

# Guidelines for the Certification and Credentialing of Skill Attainment - Texas' Framework for Skill Standards

Texas Skill Standards Board  
1100 San Jacinto, Suite 100  
Austin, Texas 78701  
(512) 936 8100  
[www.tssb.org](http://www.tssb.org)

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**Texas Skill Standards Board**  
**Guidelines for the Certification and Credentialing of Skill Attainment**

## **PREFACE**

### **About These Guidelines**

*Guidelines for the Certification and Credentialing of Skill Attainment* is designed for education and training providers, employers, industry groups, state agencies and anyone interested in implementing and using skill standards for education and training purposes. In these *Guidelines*, the TSSB provides policies and guidance regarding the usage of skill standards in Texas for curriculum development, assessment and certification of workforce skills. The TSSB does not endorse the use of skill standards for purposes other than education, training and career information.

Using skill standards as a starting point to derive a credential that specifies to an employer what skills and knowledge an individual has attained involves a three-step process: 1) translating skill standards into curriculum; 2) assessing individuals' knowledge and skill level acquisition; and 3) documenting that skill attainment. These *Guidelines* do not prescribe a particular way to accomplish this objective. Rather, the TSSB, in its system-building role, suggests options and references for conducting this process.

### **About the Texas Skill Standards Board**

*Guidelines for the Certification and Credentialing of Skill Attainment* is published by the Texas Skill Standards Board (TSSB). The TSSB is a voluntary body composed of business and industry, labor and education members, with industry representing the majority. The TSSB was established by the Texas Legislature in 1995 to advise on the development of a statewide system of industry-defined and industry-recognized skill standards. The ultimate goal of the Texas skill standards system is to assist the growth of the Texas economy through the recognition of skill standards and skill attainment to support workforce development efforts.

### **To Reach the TSSB**

On the Web: [www.tssb.org](http://www.tssb.org)

By E-mail: [tssb@io.com](mailto:tssb@io.com)

By Phone: 512/936-8100

By Fax: 512/936-8118

By Mail: Texas Skill Standards Board  
P.O. Box 2241  
Austin, TX 78768-2241

**Texas Skill Standards Board Guidelines for the  
Certification and Credentialing of Skill Attainment**

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## **INTRODUCTION**

The Texas Skill Standards Board (TSSB) is an advisory body established by the Texas Legislature to develop a statewide system of industry-defined skill standards. (See Appendix A for TSSB statute.) In its system-building role, the TSSB is charged with two major functions.

### **Development and Recognition of Skill Standards**

First, the TSSB facilitates the development and recognition of skill standards. One of its charges is to convene industry groups to voluntarily develop skill standards and certification procedures. As part of this function, the TSSB serves as a quality assurance agent for the development process, informing industry groups of the content and procedural validity criteria required for TSSB recognition. The TSSB then evaluates the skill standards against the criteria and grants recognition of the standards.

### **Facilitation of Skill Standards Usage**

Secondly, the TSSB facilitates dissemination and usage of the state-recognized skill standards. The Legislature intended the skill standards to “guide curriculum development, assessment and certification of workforce skills.” The TSSB helps to bridge the gap between industry skill standards and their usage by education and training providers to prepare students and trainees for the workforce. Within Texas’ voluntary system, the TSSB has no authority to compel education and training providers to use the standards. The TSSB’s charge is to promote the use of standards and credentials among employers. Given that skill standards serve as a communication tool to inform training and education providers of business and industry skill requirements, it is crucial that employers hire graduates of the programs that base their curricula on industry skill standards. Industry will ultimately drive the successful implementation of the skill standards system.

### **System Vision: Texas Skill Standards Infrastructure**

The two functions above are supported by two sets of policy and procedural frameworks, or guidelines, which together comprise the infrastructure of the Texas skill standards system. The Texas Skill Standards Infrastructure (TSSI) is the system to support the creation and use of the industry-defined skill standards. The TSSI aims to assist the growth of the Texas economy through the recognition of skill standards and skill attainment to support workforce development efforts.

The first policy and procedural framework, entitled *Guidelines for the Development, Recognition and Usage of Skill Standards (Guidelines for Development)*, defines the processes and requirements to be undertaken by industry groups seeking TSSB recognition for their skill standards. This document, *Guidelines for Certification and Credentialing of Skill Attainment (Guidelines for Certification)*, offers guidance and references for education and training providers regarding assessment and documentation of the skill attainment of individuals to the standards specified by industry. By ensuring common understanding, the two sets of guidelines support the collaboration of stakeholders, including employers and industry groups, public/private partnerships, education and training providers, and state agencies, to implement and use skill standards within their workforce development realms.

