Six Ways to Ensure Student and Program Success on the Technical Skills Assessments



Six Ways to Ensure Student and Program Success on the Technical Skills Assessments (TSAs)

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For questions or assistance, please contact a member of the Technical Standards, Technical Skills Assessments, Career Development Collaboration Team:

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Update – 1 Teach the content of the technical standards.

(Below is an example of technical standards and measurement criteria from the Education Professions program.)

EDUCATION PROFESSIONS TECHNICAL STANDARDS

STANDARD 1.0 EXAMINE THE STRUCTURE AND OPERATION OF EDUCATION

- 1.1 Identify types of education systems (e.g., elementary, middle school, high school, and college or university)
- 1.2 Identify types of schools (e.g., traditional public schools, public charter schools, public magnet schools, private schools, online academies, and homeschooling)
- 1.3 Explain the typical organizational structure of a school (e.g., school board, superintendent, district and school leadership, teachers, and support staff)
- 1.4 Identify a school's most important stake community leaders and business owne
- 1.5 Research legislative issues that affect daily membership (ADM), truancy and
- Discuss challenges that schools face (i parent involvement, etc.)
- 1.7 Explain factors that contribute to schoo expectations for students and staff, par
- 1.8 Identify career paths in education (i.e., administrator, curriculum developer, ins
- Identify certifications available in the ed English as a second language, informa

STANDARD 2.0 EXAMINE THE HIST

- 2.1 Outline the history of education in the U
- 2.2 Identify the major philosophies of education perennialism, existentialism, etc.)

- Pay attention to the verb at the beginning of each standard and measurement criteria.
- To clarify content, notice i.e. (to explain or clarify) and e.g. (examples of content that must be taught).
- Identify content that you are not familiar with and get help.
- Check out the Arizona CTE Curriculum Consortium's resources available from the CTE Curriculum Connection.
- Team up with another teacher and/or check with your program specialist for assistance.
- Ask for professional development. Let us know your challenges with the standards.
- 2.3 Describe the benefits of being a teacher and the challenge to build an educated society (i.e., career outlook, building relationships with students, transferrable skills, job satisfaction, opportunities to learn, sense of community, etc.)
- 2.4 Examine current education issues in schools today that directly affect teaching (i.e., school safety, funding, disciplinary policies, technology in education, school vouchers, standardized testing, teacher salaries, recruitment and retention, etc.)

STANDARD 3.0 EXAMINE THE PROFESSIONAL RESPONSIBILITIES OF TEACHERS AND PARAPROFESSIONALS

- 3.1 Research how to obtain and maintain an educator certification from the Arizona Department of Education
- 3.2 Identify areas of teacher professionalism [i.e., professional growth, collaboration, instruction, communication, confidentiality (e.g., FERPA), etc.]
- 3.3 Explain the curricular roles of teachers [i.e., lesson plan development, classroom time management, team planning and meetings, professional learning communities (PLCs), data input and analysis, professional development, etc.]
- 3.4 Describe additional duties and/or extracurricular activities of teachers (i.e., playground supervision, lunch supervision, managing student clubs, coaching sports, assisting with school events, etc.)
- 3.5 Discuss the supervisory and leadership roles of teachers (i.e., mandatory reporting, priority management, supervision of paraprofessionals, community leadership, etc.)
- 3.6 Describe the collaborative roles of teachers (i.e., mentor relationships; mutual classroom observations; sharing ideas and experiences with colleagues; collaborating with special education specialists, gifted specialists, counselors, and reading specialists; collaborating with families and caregivers, etc.)
- 3.7 Explain a paraprofessional's roles and responsibilities (i.e., specially trained, credentialed, educated worker who provides educational staff support; responsibilities include assisting with lessons, daily classroom activities, and with paperwork and reports; etc.).
- 3.8 Discuss the collaborative role of the paraprofessional with district and site-level support staff (i.e., working with classroom teachers, special education specialists, gifted specialists, occupational, speech therapists, reading specialists, etc.)
- 3.9 Discuss options to become a paraprofessional (e.g., earn a high school diploma or GED, complete a college education, obtain training or experience, pass an assessment, and/or earn certification)
- 3.10 Describe steps to transition from a paraprofessional to a teacher (i.e., follow ADE requirements, organizational pathways, etc.)

