

Texas Skill Standards Board

Annual Report

to

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Governor

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**Texas Skill Standards Board
Annual Report**



Executive Summary

The Challenge

The Texas Skill Standards Board (Board) was established by the 74th Legislature under House Bill 1863 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; and (2. require less than a baccalaureate degree. The Board was charged with four mandates, to:

- 1) validate 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;
- 3) review standards developed by other states and nations and enter into agreements for mutual recognition of credentials to enhance portability of skills; and
- 4) promote the use of standards and credentials among employers.

First-Year Progress

Governor Bush appointed the members of the Texas Skill Standards Board in March 1996. The highlights of the Board's first year, and its progress to date in addressing its mandates, follow.

Adopted a Proposed Framework for a Voluntary Statewide Skill Standards System. The Board adopted and approved a skill standards system framework. The proposed framework outlines the roles of the key participants in the system, including employers as the customers, the Board as facilitator, and education and training providers as suppliers of a highly-skilled workforce. The framework was developed by the Texas Skill Standards Research and Communications Project (TSSRCP), a research team funded in 1995 by the Texas Higher Education Coordinating Board and the Texas Education Agency.

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Approved Texas Skill Standards Infrastructure (TSSI). The Board approved a six-cycle, scientifically-valid process for the development of skill standards by industry-driven, private-public partnerships. The infrastructure is designed to provide guidelines for industry involvement to ensure that the skill standards and credentials are truly industry-defined and industry-recognized, as required in legislation.

Received Initial Employer Input. At TSSRCP-sponsored regional roundtable discussions, the Board solicited initial input from employers around the state on their workforce skills needs and the role they are willing to play in an industry-defined skill standards system. Employers sent the message loud and clear that job applicants today lack the skills needed for employment. Employers told the Board they wanted a "*trainable*" workforce. Workers should have basic reading, writing and math skills, but also workplace skills, such as problem-solving, team work, and communication skills. They also stressed the importance of workers with good "character": honest, motivated, willing to work, and loyal.

Reviewed State, National and International Skill Standards Initiatives. The Board reached across the borders of Texas this year. Members participated in an international skill standards forum in Austin, sponsored by the TSSRCP, which included the National Skill Standards Board, the Illinois Occupational Skill Standards and Credentialing Council, and skill standards representatives from Canada, Mexico and Australia. The Board also made contact with the leading states with skill standards boards. These countries and states shared with the Board their experience and lessons on building a skill standards and certification system.

Future Plans

The Board's challenges for the second year and beyond include the following:

- Conduct request-for-comment process to business/industry and education on the Board's proposed Texas Skill Standards Infrastructure (TSSI) and guidelines.
- Facilitate the establishment of industry partnerships to develop skill standards and credentials.
- Promote skill standards in the broader workforce development system, including education and training providers and the regional network of workforce development boards.
- Help establish bridges between the setting of skill standards by employers and the development by educators of curriculum based on the standards.



Introduction

The Need

The economic future of Texas and the prosperity of its citizens depend on the ability of businesses in the state to compete effectively in the world economy. A well-educated and highly-trained workforce provides businesses with the competitive edge critical for their success. However, Texas employers continue to be faced with applicants who do not possess the basic skills and workplace skills needed to succeed in business.

In testimony before the Texas Skill Standards Board and early reports from employer roundtables conducted in the first year, the overwhelming message heard from employers was not just "train my employee." They also expressed their need for employees who are *trainable*. Employers across the board expressed the same traits to define a "trainable" employee. An individual must possess competence in basic reading, writing, and computation, but also problem-solving, the ability to learn and apply learning on the job, the ability to work effectively as part of a team, communication skills, flexibility and adaptability, the ability to think and reason, and computer skills. In addition, employers stressed the importance of employees with good character, which includes honesty, motivation, willingness to work, and loyalty.

A survey of businesses conducted by the Texas Skill Standards Research and Communications Project (TSSRCP) confirmed this emphasis on basic and workplace skills, particularly for entry-level employees. Fifty-nine percent of respondents expressed the need for skill standards in basic skills only (reading, math, problem solving, team building) for entry-level employees. And 64 percent of employers agreed or strongly agreed that "A basic skills or job readiness certification system is needed by employers in the State of Texas."