### **Purpose and Scope of Guidelines**

In the *Guidelines for the Certification and Credentialing of Skill Attainment*, the TSSB provides policies and guidance regarding the usage of skill standards in Texas for curriculum development, assessment and certification of workforce skills. These *Guidelines for Certification* are designed for education and

training providers, employer and industry groups, state agencies and anyone interested in implementing and using skill standards within their workforce development arenas.

Using skill standards as a starting point to derive a credential that specifies to an employer what skills and knowledge an individual has attained involves a three-step process: 1) translating skill standards into curriculum; 2) assessing individuals' knowledge and skill level acquisition; and 3) documenting that skill attainment. These *Guidelines for Certification* do not prescribe a particular way to accomplish this objective. Rather, the TSSB, in its system-building role, suggests options and references for conducting this process.

As stated in the *Guidelines for Development*, the companion guide to this document, the TSSB does not endorse the use of skill standards for purposes other than education, training and career information. These *Guidelines for Certification* are limited to providing policies and guidance on the usage of skill standards within the existing postsecondary workforce education and training systems in Texas.

Unlike the National Skill Standards Board (NSSB), the TSSB does not require the establishment of a separate assessment and certification system. As a facilitator of usage in a voluntary system, the TSSB's role consists of providing technical assistance to education and training providers to use skill standards in developing curricula and assessing students' performance. It is the responsibility of the education and training providers to define and implement processes that assess and document completers' competence based on business and industry input, such as that found in the skill standards. These processes must ensure that assessment methods and instruments measure the specific skills and produce valid and reliable results.

Currently, in occupational areas where industry groups have not come to consensus on skills needed, community and technical colleges and other postsecondary training providers rely on employer advisory committees at the local level and DACUM (Developing a Curriculum) or modified DACUM processes to analyze jobs, breaking them down into tasks required and related skills. Using local employer input into the curriculum development process may result in each college reinventing the wheel. When repeated college by college, this process is slower and more expensive than statewide skill standards, and may result in contradictory standards across the State. In determining how to use skill standards for assessing and certifying their program completers, community and technical colleges and other postsecondary training providers may want to take advantage of existing occupational credentialing systems associated with TSSB-recognized skill standards.

### **Relationship with Existing Occupational Certification Systems**

Currently, third-party assessment and credentialing systems exist in the United States that perform one or all three functions referred to earlier—curriculum development, assessment and certification—for converting skill standards into a meaningful communication tool between workers and employers. These occupational credentialing systems can be divided into two categories:

*State licensed or regulated occupations* – Individuals are legally required by state government to obtain a license to earn a living in a given occupation.

*Voluntary, industry-based certifications* – Private credentialing programs sponsored by industry and professional associations or specific vendors.

#### *State Licensed or Regulated Occupations*

In some occupational areas, a legally-constituted licensing body defines the desired competencies and certifies and licenses each individual who wants to enter the occupation. Licensing requirements usually

include personal qualifications (such as minimum age, citizenship and/or letters of reference); specialized education and training; and an examination.

Nationwide, a 1993 report by the Institute for Educational Leadership entitled *An Overview of Skill Standards Systems in Education and Industry* found that the largest number of licensure programs was associated with the service industry sector. In Texas, sub-baccalaureate occupations regulated by the State are concentrated in the Health Services; Finance, Insurance and Real Estate; and Protective Services industries.

In many of these industries, voluntary professional associations perform certification and accreditation functions in concert with the role of state licensure boards. For example, the American Institute of Certified Public Accountants (AICPA) works with the National Association of States Boards of Accountancy. The AICPA advises state regulators regarding education programs that contain the academic competencies required to pass the CPA exam. AICPA also develops and administers the nationally-recognized CPA exam required by states for entrance into the profession.