Update – 2 Use the Blueprint for Instruction and Assessment, Instructional Framework, and Instructional Terminology to inform teaching and learning.

(Below are examples of the Blueprint for Instruction and Assessment, Instructional Framework, and Instructional Terminology for the Education Professions program.)

BLUEPRINT FOR INSTRUCTION AND ASSESSMENT

Domain	Related Stand	Instructional Time			
Domain 1 Instructional Strategies	STANDARD 7.0 EXAMI ENGAGEMENT ON ST STANDARD 8.0 CONST LEARNERS	40 - 50%			
Domain 2 Inclusive Practices		ARNING • The Blueprint for Instruction and Assessmen			
Domain 3 Roles in Education	STANDARD 3.0 EXAMI PARAPROFESSIONAL: STANDARD 4.0 EXAMI	Technical Skills Assessment.	the		
Domain 4 History, Philosophy, and Structure of Education	STANDARD 1.0 EXAMI STANDARD 2.0 EXAMI	en e			
Domain 5 Technology in Education	STANDARD 9.0 EXAMINE THE USE OF TECHNOLOGY IN EDUCATION 5 - 10				

INSTRUCTIONAL FRAMEWORK

Domain 1: Instructional Strategies Instructional Time: 40 - 50%

STANDARD 7.0 EXAMINE THE IMPACT OF CLASSROOM MANAGEMENT AND STUDENT ENGAGEMENT ON STUDENT LEARNING

- 7.1 Explain classroom management as the foundation for effective student learning (e.g., establish and sustain an orderly environment for students, create opportunities for meaningful learning, consider whole group instruction, paired activities, and small group instruction)
- Classroom management
 - o Establish and sustain an orderly environment for students
 - Create opportunities for meaningful learning
 - o Consider whole group instruction
 - Paired activities
 - o Small group instruction
- Difference between rules and procedures
- Proactive and reactive classroom management techniques
- Student engagement and active participation
- 7.2 Compare and contrast research- and evidence-based methodologies and techniques for classroom management (e demonstrate model behavior; allow students to help establish procedures, and consequences; encourage initiative; and pra good behavior/results)
- The <u>Instructional Framework</u> identifies, explains, and expands the content of the standards and measurement criteria and is used to guide the development of multiple-choice items for the Technical Skills Assessments.
- <u>Instructional Terminology</u> provides consistent definitions used in teaching the program standards.

INSTRUCTIONAL TERMINOLOGY

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Active Participation- the intentional techniques a teacher uses to ensure constant engagement of students

Accommodation (Also in Domain 2) - adjusting existing lesson plans or changing settings, delivery methods and assessment techniques to ensure student success

Aligned- to bring into agreement with the state and district standards

Anticipatory Set- the first step of a lesson plan where a teacher actively engages students with the content

THE TECHNICAL SKILLS ASSESSMENT REPORTS—WHAT THEY ARE AND HOW TO USE THEM

All roles and permission levels for the CTE Technical Skills Assessments can access the reports. All reports are easy to build from the requested information. See the next page for how to access the Technical Skills Assessments Dashboard to register students to take the test and to get the TSA reports and other assessment-related resources.

Student and Program Assessment Results

This report is organized by a single student or a single program. The Student Report shows the percentage of correct responses for each standard and the overall assessment score based on the student's total percentage of correct responses. The Program Report shows the percentage of correct responses for each standard based on the responses of all students. Administrators and teachers can review the results to make curricular changes in the scope and sequence and to identify program strengths to facilitate best practices among campuses. Available formats: web page with easy conversion to PDF and Excel.

Statewide Performance Results

This report is organized by Statewide results, Non-CTED results, All CTEDs results, or for a Single CTED selection. Sorted by highest to lowest assessment scores, it shows the number of students tested, the average score, and the percentage of students who passed. In this report, student counts under 10 are suppressed (*). Administrators and teachers can view each school's performance relative to other districts and schools that offered the same program. Available formats: web page with easy conversion to PDF and Excel.

