ASSESSING STUDENTS' TE
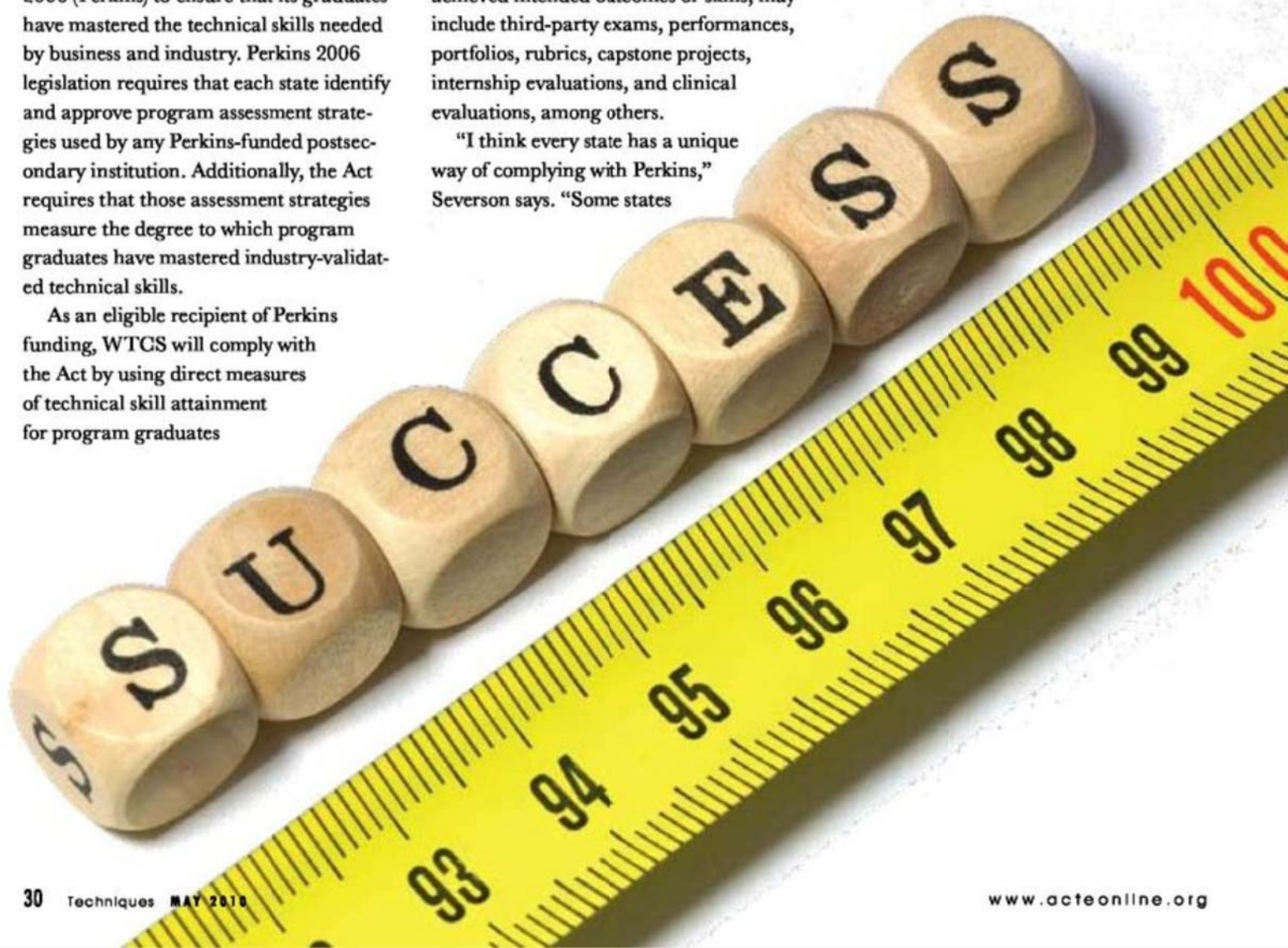# SKILL ATTAINM

BY HALEY JORGENSEN

The Wisconsin Technical College System (WTCS) is working to comply with the Carl D. Perkins Career and Technical Education Improvement Act of 2006 (Perkins) to ensure that its graduates have mastered the technical skills needed by business and industry. Perkins 2006 legislation requires that each state identify and approve program assessment strategies used by any Perkins-funded postsecondary institution. Additionally, the Act requires that those assessment strategies measure the degree to which program graduates have mastered industry-validated technical skills.

As an eligible recipient of Perkins funding, WTCS will comply with the Act by using direct measures of technical skill attainment for program graduates

within the 16 Wisconsin Technical Colleges, according to Annette Severson, WTCS associate vice president, Office of Instruction. Those direct measures, which provide evidence that students have achieved intended outcomes or skills, may include third-party exams, performances, portfolios, rubrics, capstone projects, internship evaluations, and clinical evaluations, among others.

"I think every state has a unique way of complying with Perkins," Severson says. "Some states

will only use third-party, vendor-related student assessments, such as exams. We think that relying solely on vendor exams misses the mark because some programs

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don't have a good third-party tool sensitive to local business and industry."

That's why WTCS is using third-party assessments of student skill attainment only when it is appropriate for the specific program, such as nursing, and developing unique performance-based assessments when it isn't.