It is unlikely that these state-regulated industries would submit their skill and knowledge requirements and standards to the TSSB for recognition. In practice, these industries already have a vehicle and state authority through which their required occupational competencies are communicated to community and technical colleges. The Texas Higher Education Coordinating Board's *Guidelines for Instructional Programs in Workforce Education* (GIPWE) require that programs with mandatory state, federal or national licensure, certification, or registration must prepare their graduates to meet the standards of the appropriate agency or association and take the corresponding examinations(s). These state authorities' competencies and licensure requirements are specified through the learning outcomes<sup>1</sup> of courses in the Workforce Education Course Manual (WECM). The WECM is the approved state inventory of workforce education courses for public two-year colleges in Texas, a resource that allows Texas colleges increased flexibility in responding to business and industry needs. It is designed to contribute to the quality and consistency of learning outcomes in workforce courses across the state. Where these types of licensure arrangements exist, the TSSB supports the use of existing professional certification systems for the assessment and documentation of skill attainment.

#### *Voluntary Industry-Based Certifications*

In a number of occupational areas, national industry associations or private vendors have voluntarily developed their own skill-based credentialing systems that certify individuals' attainment of required skills. The industries have chosen to establish these systems for a variety of reasons including: anticipating a shortage of skilled workers; recognizing the value of a highly-skilled, credentialed workforce; and/or responding to the threat of government regulation.

The industry associations may perform any or all of the following functions, depending on the occupational area:

1. prescribing education and experience qualifications for certification candidates;
2. accrediting programs based on qualifications for curriculum, faculty, equipment and facilities, including conducting site visits;
3. performing occupational analyses and establishing the competency requirements that will underlie the certification assessments;

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<sup>1</sup> The term "learning outcomes" wherever it appears in these Guidelines for Certification refers to a formal category or heading in the Texas Higher Education Coordinating Board's WECM. Its meaning is "results," as in the dictionary definition of outcome: a natural result; consequence.

4. developing curriculum related to the skill standards and providing technical assistance to educational institutions and training programs desiring to teach to the standards;
5. administering competitive exams for individuals and issuing certificates based on the results.

Such industry associations may submit their skill standards for TSSB recognition for the added value of having them considered for integration in WECM courses through the WECM maintenance process. For those TSSB-recognized skill standards that already have associated assessment and credentialing systems that are recognized by the industry, the TSSB encourages postsecondary education and training providers to utilize those systems for their program completers. Industry associations play a vital role in assisting colleges to develop curriculum, construct assessments and teach to the standards for which individuals will be tested and certified. The TSSB encourages industry associations and colleges to work together for these purposes.

## **POLICIES AND GUIDANCE**

Skill standards are the tool for communicating employers' workforce requirements to education and training providers. Translating skill standards into education and training programs to prepare a qualified workforce according to the industry specifications consists of three processes:

- Usage of skill standards to guide curriculum development.
- Assessment (measuring individuals' acquisition of skill standards).
- Skill Attainment Documentation (certification and credentialing).

### **Usage of Skill Standards to Guide Curriculum Development**

Skill standards and curricula essentially convey the same information. Skill standards, developed by industry groups, state what the worker needs to know and be able to do (knowledge and skills) in the workplace and the level to which the work must be performed to be deemed competent. Curricula, developed by education and training providers, state what learning outcomes (knowledge and skills) the learner must attain and the level to which the learning outcomes must be demonstrated. This similarity allows education and training providers to use skill standards to construct curricula. In fact, there is a direct parallel between the seven elements of skill standards, as approved by the Texas Skill Standards Board in the *Guidelines for Development* and the components of curricula as described below.

Skill Standards Elements	Curricula Components
<ul style="list-style-type: none"> <li>• Critical Work Function</li> <li>• Key Activities</li> <li>• Occupational Skills, Knowledge and Conditions</li> <li>• Academic and Employability Knowledge and Skills</li> <li>• Performance Criteria</li> <li>• Statements of Assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Program Structure</li> <li>• Learning Outcomes</li> <li>• Workplace Context and Resources/ Equipment</li> <li>• Sequence and Competencies Integration</li> <li>• Benchmarks and Assessment</li> <li>• Methodology and Instruments</li> </ul>

#### *Skill Standards-to-Curricula Linkages*

Critical work functions are the principal responsibilities that a worker must perform to meet the key purpose, or essential work-related goal, of an occupational area. Typically, an occupation can be described using 10 to 15 critical work functions. This skill standards element is roughly parallel to the courses that comprise an educational or training program. Thus, critical work functions provide clues as

to the potential breakdown of course content within a program of study. A critical work function, depending on its depth and breadth, may comprise one or multiple courses. It is also possible that more than one critical work function could be taught in the same course.