Total Program Results

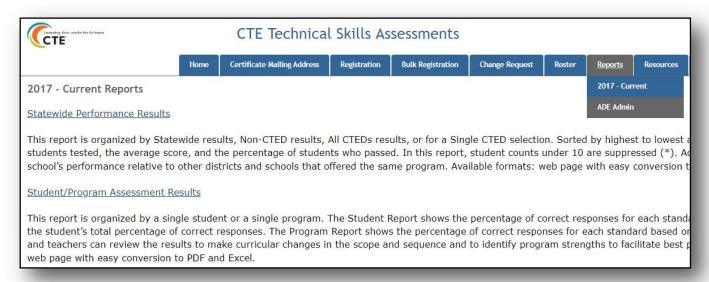
This multiple program report is organized by CTED, district, school, and teacher. It shows the Student Unique ID, program assessment, testing date, student score, school of attendance, gender, special population classification, grade level, and teacher email. Administrators and teachers can review the number of students tested and pass scores by program. Available formats: web page with easy conversion to PDF and Excel.

The TSA score for a program is shown as a percentage (60% of 80 operational items passed). When comparing the scores of two or more programs in a school/district or when comparing a single program's score with the statewide score, there are several variables to consider when interrupting the score/score differences. For example,

- Number of program sites being compared
- Number of students being tested (consider also gender and grade level)
- Number of students with special needs/accommodation requirements
- Newness of the program's technical standards
- Teacher turnover (consider background and experience)
- Teacher commitment to the TSAs (i.e., Are you involved in writing and reviewing the assessment items? Do the assessment item banks sufficiently match the domain percentages of the Blueprint for Instruction and Assessment?)

HOW TO ACCESS THE TECHNICAL SKILLS ASSESSMENT DASHBOARD TO REGISTER STUDENTS TO TAKE THE TSA AND TO GET REPORTS

Go to the ADE website, click on ADEConnect at the top of the page, click on Applications, and select CTE Technical Skills Assessments. This will take you to the Technical Skills Assessments Dashboard. The Reports tab is open in the illustration below.



IF YOU DO NOT HAVE ADECONNECT...All test coordinators and teachers must be assigned access to ADEConnect. Work with your District Entity Administrator to get access to ADEConnect and to assign assessment roles and permissions. Note: **You must login through ADEConnect not through the district's SIS**.

ADECONNECT PERMISSION LEVELS AND ROLES FOR TECHNICAL SKILLS ASSESSMENTS					
Level 1	Assessment Coordinator for CTED, District, School, Community College	Access to enter, modify, view, and maintain registration, rosters, assessment time, and reports			
Level 2	Teachers/Proctors/Other Staff Designated by Assessment Coordinator	Access to view, print, add time to assessments, and download reports for the school and teacher			
Level 3	Others Identified at the Discretion of the Assessment Coordinator	Access to READ ONLY the registration, roster, and reports			

QUESTIONS ABOUT ACCESS TO ADECONNECT are directed to ADE Support at adesupport@azed.gov or 602-542-7378.

QUESTIONS ABOUT THE APPLICATION AND ROLE ASSIGNMENT are directed to the District Entity Administrator or send an email to CTEAssessmentHelp@azed.gov.

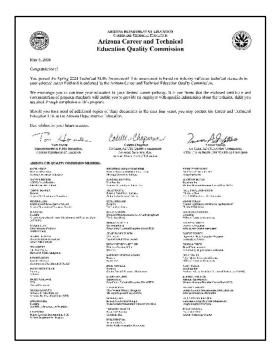
FOR COMPLETE TSA INFORMATION, consult the <u>CTE Technical Skills Assessments User Guide</u> available on the TSA Dashboard under the Help tab.

STUDENT ELIGIBILITY TO TAKE THE TECHNICAL SKILLS ASSESSMENTS

- 1. **In a traditional or block schedule,** a student should take the test when completing two courses worth one credit each in a single CTE program or when completing three courses worth one credit each in a single CTE program.
- 2. **If a district adds courses** to a program beyond the state's designated course sequence in a single CTE program, it will be the district's decision as to when the student will take the test, that is, after the 2nd, 3rd, or 4th course.
- 3. **If a student fails the test** and retakes a course, takes an additional course, or participates in a work-based learning opportunity in a single CTE program, the student can retake the test in the next school year prior to graduation through special arrangements with ADE/CTE.
- 4. If an IEP or 504 plan states that the student can take the test more than one time, the student can retake the test in the current or next school year prior to graduation through special arrangements with ADE/CTE. The last test score counts.

Note: Through special arrangements with ADE/CTE, mentioned in policy statements 3 and 4, refers to the completion, submission, and final approval of the Change Request form found on the TSA dashboard.

