OVERVIEW: ARIZONA'S TECHNICAL SKILLS ASSESSMENTS

The Technical Skills Assessment System is a secure, reliable, online testing application owned by the State of Arizona and housed in the Department of Education. Districts access the assessments on the ADE website to register students for assessments, to conduct assessments, and to access summary reports. Assessments are designed for students in their final Carnegie Unit of state-identified programs.

THE WHAT

Comprehensive, end-of-program assessments that certify and document student attainment of industry-validated technical knowledge and skills

THE WHY

To assist districts in meeting Performance Measures negotiated annually with the USDOE/OCTAE
To assist CTEDs in meeting the accountability requirements of the state legislation
To serve as an indicator for the Arizona School Report Card accountability system
To meet the demands of Arizona business and industry by preparing a skilled workforce
To better inform program instruction and improve student learning

THE WHO

Arizona Career and Technical Education Quality Commission Industry Associations and Program Advisory Committees Career Ready Education Stakeholders Industry Validation Committees for Technical Standards Teacher Item Development and Item Analysis Committees

THE VISIONARY ELEMENTS

State-owned, secure testing application

Online delivery and real-time response to students and teachers

Psychometric methods based on collective informed decisions

No cost to students; expandable system

Valued by stakeholders (business, education, students)

Certificates for students endorsed by Arizona businesses and industries

All assessments are 100 multiple-choice items that align to program technical standards and range from knowledge and comprehension to application, analysis, and evaluation in cognitive difficulty. The majority of the items are operational items that have historically proven to be valid and reliable and the remaining are field-tested items. Students are scored on only the operational items not the field-tested items. Those who successfully complete the 60% pass score requirement receive an industry-endorsed congratulatory letter and certificate.

The assessment system was created in 2006 in response to HB2700 and similar federal legislation that requires students to pass industry-validated end-of-program assessments leading to an industry-recognized credential, postsecondary education, and/or employment. The Arizona Career and Technical Education Quality Commission is the validating authority for the assessment system. These major business and education representatives meet on a regular basis and work diligently in their role as advocates for accountability and excellence in Career and Technical Education.

Teachers serve as content experts in the development of the assessment items. Committees comprised of secondary and postsecondary teachers convene annually to develop, review, and edit assessment items. The expertise of teachers and their engagement in making connections between curriculum, instruction, and assessment has contributed greatly to the advancement of student achievement. In appreciation of their time and expertise, they are awarded a professional development certificate documenting the hours they contribute to the development and improvement of the assessments.

An in-house management system—the physical design of which is driven by performance requirements—accommodates all of the assessment work. This relational database ensures a record of each assessment component and all insertions, updates, and deletions. Features include linked files from which reports are generated, i.e., assessment item banks, item analyses results, assessment statistics, and assessment catalogs for export into the testing application.

Blueprints for Instruction and Assessment ensure that what's being taught is what's on the test. Blueprints for Instruction and Assessment are developed by teachers for all programs. They illustrate the relationship among program standards, instructional time, and student success on the Technical Skills Assessments. Specifically, blueprints identify clusters of standards in content domains and recommend a percentage of instructional time for each domain which also aligns with the degree to which the content of the standards is tested.

Recent changes to the assessment system increase test fairness and reliability and ensure CTE accountability. Between July 2016 and August 2017, the assessment system underwent major changes. Assessments were redesigned to focus more on valid and reliable content and less on field-tested content. The rating system was changed to 60% for all programs, and the assessment reports were reduced from seven to three reports focusing on student performance and program outcomes. Blueprints for Instruction and Assessment for CTE programs were started and will continue to be developed. And, the assessment delivery application was moved into a new fire security called ADEConnect. These undertakings have shifted the initial intent of the Technical Skills Assessments as practical, reliable, and valid end-of-program assessments to high stakes testing and accountability.