Key activities are the major duties (or clusters of tasks) that workers must perform to accomplish each critical work function. Generally, each critical work function consists of three to six key activities. This element of the skill standards is comparable to learning outcomes in curricula. An education or training provider developing curriculum based on skill standards would expect a learner, by the completion of the program, to demonstrate the successful performance of the key activities.

Occupational skills, knowledge and conditions are the common technical or occupational-specific skills and knowledge and the associated tools, resources and equipment that are critical for carrying out the key activities to the level specified in the performance criteria. This skill standards element enables education and training providers to design the curriculum and the learning experience in the context of the workplace. The conditions are necessary to enable the learner to perform the key activities.

Academic and employability knowledge and skills are the competencies associated with the traditional subject areas of mathematics, science, reading and writing, and the applied, cross-functional skills and knowledge required for effective performance across a range of occupations. Examples of employability knowledge and skills are adaptability; using information and communications technology; listening; speaking; and working in teams. Based on the common nomenclature approved by the TSSB in the *Guidelines for Development*, there are 17 academic and employability knowledge and skills (AEKS). The TSSB adopted the AEKS common nomenclature and associated rating scales endorsed by the National Skill Standards Board.<sup>2</sup> In the skill standards, industry groups identify, for their occupational area, the academic and employability knowledge and skills associated with each critical work function. This information can be used by education and training providers to determine what academic and employability knowledge and skills underlie each of the critical work functions and to sequence the teaching of those competencies from course to course across a program.

Performance criteria indicate the type, quality and level of output (demonstrable performance) required to successfully complete each key activity. This skill standards element can be used as the benchmark in assessing students' performance of the key activity, or learning outcome.

Statements of Assessments are the industry group's recommendation for the evaluation process that should be used to determine whether the learner meets the competencies specified within each critical

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<sup>2</sup> Acknowledgement - Skill Scales Companion Guide

In an effort to facilitate portability of credentials and transferability of individuals' skills, the Texas Skill Standards Board (TSSB) designed the Texas skill standards elements and format to promote the linkage of state and national skill standards efforts.

As part of the skill standards elements required for TSSB recognition, the TSSB adopted the common nomenclature endorsed by the National Skill Standards Board. The Skill Scales Companion Guide sets out the seventeen (17) academic and employability knowledge and skills endorsed by the National Skill Standards Board, and provides scales to determine the levels of knowledge and skills required in the world of work. The Texas Skill Standards Board wishes to acknowledge the use of the academic and employability knowledge and skills, and associated skill scales and Companion Guide, developed by the National Skill Standards Board.

The skill scales and Companion Guide are subject to copyright laws at the time of publication (2000).

work function. A statement of assessment is the guide to appropriate strategies and tools to be used to assess the level of skill attainment in a critical work function. Examples of assessment strategies might include paper-and-pencil or computer-administered tests, simulations, performance-based demonstrations, work samples, portfolios, interviews, etc. The statement of assessment may be broad, or may recommend specific strategies and tools. It may also include information regarding the relative importance of the critical work functions and their associated key activities and performance criteria, in terms of time spent on the job (or in training) and weighted assessment. This skill standards element can be used to design assessments for a program and determine the methodology and instruments to use.

## **Assessment**

### *What It Is*

Assessment is the process by which an individual's performance is measured or evaluated to determine whether it meets the level of competence specified in the skill standards. Assessment instruments to measure competency include not only written exams but a variety of performance-based and other methods, as indicated above. Today, assessments are regularly designed and administered by a variety of sources, including education and training providers, companies, industry and trade associations and apprenticeship programs. Assessment makes skill standards meaningful by providing a way to know when individuals have achieved the level of competence specified by industry in the standards.

### *National Developments*

At the national level, there is currently no existing, comprehensive infrastructure of assessment and certification. Efforts to assess and certify individuals for a particular occupation have been ad hoc by industry, driven in many cases by consumer demand and/or government regulation. The National Skill Standards Board (NSSB), through its Voluntary Partnerships, is now in the process of establishing a third-party, industry-driven assessment system which will be independent of the education and training providers that will teach the standards.

For this undertaking, the NSSB has developed guidebooks to assist the voluntary partnerships. Those guidebooks address the following broad areas that must be taken into consideration when designing the system.