Questions: Please contact us at 602-542-5452 or CTEAssessmentHelp@azed.gov.





Students who receive a passing score on the Technical Skills Assessment receive a congratulatory letter and certificate endorsed by Arizona's industry leaders.

CTE PROGRAMS WITH TECHNICAL SKILLS ASSESSMENTS FOR 2024-2025

Programs with new/updated standards tested on for the first-time in the Fall and Spring are highlighted below.

CIP	PROGRAM	CIP	PROGRAM
52.0301.00	Accounting	52.1900.20	Fashion Design and Operations
01.0000.00	AgriScience	50.0602.00	Film and TV Production
47.0608.00	Aircraft Mechanics (updated in 2024)	52.0801.00	Finance
36.0202.00	Air Transportation	43.0202.00	Fire Service
15.1303.00	Architectural Drafting	50.0409.00	Graphic Design
14.4201.00	Automation and Robotics	49.0202.00	Heavy Equipment Operations
47.0603.00	Automotive Collision Repair (updated in 2024)	51.2602.00	Home Health Aide
47.0604.00	Automotive Technologies	52.0900.00	Hospitality Management
41.0100.00	Bioscience	50.0408.00	Interior Design
52.0201.00	Business Management	51.0802.00	Laboratory Assisting (updated in 2023)
52.0408.00	Business Operations	43.0100.00	Law and Public Safety
48.0703.00	Cabinetmaking	52.1801.00	Marketing (updated in 2023)
46.0201.00	Carpentry	15.1306.00	Mechanical Drafting
46.0415.00	Construction Technologies	51.0801.00	Medical Assisting Services
12.0400.00	Cosmetology and Related Services	51.1502.00	Mental and Social Health Technician
12.0500.00	Culinary Arts	15.0307.00	Music and Audio Production
51.0600.00	Dental Assisting	11.1999.00	Network Security (updated in 2024)
47.0613.00	Diesel Engine Repair (updated in 2024)	51.3902.00	Nursing Services
10.0304.00	Digital Animation	51.0805.00	Pharmacy Support Services
09.0702.00	Digital Communication	48.0510.00	Precision Machining
50.0605.00	Digital Photography	11.0202.00	Software and App Design (updated in 2024)
10.0200.20	Digital Printing	51.0913.00	Sports Medicine and Rehabilitation
13.1210.00	Early Childhood Education	50.0599.00	Stagecraft
13.1200.00	Education Professions (updated in 2023)	15.1202.20	Technology Devices Maintenance
14.1001.00	Electronic Technologies	51.3501.00	Therapeutic Massage
51.0904.00	Emergency Medical Services (updated in 2023)	01.8301.00	Veterinary Assisting
15.0000.00	Engineering	48.0508.00	Welding Technologies

FALL 2024 TESTING SCHEDULE			
October 1 – December 5	Registration for Fall Assessments		
October 1 – December 6 at Noon	Fall Testing Period		
December 9 – December 13	Congratulatory Letters, Certificates, Transcripts Delivered to Districts		
SPRING 2025 TESTING SCHEDULE			
February 24 – May 1	Registration for Spring Assessments		
February 24 – May 2 at Noon	Spring Testing Period		
May 5 – May 9	Congratulatory Letters, Certificates, Transcripts Delivered to Districts		

TIPS ON PREPARING STUDENTS FOR THE ASSESSMENTS

Assessment Overview:

Why is the assessment important? The assessment verifies students' attainment of the technical knowledge and skills taught as part of the program standards and measurement criteria. Assessment outcomes are used to inform program instruction and to meet Performance Measures and A-F School Accountability reporting.

When should students take the test? The assessment is designed for students who have passed at least two courses of a state-approved program. Students can only take the test once in the fall or in the spring.

How is the test given? The TSA is a computer-based test best given in a computer lab. On the day of testing, a test proctor will check the roster and verify student attendance, see that students correctly login to the assessment site, and instruct students in taking the test.

How long is the test? Ideally, students should have at least 2 hours to take the test. Items are designed with the expectation of a 1-2 minute response time for each item. If the computer lab must be evacuated due to an emergency, students will be able to log back in to finish the assessment. If there is insufficient time to complete the test, the test proctor or test administrator can add additional time.

