



EOC Field Test Process 2013-2014



THE OHIO STATE UNIVERSITY

CETE
1900 Kenny Road, Columbus, OH 43210

Ohio | Department
of Education

Purpose

This document explains procedures for End-of-Course field testing, an important part of psychometric quality assurance. The purpose of field testing is to examine both individual items and entire modules. This quality assurance process helps CETE staff to select better items to create operational test forms. Field test data can also be used to adjust cutoff scores when finalizing operational test forms.

Changes in 2013-2014

This memo also details changes in field testing procedure. First, field tested assessments now appear on the Ohio CTE Assessment Matrix as required for juniors who have received instruction in that content. Second, field testing closes earlier than operational testing so that QA can be completed before the end of the year. Third, please note that Ground Transportation and Information Technology pathways will be field tested in fall 2014, NOT during the current phase.

Field Tests Available: December 9, 2013 through May 2, 2014

Beginning in February 2013, secondary instructors from across Ohio participated in workshops at CETE at The Ohio State University. Preliminary End of Course test modules for selected pathways listed below were created at these workshops. Beginning in December 2013, these items will be field tested with students as part of the process for creating final modules of 40 items.

Construction Technologies Career Field (Available December 9, 2013)

- **15MC Construction Design and Management**
- **27MC Mechanical, Electrical and Plumbing**
- **45MC Structural Systems**

Engineering and Science Technologies Career Field (Available December 9, 2013)

- **26MC Engineering Design**

Health Science Career Field (Available around January 20, 2014)

- **22MC Health Information Management**
- **23MC Exercise Science & Sports Medicine**
- **25MC Allied Health and Nursing**
- **47MC Medical Bioscience**

Law and Public Safety Career Field (Available December 9, 2013)

- **41MC Firefighting and Emergency Medical Services**
- **43MC Criminal Justice**

Manufacturing Career Field (Available around January 20, 2014)

- **28MC Manufacturing Operations**

Information for All Pathways

Transition to Courses

The new field tested assessments for 2013-2014 will be replacing older assessments that were end-of-program or modular assessments. The new end-of-course test modules are intended to be administered upon the completion of courses. For more information on the Ohio CTE move from a program-based to a course-based system, see this web page:

<http://ohiocareertech.wordpress.com/2013/08/17/ohio-career-tech-goes-from-program-based-to-course-based-system/>

Test Administration

Tests are administered at no cost to Ohio local education agencies via WebXam (www.webxam.org), the online assessment delivery system maintained by CETE. Tests are not available in paper-and-pencil format. District personnel, including testing coordinators and others, can help you set up assessments on WebXam. For more information about WebXam, contact WebXam Support by email at webxam@osu.edu or by phone at 614-292-4988.

NOTE: Field tested assessments will be available until the cutoff date of May 2, 2014 so that rescoring can be accomplished.

Availability

Field tested assessments are available to all students enrolled in the corresponding career-technical education programs. The larger the number of examinees participating in the field test, the more reliable the results; therefore, all teachers and school districts with relevant programs are encouraged to participate. Students should complete end-of-course modules only if

1. the student is enrolled in the corresponding course and has completed the related coursework related to that module,
2. or the student will be taking the coursework in a future school year, and the district is allowing the student to take the module as a pre-test.

To determine whether students need to take this new assessment or an old assessment, please consult the Ohio Department of Education's Career Technical Assessment Matrix at <http://education.ohio.gov/Topics/Career-Tech/CTE-Assessments-and-Industry-Credentials>.

Student Scores

Scores for assessments field tested in 2013-2014 will be reportable through Information Technology Centers (ITC) to local districts for transmission to EMIS, Ohio's statewide data collection system. However, assessment results will be analyzed and scores adjusted before reporting by CETE at the end of the school year.

During the field testing period, students will only receive a raw score for each EOC test module taken. Students will not receive a pass/fail indication for field tested assessments at the time of testing. Field testing (and only field testing) will end on the cutoff date of May 2, 2014. At this time, CETE psychometric staff and ODE pathway consultants will analyze the field test results. Poorly performing items will be dropped, and final test forms will be selected. Every student's test result will then be

rescored based on the final set of items chosen. The percentage score may increase or decrease from the raw score shown to the student during field testing. By May 28, 2014 CETE staff will provide final scores with pass/fail indications for all field tested assessments. Districts will be able to run reports on the WebXam website, and field test results will be included in the end-of-year score output provided to ITCs for reporting purposes.

Assessment Structure

In general, each overall test and module contains items of two levels of challenge: C1 and C2. Approximately 30 percent of items will be at the C2 level (higher in Bloom's taxonomy – mainly application, analysis, or evaluation). The remaining items are at the C1 level (knowledge and comprehension). In addition, approximately 30 percent of items for each assessment are scenario-based. A scenario is a short situation, story, or passage of text that provides information needed to answer several associated items. Graphics (tables, charts, figures, maps) may be included as well to provide information needed to answer the test item.

Each module corresponds to a course as defined by the Ohio Department of Education. Specific information regarding each individual pathway test—modules to administer, modules included in each pathway assessment, and number of items in each module—follows in the next section. To find the competencies in the Ohio Career Field Technical Content Standards covered by each module, go to the WebXam Information Resources page at http://www.webxam.org/info_docs.asp.

Students are expected to test for each course in which they are enrolled. They are not required to take all end-of-course modules available for the entire program. Because programs vary in length and the minimum number of courses approved for a program is four, concentrators cannot take less than 3 modules without getting a zero score counted for the missing modules when calculating the overall score.

