

Preparing Your Students for WebXam Assessments

Sean Hickey

Ruth Ann Falconer



THE OHIO STATE UNIVERSITY

CENTER ON EDUCATION AND
TRAINING FOR EMPLOYMENT



What is WebXam?

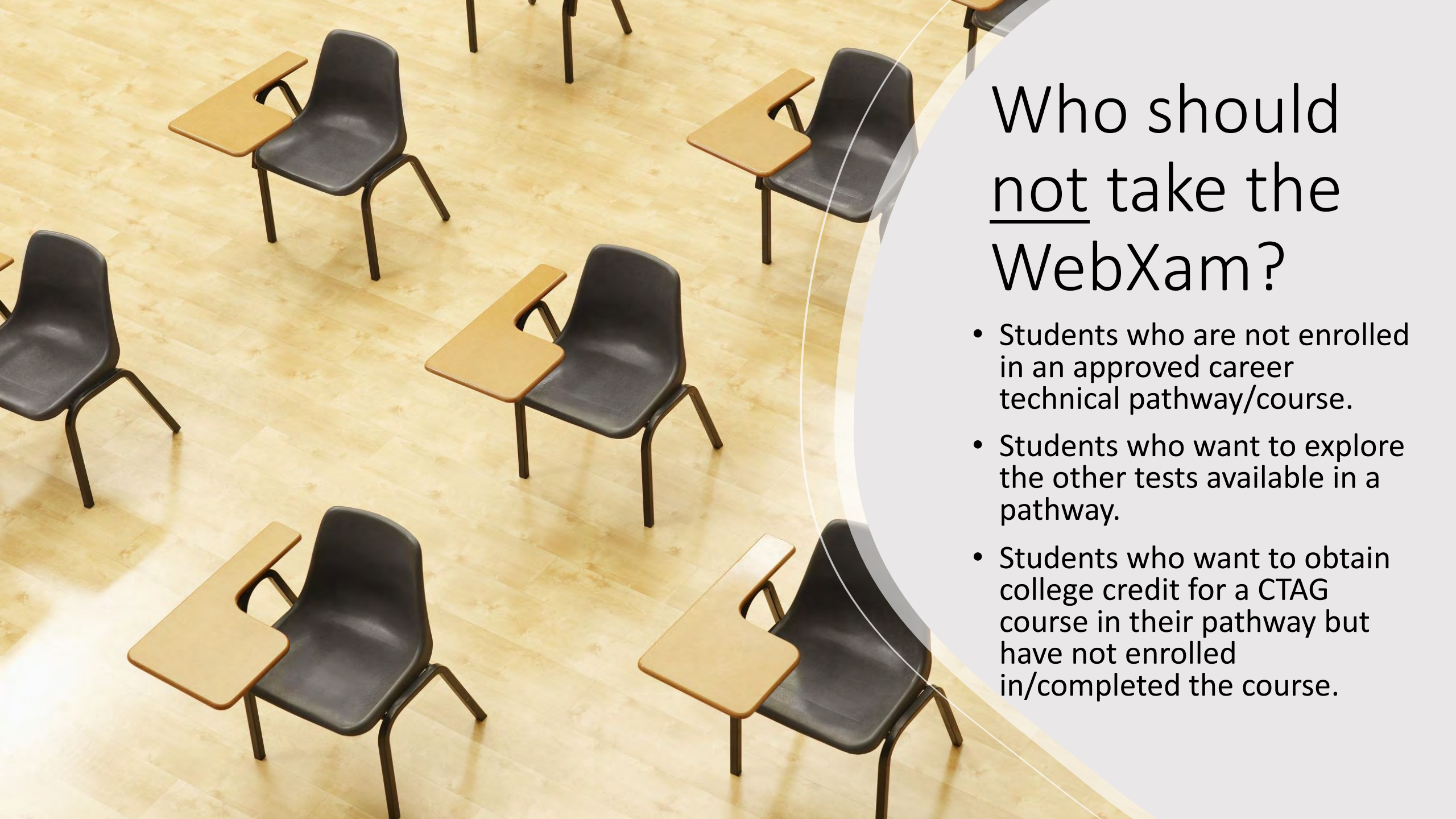
- Student assessment based on courses within a particular career field/pathway.
- Offers pre-test and end-of course assessments.
- Created by current teachers in the career field
- Measures student achievement
- Passage allows students college credit (CTAG Courses)



Who must take the WebXam?