- Determining assessment methods and process, including scoring and reporting results.
- Ensuring the assessments are reliable, fair, valid and nondiscriminatory for use in hiring.
- Providing accessibility of assessments to all citizens.
- Administering the system, including funding, marketing, maintenance, and continuous improvement.
- Linking the new assessment and certification system with education and training providers and existing industry-oriented, third-party assessment organizations.

### *Texas Approach and Scope*

At the state level, there is an existing infrastructure for administering assessments and documenting attainment of skills. In Texas, this infrastructure is the postsecondary workforce education and training systems, consisting of community and technical colleges, proprietary institutions, and the local workforce development boards through their contracted training providers. These entities are already conducting assessments of their program completers. The challenge is to develop assessments that authentically measure individuals' attainment of the skills indicated by industry groups in the skill standards. These *Guidelines for Certification* provide broad information on linking skill standards with curriculum development, assessment and certification of workforce skills. The authoritative texts listed in the following section provide more specific instruction and technical assistance regarding assessment, measurement and statistical validity.

### *What Is Measured and How*

Once employers' performance requirements as stated in the skill standards are incorporated into curricula, the assessment is the certification event for determining whether the learner has successfully attained the knowledge and skills specified in the standards. As previously mentioned, the skill standards elements provide the key to developing assessments that measure attainment of the standards. In designing assessment events, the program's learning outcomes correspond with the skill standards' key activities. Therefore, it is the learner's ability to perform the key activity that is evaluated. The performance criteria—the type, quality and level of output—are the benchmarks, or standards, against which the success of the key activity is measured. In the course of the assessment, the occupational skills and knowledge can be noted and documented within the context of the learner's performance of the key activity. In addition, the underlying academic and employability skills, which are identified by critical work function in the skill standards, can also be assessed. How the skills attainment should be measured—the best methods and instruments—is recommended by the industry groups in the Statements of Assessments.

There are a number of authoritative texts regarding assessment and designing assessment events and instruments that can provide more detailed information for postsecondary education and training institutions for evaluating performance based on skill standards. Although the following list is not exhaustive, some of those references include:

- U.S. Department of Labor (DOL), Employment and Training Administration, *Testing and Assessment: An Employer's Guide to Good Practices*, Washington, DC, 1999.
- *Credentials for Success: Common Elements of a Voluntary National System of Assessments and Certifications Based on Skill Standards*, National Skill Standards Board, Washington, DC, 2000.
- Society for Industrial and Organizational Psychology, "Principles for the Validation and Use of Personnel Selection Procedures," College Park, MD: SIOP. 1987.
- American Psychological Association (APA), American Education Research Association (AERA), and National Council on Measurement in Education Joint Commission, "Standards for Educational and Psychological Testing," Washington, DC: American Psychological Association. 1985.
- Anatasi, A. *Psychological Testing* (6<sup>th</sup> ed.). New York, NY: Macmillan Publishing Co., Inc. 1987.
- Ebel, R.L. *Essentials of Educational Measurement*. Englewood Cliffs, NJ: Prentice-Hall. 1972.
- Ghiselli, E.E., Campbell, J.P., & Zedeck, S. *Measurement Theory for the Behavioral Sciences*. New York, NY: W.H. Freeman and Company. 1993.
- Guion, R.M. "Personnel assessment, selection and placement." In M.D. Dunnette & L.M. Hough (eds.), *Handbook of Industrial and Organizational Psychology* (2<sup>nd</sup> ed., Vol. II, pp. 327-397). Palo Alto, CA: Consulting Psychologists Press, Inc. 1991.
- Nunnally, J.C., & Bernstein, I.H. *Psychometric Theory*. New York, NY: McGraw-Hill. 1994.

### *Linking with Third-Party Assessment Systems*

For some occupations, industry associations have established separate systems to assess and certify individuals who have been trained for entry into their fields. In certain industries, the certification has

become a de facto requirement for employment. In those cases especially, it is important for education and training providers to be aware of and teach to the competencies for which their graduates will be assessed. Some industry associations also accredit education or training programs that teach to the skill standards they have established.