Wisconsin's Technical Skill Attainment Rubric

The 16 WTCS technical colleges are pooling resources, sharing ideas and working together to create "Technical Skill Attainment" (TSA) assessment rubrics for programs that cannot appropriately measure student skill attainment by third-party assessments. For WTCS programs sponsored by multiple colleges, each college is collaborating to develop a common TSA assessment for measuring student achievement of a set of common core program outcomes. WTCS colleges that sponsor unique programs are also developing TSA assessments.

The new TSA assessments, which will be developed for apprenticeship training or any program of one year in length or greater, allow evaluators to determine if students are meeting core program outcomes/skills or not. The assessments measure student achievement of industry relevant program outcomes using one or more scoring guides and/or optional third-party assessments. Simultaneously,

the new TSAs ensure that program outcomes derive directly from valid industry standards. WTCS TSA program outcomes, according to Severson, are derived from and linked to valid industry and/ or academic standards; derived from and linked to a current DACUM occupational analysis; and/or reviewed by industry representatives.

Faculty Representatives Collaborate in TSA Rubric Development

Already, several TSA assessments have been developed for WTCS programs, including accounting, early childhood education and welding. Dozens more are in the works.

"Every program offered by multiple WTCS colleges must have one TSA," says Judy Neill, director of the Worldwide Instructional Design System (WIDS), a nonprofit organization that provides performance-based curriculum design software, training and consulting services. The WIDS model and software are used throughout Wisconsin's 16 technical colleges for course and program development. WIDS consultants are facilitating the TSA development process, working with faculty representatives from each technical college.

"WIDS is a key partner for WTCS because the model and software provide a consistent framework across all districts to work on these projects," says Severson. As part of the TSA development process, any of the 16 technical colleges offering accounting, for example, send faculty representatives to the table to identify common program outcomes—the first step in creating a TSA assessment rubric.

In the end, the TSA rubrics identify core technical skills measured across each program on a system-wide basis, according to Neill. "It's exciting because Wisconsin is striving to have true assessment of student learning, instead of going for the lowest common denominator of compliance." The collaboration process is

also a plus, she maintains. "Collaboration is valuable because instructors from multiple colleges share ideas, strengthen their network and have the opportunity to create and apply new assessment strategies," she says. "Some of the colleges already have program outcomes, so the TSA assessment development process gives them another opportunity to examine and refresh those outcomes with help from other instructors and advisory boards."

WTCS already has a great technical education track record, adds Severson. According to a graduate follow-up study that surveyed 2008 WTCS graduates, 91 percent of the 13,104 respondents were employed. "We have our own system that focuses on technical education," says Severson, "so we've always done a great job. We are not going to see huge improvements as a result of the new TSAs, but they will help us keep our eye on the ball."

Once the TSAs are developed and approved, each of the 16 colleges submits a college implementation plan for approval. That plan shows strategies for administering assessments, the assessments they plan to use, and how the college will collect and report data.

"At the district level, for a student in a program where a TSA measure is identified, the district will report the number of students who took the assessment, passed the assessment, and the number who did not pass the assessment," says Severson. Then, WTCS will gather the data and report the data as defined by Perkins 2006.

Going Beyond Perkins 2006—TSA Side Benefits

The entire process—developing the TSA assessments, gathering the data and reporting the data—may also glean improvements in teaching, learning and curriculum, according to Neill. Though TSA assessment is core to the WTCS evaluation of technical skill attainment, it isn't the entire picture. On the local level,

WTCS colleges are encouraged also to assess core abilities and any additional program outcomes that meet unique local needs as defined by local program advisory committees. The ability of individual colleges to add program outcomes and core abilities unique to their area is central to the way in which Wisconsin's technical colleges function, according to Neill.

WTCS Education Director Barb Schuler, of the Family, Consumer and Related Human Services Office of Instruction, worked closely on development of the new Early Childhood Education program TSA rubric. "The tool," she says, "is based on industry standards so students are assured they are focusing on the most critical competencies within a program and that those competencies are the ones identified by employers and industry leaders as the most important."

The TSA development, she maintains, is yet another chance to align outcomes with business and industry—assuring needed industry skills are being taught and mastered.

WIDS consultant Terri Johnson, who has facilitated the development of several program TSAs, feels the new TSA rubrics are multidimensional. "A college can use the TSA to validate student skills, but it also gives program improvement data back to the school. Instructors can see the results, identify where students performed poorly and adjust the curriculum to do better," says Johnson. "The TSA rubric is an excellent tool to gather data and use it. It's something the colleges can use for multiple purposes."

Neill, Johnson and Schuler attest that the new TSAs create additional opportunities to review and improve areas of teaching and learning according to the needs of business and industry.

"A final program exam is inappropriate for a field such as Early Childhood Education, since it is merely a paper and pencil test," says Schuler, who worked on developing the program's TSA. "This rubric examines the interactions between students and children and other staff, plus family members, and it assesses the ability to demonstrate application of theory to practice."

"What Wisconsin is doing with the TSA assessments is different from many other states," says Neill. "Rather than placing the primary focus on third-party exams, we are building on our foundation of performance-based learning and assessment, and simultaneously, expanding WTCS collaborations and direct industry input."

Mike Tokheim, WTCS education director-Business and Information Technology, agrees. Tokheim collaborated on several TSA assessments, including accounting, business management and paralegal.

"The initiative has helped programs understand where they are uniquely different—and that difference is built on the regional needs of employers," he says.

Through the collaborative process, according to Tokheim, faculty connect, best practices are shared, and programs are aligned more closely with the needs of business and industry. **T**

To discover more about WTCS visit **www.wtcsystem.edu**. To find out more about WIDS visit **www.wids.org**.

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