- All students (including IEP students) enrolled in an approved career technical education course must take the end-of-course (posttest) assessment for each course in which they are enrolled.
- Students may also take the pre-test assessment for courses in which they are enrolled.





Who should not take the WebXam?

- Students who are not enrolled in an approved career technical pathway/course.
- Students who want to explore the other tests available in a pathway.
- Students who want to obtain college credit for a CTAG course in their pathway but have not enrolled in/completed the course.

How Can WebXam Results Affect My Program and/or Me as a Teacher?

- Results are sent to Ohio DEW and are used as part of the Program Quality Standards.
- Districts may use results to determine continuation of program.
- Results may be used to show student skill attainment and identify where instruction should be occurring.
- Results may be used to compare students' skill attainment and provide insight into appropriate teaching strategies/methodologies.



How Can I
Ensure
Students are
Ready for
WebXam?





Tips for WebXam Preparation

- Make sure you understand the course content.
- Analyze the test blueprint.
- Understand the WebXam test format.
- Use WebXam-style test items in your classroom.
- Have students take WebXam Practice Tests.
- Modify instruction based on WebXam reports.



WebXam-Style Assessments

- Multiple-choice test items to measure student knowledge
- Scenarios and illustrations can provide opportunities for application of knowledge.

Results Are In— Now What?

- Use report data to plan instruction.
- Identify where students struggle (including in previous end-of-course assessments).



Home

User Search

Order Tests

District Testing Coordinators

Programs

Administrator

Teacher

Assessor

Secondary Student

Activate Test

Reports

Summary

Testing

Pathway

CTAG Testing and Assent

Outcome

Home / Report / Outcome

Outcome Report

Location

Show All Locations

Teacher

BELMONT, Alison (demo.63432)

Test

010105 Agriculture, Food and Natural Resources

Graduation Year

Show All Years

Year

2022 - 2023

Run Report

Report Results

Show Student Details

Search:

Code	Outcome	Your Students Pretest	Your Students Post-test	Pretest Statewide	Post-test Statewide	Blueprint Percentage
01.02	Leadership and Communications	38.46%	95.45%	61%	85%	2.22%
01.06	Business Literacy	30.77%		45%		1.11%
01.09	Financial Management	46.15%	77.27%	27%	78%	2.22%
01.12	Site and Personal Safety Procedures	61.54%	98.48%	72%	84%	8.89%
02.03	Care and Management	36.26%	88.64%	48%	80%	13.33%
03.01	Handling, Preparation, Storage, and Disposal	46.15%	86.36%	51%	71%	3.33%
03.04	Molecular-Genetics Technology	53.85%	63.64%	49%	73%	5.56%
03.06	Culturing	26.92%		34%		3.33%
04.01	Tool, Stationary and Mobile Equipment Maintenance		27.27%		51%	1.11%
04.03	Engines	50%	89.39%	58%	78%	5.56%
05.03	Design and Estimate	15.38%	77.27%	36%	58%	3.33%
05.06	Construction	65.38%	52.27%	53%	43%	5.56%
05.10	Joining and Cutting Metals with Heat	46.15%	86.36%	50%	48%	3.33%
06.01	Soils	43.08%	81.82%	46%	76%	11.11%

02.03	Care and Management	36.26%	88.64%	48%	80%	13.33%
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First Name	Last Name	% Pretest Correct	% Post-test Correct
Anaya	ASHLAND	28.57	100
Xander	ASHLAND		50
Nolan	ATHENS	14.28	50
Wesley	AUGLAIZE		75
Gideon	BROWN	85.71	100
Kash	CLERMONT		75
Edgar	COSHOCTON	28.57	75
Maxwell	ERIE		100
Teagan	FAYETTE	28.57	
Jayleen	FULTON	28.57	100
Nathan	FULTON	28.57	100
Adalyn	GREENE	14.28	100
Amy	GREENE	28.57	100
Harrison	GUERNSEY		100
Scott	HANCOCK		100
Derek	HARRISON	28.57	100
Zaiden	HIGHLAND		75
Marley	LICKING		100
Logan	MEIGS	42.85	100
Vincent	PORTAGE	57.14	75
Lana	RICHLAND		100



Using the Blueprint to Identify Instructional Needs

- The Test Blueprint identifies percentage of test items associated with each outcome on the course outline.
- Identify essential content to focus instruction.
- Pair with WebXam reports and diagnostic assessments to identify areas for student improvement.