Some employers and educators who addressed the Board expressed their frustration with the inadequate preparation of graduates with the basic knowledge, skills and abilities needed to be successful in the workforce. One business representative, speaking on behalf of many employers in her region, reminded the Board that K-12 education is a vital component of Texas' workforce development system. She advocated for high academic standards in public schools, stating that job skill standards are immaterial if high school graduates are poorly educated.

Other testimony heard by the Board emphasized the need for retraining and upgrading the skills of existing workers to meet the demands of rapidly-changing technology. In the TSSRCP survey, 50 percent of employers indicated that skill standards for experienced employees should be job specific. Worker representatives indicated that skill standards and training should be defined by industry, with input from both workers and employers.

How Skill Standards Can Help

Skill standards allow employers to communicate what competent workers need to know and be able to do to get and keep specific jobs. Skill standards also specify the level of skill at which workers must perform. Skill certificates earned by individuals can document the skills and skill levels they attain.

Employers indicated they have little faith in the validity of high school diplomas or other degrees. Diplomas show only completion of programs or courses, not mastery of skills and knowledge. One of the primary benefits of skill standards and certification is to verify that workers and applicants possess specific skills that employers have identified they need.

Skill standards used and recognized by education and industry will create a missing link in the viability of workforce development activities. Training received in one part of the United States will be accepted with confidence by an employer on the other side of the continent. This portability will dramatically improve the value of training expenditures as well as protect the investment individuals make as they strive to make improvements in their own workforce skill portfolio.

A system of skill standards and certifications benefits employers, workers, education and training providers and taxpayers. "A new skill standards system can be used to:

Common Language

- communicate a clear understanding of the skills and knowledge requirements of work in order to guide the preparation of people for work, thereby reducing the costs to employers, workers, students and the public;

Skill-Based Content

- improve curriculum development and instruction by linking academic and skill standards in programs preparing people for work;

Worker Portability

- increase worker security and mobility across industries, geographic regions, and education and training institutions through the development of portable credentials; and

Program Accountability

- improve the quality and accountability of education and training programs by defining outcomes to be achieved in terms of individual skills acquired."

(Excerpt from "Skill Standards: A Tool for State Workforce Development System Reform," National Governor's Association, 1995.)

The Texas Skill Standards Board believes that skill standards, voluntarily established by industry and targeted to occupations with a strong economic future, will be beneficial to Texas and Texans. However, the Board strongly cautions against any use of skill standards to divert attention away from the need to provide the individuals in the Texas workforce with the *basic knowledge* and *character traits* that are essential if they are to excel beginning on the first day of their careers.

This report chronicles the first-year progress of the Texas Skill Standards Board, appointed in March 1996 by Governor George Bush, in meeting its mandates under House Bill 1863.



Texas Skill Standards Board

Legislative Origins

The Texas Skill Standards Board (Board) was established by the 74th Texas Legislature under House Bill 1863. The Board was created as an advisory board to the Governor and the Legislature to develop 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; and 2) require less than a baccalaureate degree.

The Board is composed of 11 members, appointed by and serving at the pleasure of the Governor. The chair represents business. The Board consists of seven members representing business (two of whom must be from business entities that employ fewer than 50 employees), two representing labor, one representing secondary education, and one representing postsecondary education.

House Bill 1863 provided for staff support through the Texas Council on Workforce and Economic Competitiveness. Using the Council staff to support and assist the Board enabled the members to begin their work in a relatively short time.

The Legislature charged the Board with four main functions. House Bill 1863 states that the Board shall:

- 1) validate 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;
- 3) review standards developed by other states and nations and enter into agreements for mutual recognition of credentials to enhance portability of skills; and
- 4) promote the use of standards and credentials among employers.



First Year Highlights

Adopted Skill Standards System Model

In its first year, the Board modified and adopted a proposed skill standards system model, designed and recommended by the Texas Skill Standards Research and Communications Project (TSSRCP), a research team funded in 1995 by the Texas Higher Education Coordinating Board and the Texas Education Agency. The model, shown on the next page, illustrates how the system will work, using the classic supply-and-demand model of economics theory. It displays the relationship between the main participants involved in the implementation of the system and the roles and responsibilities of each.

