exam
Microsoft Certified Systems Administrator
Microsoft Certified Systems Engineer
National Board Dental Exam
National Council of Licensure Examination
National Healthcare Examination for Electrocardiography
Certification
National Registry – Nuclear Medicine Technologist
National Registry of Emergency Medical Technicians
Registered Health Information Technician Exam
Registered Respiratory Therapist Exam
Surgical Technology Certification Exam

(2) Assessment: External Administered Assessments that Lead to an Industry, National or State Recognized Credential.

Implementation Date: 7/1/08 – 6/30/10

Implementation Process:

External administered assessments that lead to an industry, national or state credential will be utilized to measure technical skill proficiency for 16% of the career-technical completers. External assessments that are currently optional for students will become mandatory for program completers.

Validity:

These assessments are mainly criterion-referenced assessments that reflect the knowledge level required by industry to be successful in the occupation. The assessments represent skill standards developed by organizations representing a particular industry or industry clusters.

Reliability:

The same assessment is administered on a state or national level and utilizes a consistent scoring and rating scale.

Assessments to be utilized:

A+, Network+, IC3
American Society of Mechanical Engineers Certification Exam

American Welding Society Certification Exam
Certified Internet Webmaster
Health Education Systems, Inc. Exit Exam
Kettering
Microsoft Office Specialist Certification
National Incident Management System Level 1 Exam
Office Proficiency Assessment & Certification Testing
Refrigeration Service Engineering Society Certification Exam
Registered Nurse Aid Exam
State Real Estate Exam

(3) *Assessment: State-level assessments tied to industry standards and completion of a capstone course experience.*

Implementation Date: 7/1/08 – 6/30/13

Implementation Process:

For all career-technical programs currently not having a valid external assessment, but using a capstone experience, the successful completion of the capstone experience will be utilized. Successful completion will be determined by the local institutions current standard for successfully completing a course.

Future planning for utilizing a capstone course experience will be developed in two phases:

1. Those career technical programs not having a valid external assessment will validate the capstone experience by tying the capstone course experience competencies to industry standards by administering a state developed end-of-course assessment. The end-of-course assessment will be developed with the input of industry, thus reflecting industry standards.
2. Initially, those career-technical programs not having a valid external assessment or a capstone course experience, will utilize program completion as technical program assessment. Course completion as an assessment will be phased out, and a capstone course experience with an end-of-course assessment as described will become the technical assessment for the program.

Validity:

The end-of-program capstone experiences and assessments will be developed in conjunction with industry to ensure that the course and assessment reflect industry standards. Each specific career-technical program end-of-course assessment will be state developed.

Reliability:

End-of-program capstone experiences and assessments will be state developed in conjunction with industry and will utilize the same rating scale and scoring guides for each career-technical program.

Assessment to be utilized:

State developed end-of-program assessments and a capstone course experience developed in conjunction with industry.

Summary: With the implementation of the above plan for administering technical program assessments, the Community and Technical College System of West Virginia will meet the established criteria of administering third party external assessments or state-level assessments reflecting industry standards. This process and implementation will be completed during the authorization of the Act.

Wisconsin

The State Board has identified 3 kinds of technical skills assessment measures:

1. Indirect/Local Assessment Standards

Based on comments about measuring technical skill attainment from labor, business and industry, all expressed support for the continued use of the State's Perkins post-secondary measure of technical skill attainment based on completion of 80% of the CTE courses attempted by a student. During 2007-08, WTCS developed a statewide model to assess postsecondary program outcome for individual CTE students.

2. External Assessment Standards

In 2008-09 State Board will attempt to obtain, directly or indirectly, the licensure information for student in the programs areas that have licensure. If successful, the data would cover about 22% of CTCS CTE graduates based on graduation levels from 2006-07.

3. WTCS Summative Assessments.

These measures are based on WTCS approved assessment of learning outcomes that objectively measures student attainment of industry- recognized technical skills upon graduation. Over the next five (5) years, the State Board estimates that about one-half of the WTCS postsecondary CTE programs will have state-approved technical skill attainment measures.

Wyoming

Efforts are being undertaken to identify CTE program areas and technical skill assessments. First, Wyoming is in the process of identifying the CTE program areas that will be focused upon in this state – these will be the program areas for which technical skill assessments will be identified. Identification of CTE program areas will be based on several considerations, including but not limited to:

- 1) historical enrollment and course-taking patterns; and
- 2) the degree to which program(s) are preparing students for high-skill, high wage and/or high demand occupations.

Second, within these identified CTE program areas, knowledge and skill statements will be articulated which clearly state the competencies that students are expected to attain upon completion of the CTE program. These knowledge and skill statements will provide the roadmap

for selecting technical skill assessment(s) that are aligned to these knowledge and skill statements and measure the articulated competencies with sufficient coverage and depth.

Third, a comprehensive review of technical skill assessments is currently being undertaken in order to determine whether there are existing assessments that will meet the needs of Wyoming in terms of alignment and other practical and budgetary considerations. It is projected that knowledge and skill statements are potential assessment(s) will be piloted during 2007-2008 and a final assessment plan in place as of the 2008-2009 school year. Baseline data collected for the new technical skill assessments will occur as of spring 2009 and a transitional assessment will be used in the interim. The transitional assessment will include a combination of new industry-specific assessment of technical skills that has historically been used.

This baseline data collection will also provide information on the coverage of programs and the number of students reported so that the State can determine appropriate goals and strategies for increasing coverage and the proportion of students assessed. Given that the technical skill assessment plan is not yet finalized pending completion of the aforementioned activities, it is anticipated that all CTE concentrators will be administered technical skill assessments upon completion of the program or reaching a designated threshold of program completion.

Puerto Rico

Currently, PRDE operates under the bronze standard of teacher-based assessments but is working towards achieving the gold standard of industry standard-based technical skill assessments.

Virgin Islands

The Virgin Islands is presently in the Bronze Standard in regards to Technical Assessments. The State goal in evaluating students attainment of technical skills is to combine state developed, nationally developed and industry standard assessment instruments to evaluate CTE students on a wide spectrum of learned skills. The state criteria in determining the appropriateness of the assessment instrument will be determined by the meeting the following objectives:

1. 50% of CTE Students will be assess by a third party assessment instrument leads to the award of state certification by year 5.
2. All CTE programs will be afforded the opportunity to assist in determining which third party assessment instrument the state will accept in the pursuit of industry certification.
3. 25 % of CTE students will take a third Party proprietary assessment that will lead to a company certification or placement
4. Applicable CTE students will be afforded a Federal regulatory assessment leads to federal licensure by year 5.
5. Applicable CTE students will be afforded a state regulatory assessment leads to state licensure by year 4.

All CTE concentrators will be eligible to take the state development assessment that leads to state certification by year 4.