- Agriculture and Environmental Systems
- Arts and Communication
- Business and Administrative Services
- Construction Technologies
- Education and Training
- Engineering and Science
- Family and Consumer Sciences
- Finance
- Health Science
- Hospitality and Tourism
- Human Services
- Information Technology
- Law and Public Safety
- Manufacturing Technologies
- Marketing
- Transportation Systems
- WebXam Practice Tests

About the Tests

Filter Options

All Tests

Field Tests Only

Show Pretests Only

Show Practice Tests Only

Agriculture and Environmental Systems

A0 Agribusiness and Production Systems (03MC)

Blueprints

Standards

ID	Code	Name	# of Items	Performance Standard	Advanced Performance Standard	Field Test?	Pretest?
010105	AAL5	Agriculture, Food and Natural Resources	40	59%	91%	✗	✓
010115	AAM5	Business Management for Agricultural and Environmental Systems	40	63%	79%	✗	✓
010120	AAN0	Mechanical Principles	40	67%	86%	✗	✓
010125	AAN5	Animal and Plant Science	40	62%	93%	✗	✓
010130	AAP0	Global Economics and Food Markets	40	76%	93%	✗	✓
010610	ACV0	Greenhouse and Nursery Management	40	63%	81%	✗	✓
010620	ACW0	Agronomic Systems	40	50%	78%	✗	✓
010715	ADG5	Energy Systems Management	40	68%	78%	✗	✓
010720	ADH0	Environmental Science for Agriculture and Natural Resources	40	59%	76%	✗	✓
010730	ADJ0	Forestry and Woodland Ecosystems	40	61%	82%	✗	✓

About Test Blueprints

Interpreting the Blueprints

010105 Agriculture, Food and Natural Resources

010115 Business Management for
Agricultural and Environmental Systems

010120 Mechanical Principles

010125 Animal and Plant Science

010130 Global Economics and Food
Markets

010610 Greenhouse and Nursery
Management

010620 Agronomic Systems

010715 Energy Systems Management

010720 Environmental Science for
Agriculture and Natural Resources

010730 Forestry and Woodland
Ecosystems

010915 Animal Health

010920 Livestock Selection, Nutrition,
and Management

010945 Animal Anatomy and
Physiology

011010 Science and Technology of
Food

011020 Meat Science and Technology

012010 Animal and Plant Biotechnology

177024 Unmanned Aircraft Systems

Agriculture, Food and Natural Resources

ODE Subject Code: 010105

Outcome #	Outcome Name	% Items Approved by SMEs
Strand 1. Business Operations/21st Century Skills		
1.2	Leadership and Communications	2.22%
1.4	Knowledge Management and Information Technology	1.11%
1.6	Business Literacy	1.11%
1.9	Financial Management	2.22%
1.12	Site and Personal Safety Procedures	8.89%
Strand 2. Animal Science		
2.3	Care and Management	13.33%
Strand 3. Biotechnology		
3.1	Handling, Preparation, Storage, and Disposal	3.33%
3.4	Molecular-Genetics Technology	5.56%
3.6	Culturing	3.33%
Strand 4. Power Systems		
4.1	Tool, Stationary and Mobile Equipment Maintenance	1.11%
4.3	Engines	5.56%
Strand 5. Structural Engineering		
5.3	Design and Estimate	3.33%
5.6	Construction	5.56%



Drilling Down in the Course Outline

- The course outline is the *source* of the content to be taught in the course.
- The test blueprint connects the course outline to the end-of-course assessment.



QUICK LINKS

- » [Agricultural and Environmental Systems](#)
- » [Arts and Communication](#)
- » [Business and Administrative Services](#)
- » [Construction Technologies](#)
- » [Education and Training](#)
- » [Engineering and Science Technologies](#)
- » [Finance](#)
- » [Government and Public Administration](#)
- » [Health Science](#)
- » [Hospitality and Tourism](#)
- » [Human Services](#)
- » [Information Technology](#)
- » [Law and Public Safety](#)
- » [Manufacturing](#)
- » [Marketing](#)
- » [Transportation Systems](#)

LATEST NEWS

Agricultural and Environmental Systems

Career-technical programs in animal and crop production, agricultural services and engineering, food processing, horticulture, natural resource management, environmental services, agricultural and environmental education, communications and research.