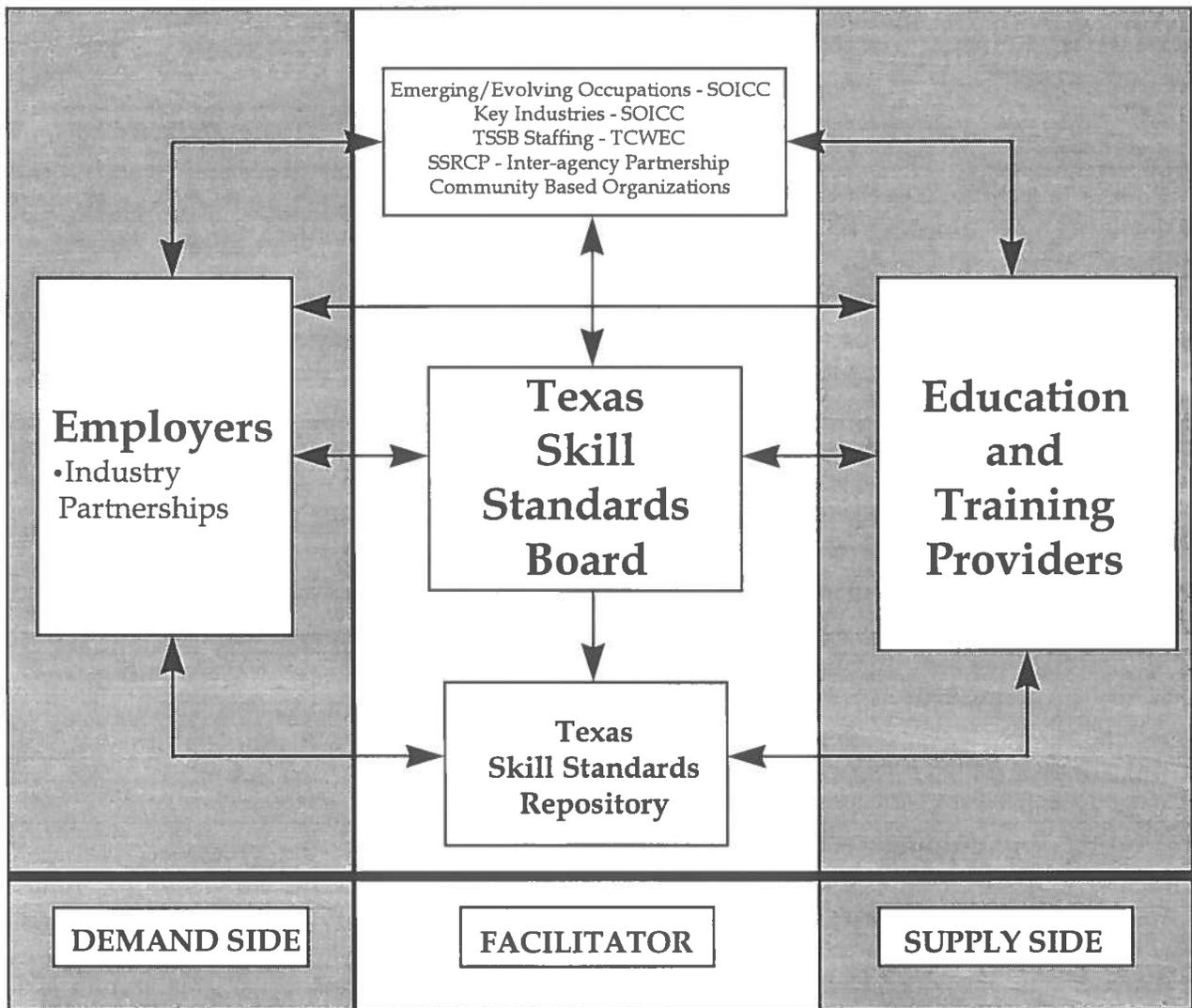
Demand Side: Role of Employers

Employers represent the demand side of the model. Successful implementation requires that they drive the skill standards system. Organized into industry-driven partnerships composed of all major stakeholders, their primary role is to identify and validate skill standards. Other responsibilities of the industry partnerships include: establishing assessment systems, establishing certification systems, updating and keeping the standards current, and promoting skill standards among their industry.