## **Skill Attainment Documentation**

### *Certification and Credentialling*

The documentation or written record of the results of the assessment process is critical in making skill standards meaningful to employers. It specifies to employers an individual's work readiness according to the industry's specifications. Certification is the process of documenting the competence of an individual who meets predetermined qualifications or performance standards of an industry group, agency or association. It is essentially the documentation of the results of the assessment process. The term credentialling refers to the granting of an official document to an individual who has demonstrated technical competence. This technical distinction is being drawn for the purposes of these guidelines, however in practice, the two terms are often used interchangeably. The credential, or official document that serves as evidence of an individual's skill attainment levels, is the key to the portability of skill sets. It enables individuals to "carry" their qualifications throughout the nation, and even across countries, and present them to employers in the language of the industry. As the communication tool between the qualified individual and the employer, it makes the skill standards meaningful to employers.

### *Levels of Credentials*

In Texas, the scope of the skill standards system is limited to the postsecondary level of education and training. As dictated in the authorizing legislation for the Texas Skill Standards Board, the voluntary statewide system of skill standards and credentials shall encompass all major skilled occupations that provide strong employment and earnings opportunities and require less than a baccalaureate degree. In Texas' postsecondary education and training system, the credentials that encompass this range of occupations are generally referred to as Certificate, Certificate II, and the Associate degree.

### *Portability of Credentials*

The Texas Legislature envisioned a state system of skill standards that would guide curriculum development, training and certification of workforce skills. As part of its system-building role, the TSSB was also charged with validating and recognizing nationally-established standards and with reviewing standards developed by other states and nations to enter into agreements for mutual recognition of standards and credentials. This coordination nationally and between states allows the transferability of workers' skill sets across employers and industries, and is the key to portability of credentials.

### *National Alignment*

Establishment of this national system of portable credentials based on skill standards requires alignment of skill standards recognized by the TSSB with those endorsed by the National Skill Standards Board (NSSB). The developing NSSB system of assessment and certification will assess an individual's mastery of the following three types of skill standards:

Core skill standards – The knowledge, skills, and performance that are common and critical to all frontline jobs within an industry sector.

Concentration skill standards – The knowledge, skills, and performance that are needed for major areas of frontline responsibility, typically covering families of related jobs and occupations.

Specialty skill standards – The knowledge, skills, and performance that are unique to a particular job, occupation, industry, or company.

Thus far, the skill standards developed or validated in Texas by industry technical advisory committees and recognized by the TSSB fall within the specialty, and possibly concentration, categories as defined by the NSSB. The Texas skill standards may equate with entry-level, intermediate, or advanced job levels in the workplace. As the core and concentration skill standards are developed by the voluntary partnerships and endorsed by the NSSB, the TSSB will translate, validate, recognize, and align the content of those standards within the Texas skill standards system.

#### *Mutual Recognition between States*

Just as the Texas skill standards system will need to be aligned with the NSSB system, skill standards from other states will need to be coordinated and aligned to establish a truly nationwide system. Several states have legislatively-based skill standards recognition authorities or active industry-and-education partnerships that are developing skill standards and certification systems. Agreements for mutual recognition of skill standards and credentials are the mechanisms that enable portability of individuals' credentials and transferability of their skill sets across states.

### **Program Recognition**

As noted throughout these *Guidelines*, both the development and utilization of skill standards is voluntary in Texas. As a market-driven system, implementation of the skill standards and credentials will only succeed with the active participation of employers hiring the graduates of postsecondary education programs that utilize skill standards as the basis of their programs. This feedback loop will reward community and technical colleges that use skill standards by improving their placement statistics and will also provide incentive to those colleges that are not using skill standards.

This supply and demand mechanism will only work if employers are aware of which community and technical colleges have incorporated skill standards into their curricula, assessments and credentials. To help facilitate usage of skill standards, the Texas Legislature charged the TSSB with promoting skill standards among employers. As part of that mission, the TSSB will recognize community and technical college programs that teach and assess students on the skill standards content, and will promote those programs to employers.

#### *TSSB Policy Intent*

##### Skill Standards-Based Technical Core

The TSSB, comprised of a majority of business and industry members, recognizes the desire of employers to see consistent, industry-defined student outcomes in any given program area, regardless of the college from which they recruit. To achieve that end, the TSSB believes that program recognition should be used to foster and promote the development of a common, skill standards-based technical core curriculum. The technical core ensures that both a statewide standard of industry-defined outcomes is met across colleges, and that specialized skill sets required by local or regional employers may be met in additional courses in any individual college's program.