Courses

Middle School

- » [Middle School Agricultural Education Course Titles and Descriptions](#) 

High School

- » [High School Agricultural and Environmental Systems Career Field Course Titles and Descriptions](#) 
- » [High School Agricultural and Environmental Systems Career Field Course Outlines](#) 
- » [Units of Instruction - High School Agricultural and Environmental Systems Career Field](#) 
- » [FY2024 DRAFT Agricultural and Environmental Systems Career Field Course Outlines](#) 

Standards

- » [Agriculture and Environmental Systems Career Field Technical Content Standards](#) 

Agricultural and Environmental Systems Career Field
Agriculture, Food and Natural Resources
Subject Code: 010105
Outcome & Competency Descriptions

Course Description:

This first course in the career field is an introduction to Agricultural and Environmental Systems. Students will be introduced to the scope of the Agricultural and Environmental Systems career field. They will examine principles of food science, natural resource management, animal science & management, plant & horticultural science, power technology and bioscience. Students will examine the FFA organization and Supervised Agricultural Experience programs. Throughout the course, students will develop communication, leadership and business skills essential to the agriculture industry.

Strand 1.

Business Operations/21st Century Skills

Learners apply principles of economics, business management, marketing and employability in an entrepreneur, manager and employee role to the leadership, planning, developing and analyzing of business enterprises related to the career field.

Outcome: 1.1. Employability Skills

Develop career awareness and employability skills (e.g., face-to-face, online) needed for gaining and maintaining employment in diverse business settings.

Competencies

- 1.1.3. Develop a career plan that reflects career interests, pathways and secondary and postsecondary options.
- 1.1.4. Describe the role and function of professional organizations, industry associations and organized labor and use networking techniques to develop and maintain professional relationships.

An "X" indicates that the pathway applies to the outcome.

Pathways	X	Agribusiness & Production	X	Animal Science & Management	X	Bioscience	X	Natural Resource	X	Horticulture	X	Power Technology
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Outcome: 1.2. Leadership and Communications

Process, maintain, evaluate and disseminate information in a business. Develop leadership and team building to promote collaboration.

Competencies

- 1.2.1. Extract relevant, valid information from materials and cite sources of information.
- 1.2.2. Deliver formal and informal presentations.
- 1.2.5. Communicate information (e.g., directions, ideas, vision, workplace expectations) for an intended audience and purpose.
- 1.2.6. Use proper grammar and expression in all aspects of communication.
- 1.2.7. Use problem-solving and consensus-building techniques to draw conclusions and determine next steps.
- 1.2.13. Identify stakeholders and solicit their opinions.
- 1.2.14. Use motivational strategies to accomplish goals.

An "X" indicates that the pathway applies to the outcome.

Course Outlines

- Description of what the student can expect to learn from the course
- **Strands:** Overarching content areas within the career field
- **Outcomes:** Student learning outcomes within each strand
- **Competencies:** Specific knowledge or skills required for the student to demonstrate the outcome