Supply Side: Role of Education and Training Providers

Educators and training providers are also key stakeholders in the proposed system. Once skill standards are defined, educators and training providers develop new curricula or update existing curricula for educational, community-based, and/or work-based training programs to meet the needs of the workplace. Educators and training providers can then teach to a recognized standard. The role of the educators and training providers in the voluntary skill standards system includes: providing skills-based education and training, establishing assessment systems, establishing certification systems, establishing a skills attainment registry, and promoting skill standards.

Diagram 1:
State of Texas
Proposed Skill Standards and Certifications System Model
 as recommended by the Texas Skill Standards Board



Facilitator: Role of Texas Skill Standards Board

The Texas Skill Standards Board serves as a catalyst for the development of a voluntary statewide skill standards system. The Board's role is to encourage and facilitate the formation of Industry Partnerships, and to establish endorsement criteria and guidelines for the partnerships to follow. The Board also reviews and approves standards developed by industry partnerships based on consistency with the endorsement criteria and guidelines. Once approved, the skill standards are deposited into a statewide repository, and become public domain, where they can be accessed by electronic or traditional means. Employers, employees, educators, training providers, students, and other interested individuals or parties may retrieve skill standards from the repository for the purposes of curriculum or training program development and/or revision.

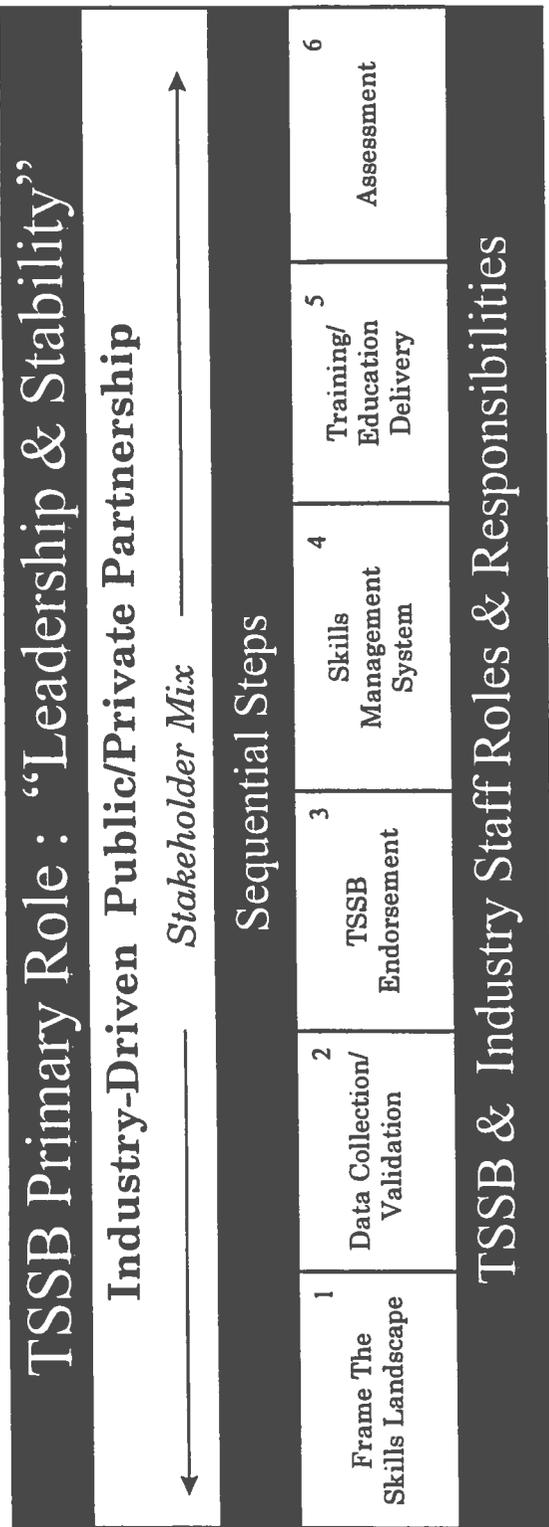
Approved Texas Skill Standards Infrastructure (TSSI)

The Board approved a truly industry-driven process for the development of skill standards in Texas. The Texas Skill Standards Infrastructure provides industry partnerships with general guidelines for the development of skill standards within an overall workforce development strategy to improve economic competitiveness. The Infrastructure describes six sequential steps that industries can follow, beginning with the establishment of a private-public partnership through assessing their return on investment.