How can students with IEPs and 504 plans be accommodated for testing purposes? The same accommodations made for teaching students with special needs should also be made for testing. Some examples are extended time, small group setting, use of notes, assistive technology, and paraprofessional assistance. See the Universal Test Administration Conditions and Accommodations Guide for suggestions about how to help all students demonstrate their best achievement on the CTE Technical Skills Assessments (TSAs). This guide is available at https://www.azed.gov/cte/assessments.

What are some ways to prepare students to take the assessment?

1. Explain the purpose of the assessment.

The assessment measures students' knowledge and skill attainment. Since this is an end-of-program assessment, the items cover a broad range of content. Those who successfully complete the 60% pass score requirement receive an industry-endorsed congratulatory letter, certificate, and documentation of their program standards.

2. Review the mechanics of multiple-choice items.

Each item consists of a stem phrased as a question followed by four options consisting of one correct response and three distractors. Students may be asked a question about a graphic or an image. Graphics and images may also appear as options from which to select the correct response.

- 3. Review concepts, terms, definitions, symbols, processes, problem-solving strategies, safety requirements, etc., that have been taught in the program. For example:
 - Practice reading and interpreting multiple-choice questions.
 - Review tests that have been generated for various classroom/lab activities.
 - Have students develop multiple-choice items to be assembled as a practice test.
 - Post one review question or problem every day for a period of time prior to the test date. Tell students to keep track of the questions and answers in their notebooks.

Update – 6 Prepare your students to take the test *continued.*

- Flashcards are an ideal study technique to help students become familiar with vocabulary, definitions, terms, and facts. Students could use flashcards in pairs or small groups.
- Provide an incentive such as extra points for passing the test.
- Talk up the certificate and standards students will get for passing the test. These documents are endorsed by Arizona business and industry and can be used when they apply for a job.

4. Review strategies for maximizing success on multiple-choice items.

- ✓ Don't get distracted by other test-takers.
- ✓ Pace yourself.
- ✓ Read the question and identify key words and phrases.
- ✓ Read all the options before choosing the BEST response.
- ✓ Eliminate the options you know are incorrect.
- ✓ Reread the question for clues to the correct response.
- ✓ If a question is difficult, mark it as skip and come back to it later.
- ✓ If you answer a question, but you are not sure about the answer, mark it for review.
- ✓ Don't change your answer unless you are 100% certain.
- ✓ Use the scratch paper provided or the calculator on the computer for math problems.
- ✓ Take time to return to the items that were skipped and marked for review.
- ✓ Look at your test results and send a copy to your email to review with your teacher later.

5. Tell students what to expect on the day of testing.

- A test proctor will walk you through every step of the testing process.
- You will be told how to log in to the assessment site, and you will be given a password to take your test.
- You will be able to SELECT the correct answer for an item, SKIP the item to come back to later, MARK the item for review, SAVE the answer, and SUBMIT the test.
- Once you have submitted your test, you will be able to REVIEW the results and send a copy to your email address.

NOTE TO TEACHERS:

Remind students to complete and submit the test. Look at the statewide data for Spring 2024 Assessment Participation on the next page. Notice for each program the number of students who were registered for the test (Total Students Registered) and the number of students that finished the test (Students Tested). What happened to the students who did not take or finish the test? Did they just quit, or did they fail to submit the test?