Contact WebXam

Email: webxam@osu.edu

Phone: 614-292-4988

Web: www.webxam.org

Construction Technologies Career Field

15MC Construction Design and Management

Module Name	# Items
15MC Construction Technology–Core and Sustainable Construction	81
15MC Construction Safety	86
15MC Plan Reading	84
15MC Architecture Design – Structural and MEP	86
15MC Architecture Design – Site and Foundation Plans	82
15MC Construction Management	85
15MC Interior Design	90
15MC Remodeling/Renovation	86
15MC Facility and Building Maintenance	93
15MC Custodial Services	82
15MC Heavy Equipment Operations	84
15MC Construction Site Preparation	75

27MC Mechanical, Electrical and Plumbing

Module Name	# Items
27MC Construction Technology–Core and Sustainable Construction	81
27MC Construction Safety	86
27MC Mechanical, Electrical and Plumbing Systems	87
27MC Construction Electrical Systems	85
27MC Residential Electrical Systems	93
27MC Commercial and Industrial Construction Electrical Systems	83
27MC Plumbing and Pipefitting Systems	92
27MC Residential and Commercial Plumbing Systems	84
27MC Heating and Cooling Systems	80
27MC HVAC Refrigeration	80
27MC Sheet Metal	80
27MC Telecommunications/Low Voltage Systems	89
27MC Alternative Power Generation Systems	82

45MC Structural Systems

Module Name	# Items
45MC Construction Technology–Core and Sustainable Construction	81
45MC Construction Safety	86
45MC Carpentry and Masonry Technical Skills	90
45MC Structural Systems	85
45MC Structural Coverings and Finishes	88
45MC Masonry	85
45MC Concrete and Residential Masonry	85

Engineering and Science Technologies Career Field

26MC Engineering Design

Module Name	# Items
26MC Engineering Design	83
26MC Engineering Principles	78
26MC Manufacturing Operations	91
26MC Robotics	85
26MC Computer Integrated Manufacturing	79
26MC Digital Electronics	99
26MC Mechanisms and Drives	83

Health Science Career Field

22MC Health Information Management Services

Module Name	# Items
22MC Health Information Technology	TBD
22MC Health Information Management	TBD
22MC Billing and Coding	TBD
22MC Medical Terminology	TBD

23MC Exercise Science & Sports Medicine

Module Name	# Items
23MC Exercise and Athletic Training	79
23MC Bio-Statistics in Exercise Science and Sports Medicine	82
23MC Exercise Physiology and Biochemistry	83
23MC Nutrition & Wellness	83
23MC Fitness Evaluation and Assessment	71
23MC Athletic Injuries and Prevention	84
23MC Sports Exercise Psychology	83
23MC Medical Terminology	TBD
23MC Human Anatomy and Physiology	TBD
23MC Health Science Capstone	TBD

25MC Allied Health and Nursing

Module Name	# Items
25MC Clinical Laboratory Techniques	89
25MC Dental Technology	84
25MC Human Anatomy and Physiology	85
25MC Human Pathophysiology	81
25MC Oral Diagnosis and Treatment Planning	87
25MC Principles of Allied Health	87
25MC Surgical Support	86
25MC Lifespan Development and Medical Intervention	82
25MC Mental Health	82
25MC Opticianry and Vision Care	92
25MC Patient Centered Care	91
25MC Patient Centered Care and Diagnostics	82
25MC Pharmacology	84
25MC Respiratory Technology	82

47MC Medical Bioscience

Module Name	# Items
47MC Laboratory Techniques	85
47MC Cell Culturing/Fermentation	84
47MC Biochemistry	85
47MC Molecular Biology Techniques	85
47MC DNA and Protein Analysis	89

Law and Public Safety Career Field

41MC Firefighting and Emergency Medical Services

Module Name	# Items
41MC Foundations of Firefighting and EMS	101

43MC Criminal Justice

Module Name	# Items
43MC The American Criminal Justice System	88
43MC Police Work and Practice in Public Safety	89
43MC Security and Protective Services	88
43MC Investigations and Forensics in Criminal Investigations	90
43MC The Correctional System and Services	87
43MC Homeland Security Protecting America's Critical Infrastructure	92

Manufacturing Career Field

28MC Manufacturing Operations

Module Name	# Items
28MC GMAW	TBD
28MC SMAW	TBD
28MC FCAW	TBD
28MC GTAW	TBD
28MC Machine Tools	TBD
28MC Turning	TBD
28MC Cutting	TBD
28MC CNC	TBD

Transportation Career Field

10MC Ground Transportation

Module Name	# Items
10MC Ground Transportation Maintenance	TBD
10MC Ground Transportation Engine and Power Train	TBD
10MC Ground Transportation Electrical/Electronics	TBD
10MC Automotive Braking, Suspension, and Steering Systems (Undercarriage Systems)	TBD
10MC Ground Transportation HVAC	TBD
10MC Truck Braking, Suspension, and Steering Systems (Undercarriage Systems)	TBD
10MC Automotive Engine Performance	TBD
10MC Truck Diesel Engines	TBD
10MC Sports/Recreational Power Systems	TBD
10MC Collision Electrical & Mechanical Systems	TBD
10MC Collision Structural Inspection & Repair	TBD
10MC Collision Nonstructural Inspection & Repair	TBD
10MC Collision Painting & Refinishing	TBD

NOTE: Pathway is in process; item counts are not available at this time. Updated will be posted at WebXam.