As indicated in the chart on the following page, the six steps are: 1) Frame the Skills Landscape; 2) Data Collection and Validation; 3) Texas Skill Standards Board Endorsement; 4) Skills Management System; 5) Training/Education Delivery; and 6) Assessment. Industry partnerships or groups of employers can start at any stage in the infrastructure cycle, depending on how much work they have already done with skill standards. The first step, Framing the Skills Landscape, involves establishing the partnership, setting goals, identifying and prioritizing occupations for which to develop skill standards, determining funding needs and sources, establishing performance goals, and determining return-on-investment requirements.

Data Collection and Validation is the heart of the skill standards development. During this step, current workers or "subject matter experts" identify the skills and skill levels required to perform on the job. A survey is also disseminated across the industry to verify the subject matter experts' assessment of the skills and skill levels needed. The survey data is analyzed and the resulting skill standards are submitted to the Texas Skill Standards Board for endorsement.

Diagram 2: Texas Skill Standards Infrastructure (TSSI)



- ◆ Define Partnership
- ◆ TSSB Endorsement Guidelines
- ◆ Resource Review / Job Identification
- ◆ Prioritize
- ◆ Resource Matching
- ◆ Performance Goals
- ◆ ROI Requirements
- ◆ SME Meeting Preparation
- ◆ Conduct SME Meetings:
- ◆ Industry Enterprise
- ◆ Build Inventory: ◆ KSAO's
- ◆ Tasks/Duties
- ◆ General Work Areas (GWA)
- ◆ Survey Construction
- ◆ Survey Deployment
- ◆ Data Analysis
- ◆ TSSB Submission
- ◆ Reviewer Activities
- ◆ Reviewer Report
- ◆ TSSB Approves
- ◆ Award/Designation
- ◆ Registration
- ◆ Partnership MOU
- ◆ Reviewer Report
- ◆ TSSB Approves
- ◆ Award/Designation
- ◆ Registration
- ◆ Partnership MOU
- ◆ Operationalize Partnership
- ◆ Implement Plan
- ◆ Performance Measurements
- ◆ Usage Strategy
- ◆ Data Storage Structure/Format
- ◆ Update Strategy
- ◆ Best Practices
- ◆ Skill Acquisition Needs
- ◆ Delivery System
- ◆ Non-Traditional
- ◆ Content Resource
- ◆ Learning Plans
- ◆ Vendor Selection
- ◆ TED Validation
- ◆ Recruitment Rates
- ◆ Performance Impact
- ◆ Project ROI
- ◆ Follow-up
- ◆ Adjustments
- ◆ Next Steps

In Step Three, the Texas Skill Standards Board reviews the skill standards development process for scientific validity and for consistency with the format and definition of skill standards. The skill standards are then catalogued and stored for public access for individual workers, employers, education and training providers, and others.

The last three steps involve how the skill standards will be used and assessing their impact. In Step Four, Skills Management System, the partnership develops a strategic plan to use the skill standards. They can be used for a variety of purposes, including recruiting and hiring, promotion, assessment of workers' skills, training and/or curriculum development. This step also includes identifying a strategy for updating the skill standards and for storing the skill standards. Training/Education Delivery consists of identifying worker skill acquisition needs, developing lesson plans and deciding on what education or training delivery system to use. Assessment is the final step in which the process is evaluated and improvements made. Factors to be considered may include the impact on placement rates, the return-on-investment of the project, adjustments to the process and next steps.

The Board's role is primarily to provide overall leadership and stability to industry partnerships that request the Board's help in facilitating the process. In the coming year, the Board will extensively disseminate and solicit comment on the proposed Texas Skill Standards Infrastructure from industry, education and training providers and the local workforce development system

Received Initial Employer Input

The Board received employer input into the need for skill standards at its meetings and at seven employer roundtable discussions conducted by the Texas Skill Standards Research and Communications Project (TSSRCP). The purpose of the roundtables, which were held around the state this year, was to solicit employer input on the concept of skill standards in general and on the role employers believe industry should play in the Board's proposed voluntary state skill standards system.