SPRING 2024 ASSESSMENT - STATEWIDE PARTICIPATION SUMMARY

CIP	Program	Total Students Registered	Students Tested	Students Passed	Percent Students Passed	Pass Soore	Statewide Average Score Percentage
52.0301.00	ACCOUNTING	140	132	81	61%	60%	60%
01.0000.00	AGRISCIENCE	1682	1618	1204	74%	60%	68%
36.0202.00	AIR TRANSPORTATION	220	206	141	68%	60%	65%
47.0608.00	AIRCRAFT MECHANICS	52	52	34	65%	60%	65%
15.1300.00	ARCHITECTURAL DRAFTING	85	84	35	41%	60%	55%
14.4201.00	AUTOMATION AND ROBOTICS	74	69	40	57%	60%	59%
47.0603.00	AUTOMOTIVE COLLISION REPAIR	156	141	84	59%	60%	61%
47.0604.00	AUTOMOTIVE TECHNOLOGIES	1596	1513	709	46%	60%	56%
41.0100.00	BIOSCIENCE	625	614	442	71%	60%	66%
52.0201.00	BUSINESS MANAGEMENT	1373	1300	923	71%	60%	66%
52.0408.00	BUSINESS OPERATIONS	416	359	298	83%	60%	72%
48.0703.00	CABINETMAKING	277	246	121	49%	60%	56%
46.0201.00	CARPENTRY	233	216	57	26%	60%	50%
46.0415.00	CONSTRUCTION TECHNOLOGIES	1179	1090	497	45%	60%	56%
12.0400.00	COSMETOLOGY AND RELATED SERVICES	733	679	626	92%	60%	74%
12.0500.00	CULINARY ARTS	4730	4516	3621	80%	60%	70%
51.0600.00	DENTAL ASSISTING	261	260	227	87%	60%	71%
47.0613.00	DIESEL ENGINE REPAIR	115	108	39	36%	60%	52%
10.0304.00	DIGITAL ANIMATION	186	149	131	87%	60%	73%
09.0702.00	DIGITAL COMMUNICATION	280	249	162	65%	60%	62%
50.0605.00	DIGITAL PHOTOGRAPHY	1271	1224	904	73%	60%	66%
10.0200.20	DIGITAL PRINTING	48	35	5	14%	60%	44%
13.1210.00	EARLY CHILDHOOD EDUCATION	1467	1424	1321	92%	60%	76%
13.1200.00	EDUCATION PROFESSIONS	498	462	436	94%	60%	81%
14.1001.00	ELECTRONIC TECHNOLOGIES	65	62	8	12%	60%	45%
51.0904.00	EMERGENCY MEDICAL SERVICES	239	234	206	88%	60%	70%
15.0000.00	ENGINEERING	1289	1233	1040	84%	60%	74%
52.1900.20	FASHION DESIGN AND MERCHANDISING	266	251	186	74%	60%	68%
50.0602.00	FILM AND TV PRODUCTION	1580	1517	1299	85%	60%	74%
52.0801.00	FINANCE	399	383	351	91%	60%	77%
43.0202.00	FIRE SERVICE	427	413	306	74%	60%	68%
50.0409.00	GRAPHIC DESIGN	1731	1660	1256	75%	60%	67%
49.0202.00	HEAVY EQUIPMENT OPERATIONS	52	41	29	70%	60%	65%
51.2602.00	HOME HEALTH AIDE	253	242	210	86%	60%	71%
52.0900.00	HOSPITALITY MANAGEMENT	215	213	143	67%	60%	64%
52.1900.30	INTERIOR DESIGN	110	106	88	83%	60%	69%
51.0802.00	LABORATORY ASSISTING	50	48	46	95%	60%	74%
43.0100.00	LAW AND PUBLIC SAFETY	1632	1567	1224	78%	60%	68%
52.1801.00	MARKETING	2103	2005	1755	87%	60%	74%
15.1306.00	MECHANICAL DRAFTING	68	68	36	52%	60%	60%
51.0801.00	MEDICAL ASSISTING SERVICES	1217	1190	1110	93%	60%	76%
51.1502.00	MENTAL AND SOCIAL HEALTH TECHNICIAN	202	191	184	96%	60%	82%
15.0307.00	MUSIC AND AUDIO PRODUCTION	159	151	123	81%	60%	69%
11.1999.00	NETWORK SECURITY	286	273	164	60%	60%	63%
51.3902.00	NURSING SERVICES	838	826	776	93%	60%	75%
51.0805.00	PHARMACY SUPPORT SERVICES	190	188	171	90%	60%	73%
48.0510.00	PRECISION MACHINING	37	36	30	83%	60%	67%
11.0202.00	SOFTWARE AND APP DESIGN	1904	1825	1172	64%	60%	62%
51.0913.00	SPORTS MEDICINE AND REHABILITATION	3025	2944	2095	71%	60%	66%
50.0599.00	STAGECRAFT	700	664	470	70%	60%	64%
15.1202.00	TECHNOLOGY DEVICES MAINTENANCE	223	205	136	66%	60%	64%
51.3501.00	THERAPEUTIC MASSAGE	45	43	38	88%	60%	77%
01.8301.00	VETERINARY ASSISTING	352	347	332	95%	60%	77%
48.0508.00	WELDING TECHNOLOGIES	1660	1547	1077	69%	60%	65%
	Total:	39,014	37,219	28,199			