Given this goal, it is the intent of the TSSB that the first college to incorporate the skill standards into its program may apply for "program recognition" (listed as application type 1 below). Subsequent colleges should apply for "program replication" (listed as application type 2 below).

##### College Collaboration

Where one college has already received program recognition, the technical core curriculum that encompasses the skill standards content will be expected to evolve through the collaboration of additional colleges that subsequently seek TSSB recognition for the same type of program. Thus, both the original

recognized program and institutions that follow shall collaborate, with the goal of agreement on a technical core that is broadly representative of their college programs. One exception to this practice may be where a critical mass of colleges has agreed on a common technical core that appears to be broadly representative of the program area. In those instances, future colleges may be expected to replicate the core curriculum as it exists.

In applying for program recognition or replication, the technical core is documented on the key activities-to-courses matrix. The matrix reflects the courses in which the colleges have agreed, at a minimum, to assess the key activities as significant (summative or terminal, when appropriate) learning outcomes. A college also may assess the key activities in additional courses. However, the matrix indicates the consensus across the colleges as to the technical core courses in which they will teach and assess the key activities to the performance criteria, or where appropriate, depending on the specific skill standards, the related knowledge and skills. The TSSB may choose not to recognize a program where the college does not agree to collaborate with future programs seeking TSSB recognition, or where a college seeking recognition does not collaborate to achieve a common technical core.

#### *Program Recognition Criteria*

To receive TSSB recognition for a workforce education program, community and technical colleges must meet the following criteria:

- Incorporate all elements of the skill standards into the curriculum or program.
- Teach the key activities defined in the standards as learning outcomes in the program, and assess students' performance on the basis of those activities and related performance criteria, skills, and knowledge.
- Complete and submit an Application for Program Recognition that is approved by the TSSB, which consists of the following documentation:
  - ▶ Notification of Intent to Apply for Program Recognition
  - ▶ Application Cover Page
  - ▶ Key Activities-to-Courses Matrix – indicating in which courses the key activities will be taught as learning outcomes.
  - ▶ Syllabi for each course in the matrix listing the key activities as learning outcomes.
  - ▶ Signed Statement of Assurances indicating the college's willingness to collaborate with other colleges on a skill standards-based technical core curriculum for the program area.

#### *Application Types*

Colleges may apply for program recognition in one of the following ways:

- 1) Recognition – As the initial college, incorporate skill standards into its program; OR
- 2) Replication – Offer the technical core curriculum of a TSSB-recognized program into which the relevant skill standards already have been incorporated. Under this option, colleges shall ensure that the key activities are taught and assessed, at a minimum, in the same technical courses as the recognized program.

Once the application is approved, the TSSB prominently displays the recognized program on its web site and promotes it in outreach and awareness activities to Texas employers and industry groups.

To assist curriculum developers, the TSSB provides guidelines and suggestions for incorporating skill standards content into postsecondary workforce education programs in the community and technical colleges section of its website ([www.tssb.org](http://www.tssb.org)).

#### *Renewal Criteria and Process*

Program recognition expires three years from the date of recognition, at which time, it may be renewed. To renew its program recognition, a college must meet the following criteria:

- Have developed and be using assessments to measure students' mastery of all the key activities (or equivalent element) and related criteria, skills and knowledge incorporated into the curriculum.
- Indicate commitment through a signed statement to continue teaching and assessing the key activities, as documented on the original key activities-to-courses matrix, or revised matrix as needed, to reflect updated or amended skill standards.
- Complete and submit an application for program recognition renewal that is approved by the TSSB, which consists of the following documentation:
  - ▶ Renewal Application Cover
  - ▶ Renewal Application Form
  - ▶ Revised key activities-to-courses matrix – as needed, to reflect changes in the skill standards since the program was originally recognized
  - ▶ Syllabi corresponding to the matrix changes, as needed.
  - ▶ Illustrative examples of at least three assessments, with the agreement that all assessments will be available for review if requested by the TSSB.

#### *Subsequent Renewals*

Program recognition must be renewed every three years. After its initial three-year renewal is approved, a college may submit an abbreviated application for subsequent renewals. That application shall consist of a statement of assurances attesting that the assessments used evaluate student mastery of the skill standards and that the courses integrated with key activities have not changed since the last renewal. The statement must be signed by a program representative (such as the chair or lead faculty member), the dean overseeing the program, and the college president or vice president of instruction/academic affairs.