Employers at the roundtables responded with a resounding "no" to the question of whether they were able to hire employees with the skills they need. As indicated in the introduction of this report, employers stated that employees are lacking the basic skills of high school-level math, reading and writing, as well as more general workplace skills and character traits. Computer skills were also universally mentioned. Occupationally-specific skills are also needed, according to the employers, depending on the level of job for which they are recruiting. Technicians and specialists need more specific and technical skills.

Employers expressed the benefits of a voluntary skill standards system to be several. They saw skill standards as a way to verify the credentials of applicants seeking work at their companies, serving as a "truth in advertising" document. As one participant put it, "if you have an associate's degree in plumbing, you should be able to plumb." Participants also recognized the potential for skill standards to save employers time and money, and liked the idea of having a common language to communicate with other employers and education and training providers. Finally, they recognized that skill standards could help to increase the overall worker pool for all employers in their industries.

Employers sent a strong message to the Texas Skill Standards Board to ensure that the statewide system is employer-driven. They indicated their willingness to serve on industry partnerships that would identify, validate and continually update skill standards.

Reviewed State, National and International Skills Initiatives

One of the Board's mandates is to validate nationally-established skill standards. This year, the Board began to identify and review national skill standards initiatives. In 1992, the U.S. Departments of Education and Labor funded 22 industry associations and industry-based consortia to develop voluntary skill standards and certification procedures. Two of these skill standards initiatives, for the Photonics industry and for Hazardous Materials Management Technology, were led by Texas-based organizations. These pilot projects were funded prior to the establishment of the National Skill Standards Board in 1994 and received few parameters for developing the standards. As a result, the projects have produced skill standards that vary widely.

The National Skill Standards Board (NSSB), which was established to stimulate the development of a voluntary national system of skill standards, has not adopted any of the 22 initial skill standards projects to date. The NSSB has adopted a framework and endorsement criteria for national skill standards. This year, voluntary partnerships will be convened to further develop the guidelines for the skill standards and certification procedures.

The Board has established a partnership, along with other leading states, with the NSSB. The Board's skill standards development guidelines are designed to fit the Texas economy and be responsive to Texas employers, workers and industry, as required by House Bill 1863. At the same time, in order to achieve portability of skill credentials across the country, the Board understands the importance of establishing standards that are consistent with those being developed at the national level. The challenge will be to coordinate the Board's efforts with those of state and national partners as they all begin

to establish standards on different timetables. Initial meetings with the NSSB and state partners, including Texas, will be followed up in the coming years.

Another of the Board's mandates is to review standards developed by other states and nations and enter into agreements for mutual recognition of credentials to enhance portability of skills. The Board has begun to address this mandate in two ways.

First, the Board has begun to make contact with other states. Texas is one of the leading states in the country in establishing a voluntary statewide skill standards system. Only two other states, Illinois and Indiana, have established skill standards boards. Both of these states' boards have already adopted skill standards in some occupational areas. This year, the Board made initial contact with the representatives of these boards and is making plans to convene the first multi-state meeting in the coming year. Another state that has been included in the discussions is North Carolina. North Carolina's governor is considering establishing a skill standards board through executive order.

Second, the Board has begun to reach across the borders of Texas and the United States to meet with several leading countries in the skill standards development movement. This year, the Texas Skill Standards Research and Communications Project (TSSRCP) facilitated a ground-breaking international exchange in Texas between representatives of the National Skill Standards Board, the Texas Skill Standards Board, the Illinois Occupational Skill Standards and Credentialing Council, and skill standards representatives from Canada, Mexico and Australia. These countries and the State of Illinois, which are all farther along in their development of a skill standards system than Texas, shared with the Board their insights and lessons about how to proceed. This exchange was part of the Board's efforts to develop a skill standards system for Texas that is benchmarked to the highest standards in the world to ensure that the Texas workforce will be able to compete in today's global economy.



Challenges for the Future

The major initiatives the Board will undertake in its second year are the following:

- Conduct request-for-comment process to business/industry and education on the Board's proposed Texas Skill Standards Infrastructure guidelines and endorsement criteria.
- Facilitate the establishment of industry partnerships to develop skill standards, credentials and management systems.
- Promote skill standards in the broader workforce development system, including education and training providers and the regional network of workforce development boards.
- Help to establish bridges between the setting of skill standards by employers and the development by educators of curriculum based on the standards.



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