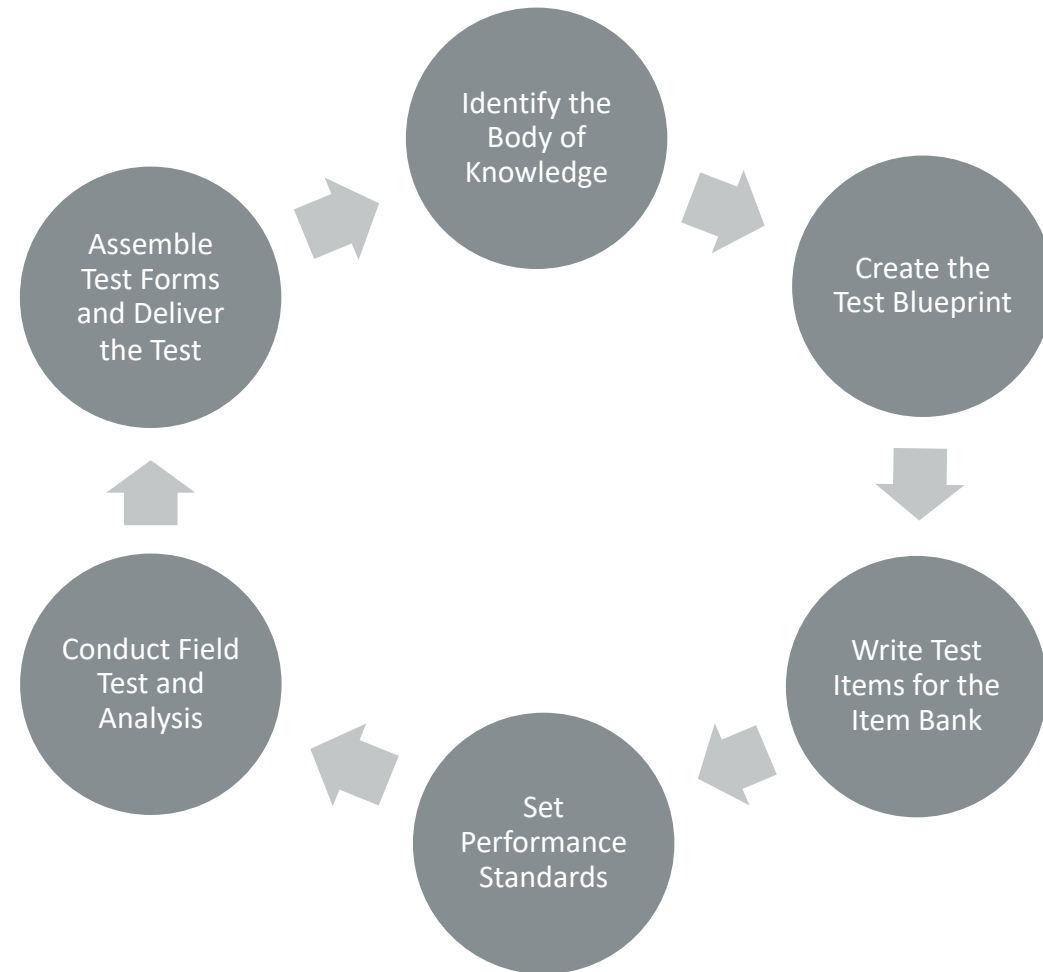


Determine Instructional Needs and Delivery Model

- Identify student knowledge- or skill-gaps.
- Participate in students' IEP meetings (if applicable).
- Plan instruction or interventions to address gaps.
- Reevaluate to ensure students are ready for WebXam end-of-course assessment.



Understanding the Test-Development Process





WebXam During Test Development Period

- School Year 2024-2025
 - Business, Marketing, and Finance: Back to “normal”
 - Agricultural and Environmental Science: In field-testing
 - No pretests
 - Allow extra time for 95-item posttest
 - I.T. & Arts and Communications: New tests being written
 - Deliver the “old” tests this year
 - Participate as a SME to help develop the test items



WebXam During Test Development Period

- School Year 2025-2026
 - Agricultural and Environmental Science: Back to “normal”
 - I.T. & Arts and Communications: In field-testing
 - No pretests
 - Allow extra time for 95-item posttest
 - Engineering and Manufacturing*: New tests being written
 - Deliver the “old” tests this year
 - Participate as a SME to help develop the test items

How to Become Involved in Item Writing

- Become a Subject Matter Expert (SME)
- Complete signup form available at the CETE Display Booth or by accessing this QR Code
- Recruitment Team will begin contacting SMEs in August/September
- Watch for emails throughout the school year and respond ASAP

Subject Matter Expert (SME) Sign-
Up Form: Information Technology
and Arts & Communication





What Does a Subject-Matter Expert (SME) Do?

- Meetings Held **Onsite** at **OSU-CETE**
 - Standards Alignment Workshop*—Fall 2024 (*TENTATIVE, may be remote)
 - Validation and Standards Setting Workshop—Summer 2025
 - CETE reimburses for travel and substitute teacher costs
- Meetings Held **Remotely** via **Zoom**
 - Item Writing Workshops
 - Held throughout the school year from 3-5 pm
 - CETE pays stipend directly to SMEs
 - Each course includes
 - Two item writing workshops—Blueprint is created, and small groups work to develop items
 - Homework—2-3 questions written independently outside of Zoom (only used if questions are not completed during workshop)
 - Large Group Review—Review of each newly created item
 - Items are reviewed for technological accuracy, competency alignment, answer choices are clearly correct/incorrect, cognate/cognitive-skill level (C1/C2)
 - Improve quality of the items.

Questions?

- Want to become a SME? Scan the QR Code and complete the questionnaire.