If any of the following has occurred since the last renewal, the college also must submit sample assessments:

- College's program assessments have changed;
- Skill standards have been amended or updated; or
- Common technical core curriculum or its placement of key activities has changed.

#### *Rules and Requirements Governing Changes Prior to Program Recognition Renewal*

##### College Program Revision

If a college formally revises its TSSB-recognized program, i.e., submits a program revision to the Texas Higher Education Coordinating Board (THECB) for approval, before the three-year recognition term expires, it must submit either:

- 1) A statement indicating that the placement of key activities in the program's courses is unchanged, as indicated on the matrix submitted with the college's program recognition application;

- 2) A revised matrix showing any changes in the placement of key activities in courses, (e.g., if a course integrated with a key activity has been replaced by another course), and where the key activities will now be taught, plus course syllabi for the changed courses that document the key activities as learning outcomes; OR
- 3) A statement notifying the TSSB that the program is being deactivated or closed.

#### Updated Skill Standards

If skill standards are updated, i.e., the work-oriented elements (critical work functions, key activities and performance criteria) are significantly changed, essentially resulting in new skill standards, before program recognition expires:

- Relevant colleges will be notified of the updated skill standards.
- Affected colleges may choose to renew their program recognition to reflect the changes in the skill standards, but will not be required to.
- For subsequent renewals (see above), colleges will be required to use the updated skill standards.

#### Expired Skill Standards

If the skill standards expire before a college's program recognition expires:

- Program recognition continues until the expiration date, at which time it is not renewed. The expired skill standards shall remain in the Texas Skill Standards Repository in an archives section until the TSSB recognition of all recognized programs integrated with the expired skill standards has also expired.

#### **Industry Certification**

In a number of occupational areas, industry associations have developed program certification and/or credentialing systems based on use of the association's skill standards. Program certification systems accredit programs that incorporate the industry's occupational skill standards, based on program delivery criteria for curriculum, faculty, equipment and facilities. Site visits are required by some to certify compliance. Industry-based credentials document an individual's attainment of skill standards through industry-endorsed assessments. Colleges may want to seek industry program certification as well as receiving TSSB program recognition. Alternatively, a college may choose to seek industry certification alone.

Where industry groups affiliated with TSSB-recognized skill standards offer such program certifications or individual credentialing, the TSSB will provide contact information on its web site for education and training providers that wish to take advantage of their services.

## Appendix A

### Texas Skill Standards Board Statute

Article 7, House Bill (HB) 1863  
74<sup>th</sup> Texas Legislature  
As Amended by HB 3431  
76<sup>th</sup> Texas Legislature

#### Article 7. SKILL STANDARDS BOARD.

Sec. 7.01. TEXAS SKILL STANDARDS BOARD. (a) The Texas Skill Standards Board is created as an advisory board to the governor and the legislature on the development of a statewide system of industry-defined and industry-recognized skill standards and credentials for all major skilled occupations that:

- (1) provide strong employment and earnings opportunities in this state; and
- (2) require less than a baccalaureate degree.

(b) The board is composed of 11 members appointed by and serving at the pleasure of the governor. The board consists of the following members:

- (1) seven members representing business, two of whom must be from business entities that employ fewer than 50 employees;
- (2) two members representing labor;
- (3) one member representing secondary education; and
- (4) one member representing postsecondary education.

(c) The governor shall appoint the presiding officer of the board from the members representing business.

(d) The skill standards board shall:

- (1) validate and recognize nationally established skill standards to guide curriculum development, training, assessment, and certification of workforce skills;
- (2) convene industry groups to develop skill standards and certification procedures for industries and occupations in which standards have not been established or adopted and recognize the skill standards and certification procedures;
- (3) review standards developed by other states and nations and enter into agreements for mutual recognition of standards and credentials to enhance portability of skills; and
- (4) promote the use of standards and credentials among employers.

(e) The board shall meet at the call of the presiding officer as often as necessary to accomplish its work.

(f) A member of the board is not entitled to compensation for service on the board but is entitled to reimbursement for reasonable expenses incurred in performing board duties, subject to any applicable limitation in the General Appropriations Act.

(g) The council shall provide staff support for the board as necessary.

(h) The skill standards board shall report periodically to the governor and shall provide annual reports to the governor, the division, and the legislature.

(i) Article 6252-33, Revised Statutes, does not apply to the board.