01.0000 Agriculture, Agricultural Operations and Related Services

Release of Standards

MDE – Office of Career and Technical Education and Michigan Center for Career and Technical Education

2013
Agenda

RELEASE OF NEW STANDARDS WEBINAR

• Review of Career and Technical Education and Program Overview
• Overview of the review and revision process
• Steps on how to access the revised standards
• Implementation timeline
Project Team

Michigan Department of Education

Glenna Zollinger-Russell, Supervisor
Randy Showerman, Program Consultant,
Jackie Martinez, Administrative Support

Wayne State University
Dr. Geralyn E. Stephens, EdD
CTE AND PROGRAM OVERVIEW
NATIONAL – Carl Perkins Legislation

High Skill → High Demand → High Wage
Perkins Legislation

Technical Standards

Training Standards & Curriculum

Test and certification
National Career Clusters

- High Learner Achievement
- Better preparation for succeeding in careers (technical skills and employability skills)
- Successful transition between secondary, postsecondary education and/or employment
- Promotion of economic development to increase productivity
# National Career Clusters

<table>
<thead>
<tr>
<th>Agriculture, Food &amp; Natural Resources</th>
<th>Hospitality &amp; Tourism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture &amp; Constructions</td>
<td>Human Services</td>
</tr>
<tr>
<td>Arts, A/V Technology &amp; Communications</td>
<td>Information Technology</td>
</tr>
<tr>
<td>Business, Management &amp; Administration</td>
<td>Law, Public Safety, Corrections &amp; Security</td>
</tr>
<tr>
<td>Education &amp; Training</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Finance</td>
<td>Marketing</td>
</tr>
<tr>
<td>Government &amp; Public Administration</td>
<td>Science, Technology, Engineering &amp; Mathematics</td>
</tr>
<tr>
<td>Health Science</td>
<td>Transportation, Distribution &amp; Logistics</td>
</tr>
</tbody>
</table>
The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fuel, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.

|---|---|---|---|---|---|---|---|

**Cluster Knowledge and Skills**

- Premier Leadership ● Personal Growth ● Career Success ● Organizations and Associations ● Organizational structures and processes ● Safety, Health, and Environmental Management ● Health and safety procedures ● Tools, equipment, machinery and technology ● Issues ● Technology and globalization ● Scientific Inquiry
Sources of CTE Standards in Michigan

National Career Cluster

- Career Ready Practices*
- Common Career and Technical Core (CCTC)
  - Cluster Level
  - Pathway Level

Michigan Technical Standards

- Customized
- State
- National specific to the field

*Michigan Career & Employability Skills are Included in the National Career Ready Practices
Current 12 Segments

Scientific and Social Implications
- Leadership, Business Education & Career Success
- Organization of Living Systems
- Animal Industries and Domestic Animal Production

Plant Nutrition
- Plant Physiology
- Animal Health and Nutrition
- Comparative Animal Systems and Animal Genetics

Pests and Pest Management
- Soils
- Environmental and Energy Systems
- Natural Resources Fundamentals
Profile – Agriculture, Agricultural Operations and Related Services

Number of Programs (77) Enrollment (14,208)
REVIEW AND REVISION PROCESS
Review and Revision Process

Secondary CTE Program standards are reviewed every 3-5 years.

Type of revision is identified:
- Major
- Moderate
- Minor

Input is gathered on program standards from:
- Business & Industry
- Post-Secondary
- CTE Secondary Teachers
Michigan CTE teachers teaching in a state approved program were surveyed.

Data was gathered on how many programs operate in career centers and high schools.

Teachers reported on postsecondary enrollment and job placement post graduation.

Teachers identified certification that their students qualify for in the program area.
National Search
Steps Needed by Business and Industry

Round 1 Survey:
- Review of identified standards individually
- Rate standards identified in survey individually
- 7 days to complete

Round 2 Survey:
- Review the compared group average from first round to your rating sent out
- May change your first rating
Overview of Delphi Process

• Research tool for:
  – Gathering data
  – Facilitating consensus for core curriculum

• Used for groups and individuals who:
  – Have special knowledge to share
  – But typically not in contact with each other
Steps Completed by Business and Industry

<table>
<thead>
<tr>
<th>Importance Ratings</th>
<th>Highly Relevant for High School Students</th>
<th>Somewhat Relevant for High School Students</th>
<th>Not Relevant for High School Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not having skill/knowledge in this area will keep you from gaining employment in this occupation</td>
<td>Skill/knowledge in this area MAY enhance employability in this area</td>
<td>Skill/knowledge in this area are NOT important for employment in this occupation at all</td>
<td></td>
</tr>
</tbody>
</table>
9. Please rate the relevancy of the following standards related to the development and implications of animal origin, domestication and distribution.

