



**AGRICULTURAL EDUCATION:
CORE
SKILLS STANDARDS
OD46001**

COMPETENCY-BASED EDUCATION: OKLAHOMA'S RECIPE FOR SUCCESS

BY THE INDUSTRY FOR THE INDUSTRY

Oklahoma's *CareerTech* system of competency-based education uses industry professionals and certification standards to identify the knowledge and abilities needed to master an occupation. This industry input provides the foundation for development of instructional materials that help prepare the comprehensively trained, highly skilled employees demanded by our workplace partners.

TOOLS FOR SUCCESS

CareerTech relies on three basic instructional components to deliver competency-based instruction: skills standards, curriculum materials, and competency assessments.

Skills standards provide the foundation for competency-based instruction in Oklahoma's *CareerTech* system. The skills standards outline the knowledge, skills, and abilities needed to perform related jobs within an industry. Skills standards are aligned with national skills standards; therefore, a student trained to the skills standards possesses technical skills that make him/her employable in both state and national job markets.

Curriculum materials contain information and activities that teach students the knowledge and skills outlined in the skills standards. In addition to complementing classroom instruction, curriculum resources provide supplemental activities to enhance learning and provide hands-on training experiences.

Competency Assessments test the student over material outlined in the skills standards and taught using the curriculum materials. When used with classroom performance evaluations, written competency assessments provide a means of measuring occupational readiness.

Although each of these components satisfy a unique purpose in competency-based education, they work together to reinforce the skills and abilities students need to gain employment and succeed on the job.

MEASURING SUCCESS

Written competency assessments are used to evaluate student performance. Results reports communicate competency assessment scores to students and provide a breakdown of assessment results by duty area. The results breakdown shows how well the student has mastered skills needed to perform major job functions and identifies areas of job responsibility that may require additional instruction and/or training.

Group analysis of student results also provides feedback to instructors seeking to improve the effectiveness of career and technology training. Performance patterns in individual duties indicate opportunities to evaluate training methods and customize instruction.

TRUE TO OUR PURPOSE

"We prepare Oklahomans to succeed in the workplace, in education, and in life" defines the mission of Oklahoma *CareerTech* and its competency-based system of instruction. Skills standards, curriculum, and assessments that identify and reinforce industry expectations provide accountability for programs and assure *CareerTech*'s continued role in preparing skilled workers for a global job market

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**AGRICULTURAL EDUCATION I: CORE
SKILLS STANDARDS**

- Unit IA1: Introduction to the Agricultural Industry
- Unit IA2: Career Entry and Advancement in the Agricultural Industry
- Unit IA3: Agricultural Safety
- Unit IA4: Agribusiness and Economic Principles
- Unit IA5: Animal Agriculture
- Unit IA6: Plant, Horticulture, and Soil Science
- Unit IA7: Natural Resources
- Unit IA8: Agricultural Mechanics
- Unit IA9: Agricultural Education

Unit IA1: Introduction to the Agricultural Industry

CODE	BENCHMARK
IA1-1.01	Students will explain the meaning and importance of the agricultural industry in meeting human needs
IA1-2.02	Students will list and describe major areas of the agricultural industry in the nation, state, and local community as well as globally
IA1-3.03	Students will discuss historical developments in the agricultural industry
IA1-4.04	Students will identify the roles of biotechnology and technology in the agricultural industry

Unit IA2: Career Entry and Advancement in the Agricultural Industry

CODE	BENCHMARK
IA2-5.01	Students will identify agriculture, food and natural resources career pathways, specific careers, and the competencies needed to enter the careers
IA2-6.02	Students will name and describe important interpersonal skills for career success

Unit IA3: Agricultural Safety

CODE	BENCHMARK
IA3-7.01	Students will assess safety situations and choose appropriate safety practices
IA3-8.02	Students will properly select, use, and maintain personal protective equipment

Unit IA4: Agribusiness and Economic Principles

CODE	BENCHMARK
IA4-9.01	Students will distinguish among economic systems and describe ways of doing business in capitalism

IA4-10.02	Students will select and appropriately use record keeping systems
IA4-11.03	Students will discuss the importance of marketing in the agricultural industry

Unit IA5: Animal Agriculture

CODE	BENCHMARK
IA5-12.01	Students will identify important agricultural animals and the benefits of each species
IA5-13.02	Students will explain the importance of animal agriculture in Oklahoma and the United States
IA5-14.03	Students will identify major breeds of livestock produced in Oklahoma and contrast and compare the merits of each breed
IA5-15.04	Students will identify and explain major anatomical and physiological features of agricultural animals
IA5-16.05	Students will explain the meaning and importance of animal well-being and identify production practices that promote well-being
IA5-17.06	Students will follow appropriate management practices in animal production
IA5-18.07	Students will use appropriate nutrients and feed to assure efficient animal production
IA5-19.08	Students will select practices that promote animal health and production

Unit IA6: Plant, Horticulture, and Soil Science

CODE	BENCHMARK
IA6-20.01	Students will identify important agricultural and horticultural plants and discuss their benefits
IA6-21.02	Students will distinguish and classify plants on the basis of life cycle
IA6-22.03	Students will identify the major vegetative structures of plants and discuss the functions of each
IA6-23.04	Students will distinguish between sexual and asexual propagation and identify the structures and procedures that are involved
IA6-24.05	Students will describe the role of nutrients and nutrition in plant growth
IA6-25.06	Students will discuss the importance of soil and its constituents

Unit IA7: Natural Resources

CODE	BENCHMARK
IA7-26.01	Students will identify important natural resources and classify as renewable or nonrenewable
IA7-27.02	Students will explain the meaning of sustainable resources use and identify practices that contribute to sustainability

Unit IA8: Agricultural Mechanics

CODE	BENCHMARK
IA8-28.01	Students will identify hazards and demonstrate appropriate safety practices in agricultural mechanics work
IA8-29.02	Students will discuss the role and importance of agricultural power and technology
IA8-30.03	Students will identify and properly use common hand tools in agricultural mechanics

Unit IA9: Agricultural Education

CODE	BENCHMARK
IA9-31.01	Students will explain the meaning and importance of agricultural education
IA9-32.02	Students will describe the role, importance, and kinds of supervised agricultural experience
IA9-33.03	Students will plan, establish, and manage an appropriate supervised experience program
IA9-34.04	Students will discuss the history, origin, and traditions of FFA membership
IA9-35.05	Students will identify opportunities for participation and advancement in the FFA
IA9-36.06	Students will demonstrate leadership skill development by preparing speeches, participation in meetings, and engaging in FFA activities