<table>
<thead>
<tr>
<th>Highly Relevant for High School Students</th>
<th>Somewhat Relevant for High School Students</th>
<th>Not Relevant for High School Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluate and describe characteristics of animals that developed in response to the animals’ environment and led to their domestication.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Steps of the Process

- Analysis of data and report given to OCTE
- Recommendation of the new standards
Decision Process

Consultants develop white paper

• 3 options
• Pros and Cons
• Recommendation
All CIPs have Four Knowledge Areas

- Technical Skill Standards
- Pathway Standards
- Career Cluster Standards
- Career Ready Practices
Levels of Standards

Level 1 - Knowledge (ex: I, II, III)
Level 2 - Skill (ex: A, B, C)
Level 3 - Performance Element (ex: 1, 2, 3)

Level 4 - Measurement Criteria
(lower case letters)
(This level assists in defining Level 3 - Performance Element)

<table>
<thead>
<tr>
<th>I</th>
<th>Animal Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Examine the components, historical development, global implications and future trends of the animal systems industry</td>
</tr>
<tr>
<td>1</td>
<td>Evaluate the development and implications of animal origin, domestication and distribution.</td>
</tr>
</tbody>
</table>
Standards are Segmented by CTE Teachers

• CTE Teachers assist with process to identify 12 segment titles

- Safety
- Animal Anatomy & Physiology
- Animal Genetics and Reproduction
- Domestic Animal Production
- Animal Health & Nutrition
- Plant Anatomy Physiology
- Soils & Plant Nutrition
- Plant Culture and Propagation
- Natural Resource Systems
- Environmental Service Systems
- Agricultural Business & Marketing
- Career Readiness & Leadership
# New Segment Allocation

## 01.0000 Agriculture, Agricultural Operations, and Related Sciences (2013)

<table>
<thead>
<tr>
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<td>34</td>
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<tr>
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<td>2</td>
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<td>4</td>
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<tr>
<td>CRP (12)</td>
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<td>9</td>
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Standards Released To The Field

Website: ctenavigator.org

Welcome to MCCTE Navigator

Welcome to the electronic curriculum system for Michigan's Career and Technical Education community (State/Regional/Local Administrators, and Instructors). The system is called MCCTE Navigator and provides real-time access to Michigan's state approved CTE program curriculum which is necessary for educational decision-making, management and ultimately student achievement.

The web-based, online database is comprehensive, statewide, user-friendly, and instructor-driven and can be used for managing the technical standards, career cluster content, segments, resource content, and academic alignment results for all of Michigan's CTE program areas.

For State Approved Programs with a PSN Only:
NEW IN MCCTE NAVIGATOR – ELECTRONIC GAP ANALYSIS
You can now complete the Gap Analysis electronically in MCCTE Navigator. To access the directions to do the Electronic Gap Analysis go to "Resources", scroll down to "Gap Analysis Documents", and click on "Directions for MCCTE Navigator Gap Analysis – 2011".
Steps to access webinar and gap analysis:

1. Select Career Cluster

[Image of Michigan Center for Career and Technical Education website]
Standards Released To The Field

Steps to access webinar and gap analysis:

2. Select specific CTE program
Steps to access webinar and gap analysis:
- Click on Links – “Program Links”
Standards Released To The Field

Welcome
- Edit Profile
- Log Out

Links
- Program Links
- States' Career Clusters
- OCTE Website

01.0000 Links
2013 - Agriculture, Agricultural Operations & Related Sciences Gap Analysis
http://dev.ctenavigator.org/resources/download/217
# Gap Analysis

Section to be completed by CTE teacher electronically or hardcopy

## Hard copy

### Directions: (Print on legal size paper)
- **Secondary Proficiency:** Indicate the level the student will be able to perform for standard sanitizing the program for each CTE Program.
- **Academic Standards Completion:** Indicate the date the student is expected to deliver the actual work.
- **Academic Standards Completion:** Indicate how the academic standard or activity will be completed.
- **Guidance and Counseling:** Indicate the appropriate guidance and counseling student to be completed.

### Gap Analysis for 2007 Standards

<table>
<thead>
<tr>
<th>Year/Std</th>
<th>Description</th>
<th>Standard</th>
<th>What needs to be done?</th>
<th>Who is going to do it?</th>
<th>What will it be done?</th>
</tr>
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<tr>
<td>Animal Systems</td>
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<tr>
<td>1</td>
<td>Evaluate the development of animal origin, domestication and distribution.</td>
<td></td>
<td>4</td>
<td>Technical</td>
<td></td>
</tr>
</tbody>
</table>
Gap Analysis Ratings

4 = Exceeds criteria and/or able to teach task

3 = Accomplishes task to criteria

2 = Accomplishes task with help

1 = Exposed to the task

N = Not Exposed to the Task
Section to be completed if standard was rated with a “1” or “N”
## Sample Plan of Improvement

### PLAN OF IMPROVEMENT

Any performance element rated a "1" or "N" needs plan of improvement.

<table>
<thead>
<tr>
<th>What needs to be done?</th>
<th>Who is going to do it?</th>
<th>When will it be done?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample: Provide students exposure through job shadow</td>
<td>Teacher</td>
<td>Fall 2013</td>
</tr>
<tr>
<td>Sample: Evaluate current teaching material to expand opportunities for students.</td>
<td>Teacher</td>
<td>Summer 2013</td>
</tr>
<tr>
<td>Sample: Expand Curriculum</td>
<td>Teacher</td>
<td>Summer 2013</td>
</tr>
</tbody>
</table>
IMPLEMENTATION TIMELINE
Next Steps

March 2013 – December 2013
• Complete Gap Analysis

March – May, 2013
• Academic alignment

June 24-25, 2013
October 10-11, 2013
• Professional Development In-service

Fall 2014
• Implementation of the standards
Thank You

If you have questions regarding this webinar contact:

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Phone: (517) 353-3562