



Spring 2013

The Career and Technical Education Team
Department of Public Instruction
www.dpi.wi.gov

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Analytics\Materials\S4_2013 DQI_Data Research Analytics_WI Data and Accountability.docx

Career and Technical Education Data

Working with CTE Data in Wisconsin

Background Information: Data related to secondary career and technical education (CTE) programs in Wisconsin is available from numerous sources involving multiple state agencies, multiple websites and more. The primary sources available via the web, which are used for various state and federal reporting purposes, are covered in this document. By providing access and documentation of student achievement within and through CTE, the role and partnership of CTE become more visible in the accountability efforts of the school. It is important to note that data is a critical foundation to any promotional effort.

Career and Technical Education Resources

A primary source for data can be found in the Career and Technical Education Enrollment Reporting System (CTEERS) section of the CTE website. The other resources found in this document are useful tools in gathering data that can be used to articulate, emphasize, and highlight the value of CTE. These should be incorporated into data collection methods in order to develop a more complete and accurate “picture” of Career and Technical Education.

Each of the following resources should be used collaboratively to “tell your CTE story” with data to support the successes of CTE students.

Data Sources (see the following pages for more information)

- CTEERS
<http://www.dpi.wi.gov/cte/index.html>
- State Cooperative Education Skill Standards
<http://www.dpi.wi.gov/cte/cteskills.html>
- School District Performance Report
<https://wlds.dpi.wi.gov/spr/spr.action>
- National Student Clearinghouse
<http://www.studentclearinghouse.org/default.asp>
- WINNS WKCE – provides data for local district analysis
<http://dpi.wi.gov/oea/wkce.html>
- CTSO Fact Sheet
<http://www.dpi.wi.gov/cte/pdf/govdayflyer2010.pdf>

Career and Technical Education Data

Useful State Agency Websites

1. Department of Workforce Development <http://www.dwd.state.wi.us/>
(DWD--Youth Apprenticeship)
 - a. Regional labor market information
2. Wisconsin Technical College System (WTCS) <http://www.witechcolleges.org/>
 - a. Advanced standing/transcripted credit
 - b. Program of Study offerings
3. Wisconsin Technical College System Board (WTCSB)
<http://www.wtcsystem.edu/board/>

Getting Started

Begin with the end in mind. If you haven't already done so, develop a prioritized list of goals and activities for your CTE program based on the Program of Study Implementation Guide. Identify the ways in which data collection, analysis, and/or dissemination can support each goal and activity.

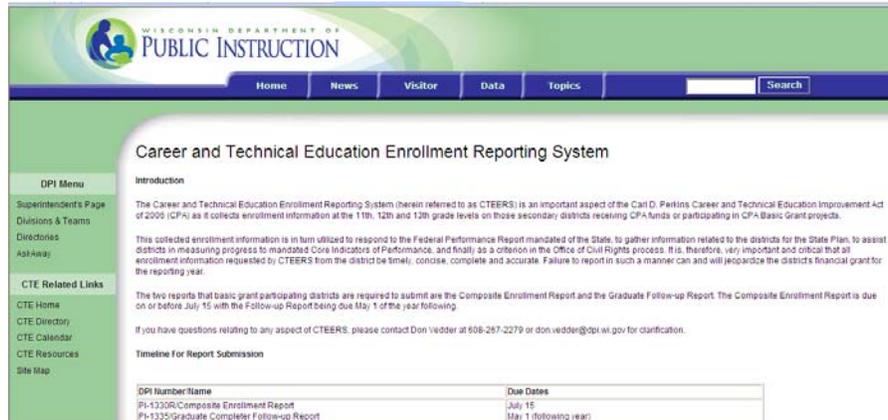
Here is an example:

Priority	Goal/Activity	How data can support	Sources of data
1	Formation of industry advisory committee	<ul style="list-style-type: none"> • Show local demand for workers with these skills 	<ul style="list-style-type: none"> • Labor Market Info
2	Develop new course proposal	<ul style="list-style-type: none"> • NA 	<ul style="list-style-type: none"> • NA
3	Board approval of new course proposal	<ul style="list-style-type: none"> • Show local demand for workers with these skills • Show potential student academic gains from taking this course 	<ul style="list-style-type: none"> • Labor Market Info • Schools that Work reports • CTEERS
4	Recruit students for courses	<ul style="list-style-type: none"> • Show students & parents demand & wages for related careers 	<ul style="list-style-type: none"> • Wicareerpathways.org
5	Improve student academic achievement through CTE	<ul style="list-style-type: none"> • Compare achievement of CTE and non-CTE students 	<ul style="list-style-type: none"> • CTEERS
6	Increase non-traditional enrollment in CTE	<ul style="list-style-type: none"> • Look for past enrollment trends • Show breadth of related career opportunities 	<ul style="list-style-type: none"> • CTEERS • District enrollment data
7	Update class equipment	<ul style="list-style-type: none"> • Show current equipment in use by related industries • Show skill level needed for entry level workers 	<ul style="list-style-type: none"> • Survey of local businesses •

Career and Technical Education Data

Resource: **CTEERS** (Career and Technical Education Enrollment Reporting System)

Website: <http://www.dpi.wi.gov/cte/veershome.html>



WHAT CAN YOU ACCESS?...

- CTEC technical support
- How to prepare and submit data to DPI
- CTEERS field manual
- Basic Facts to compare districts
- District and Non Traditional Occupation enrollment profile
- District core indicator profile

Wisconsin Vocational Education Enrollment Reporting System (VEERS) Basic Facts Comparison

Comparison WorkSheet:

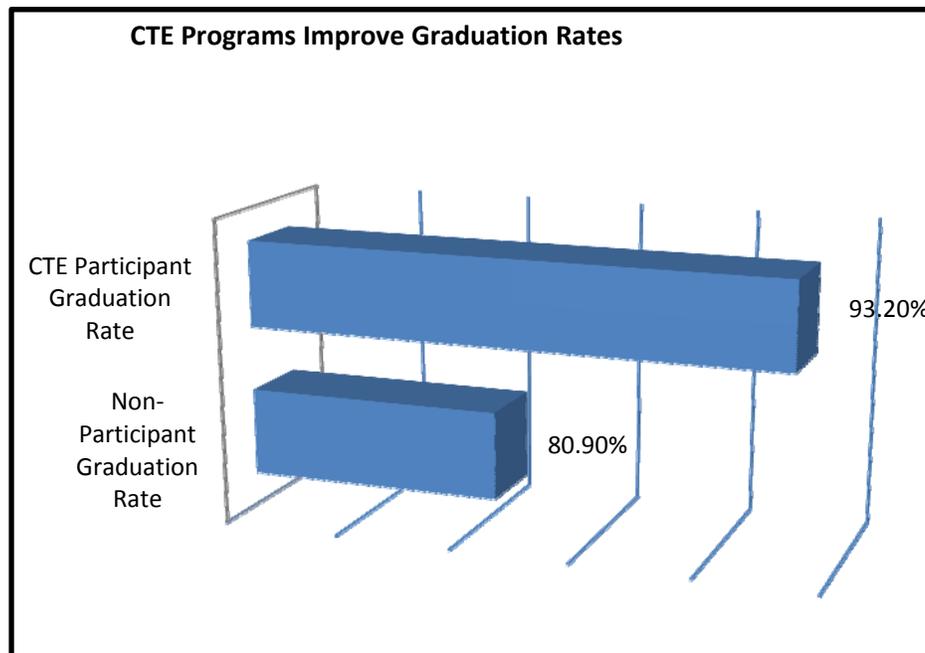
Reporting Year:		2009						
District and/or Selection Comparison(1)		State: Wisconsin Total						
District and/or Selection Comparison(2)		State: Wisconsin Total						
District & School Code(1)		9999	0000					
District & School Code(2)		9999	0000					
Student Universe - Grades 11-13 (1) (2)		140,707	140,707					
		Universe			Non-VE Participants			VE Participants
		% of Total(1)	% of Total(2)	Difference	% of Total(1)	% of Total(2)	Difference	% of Total(1)
	Grade 11	49.2%	49.2%	0.0%	51.4%	51.4%	0.0%	48.1%
	Grade 12	50.6%	50.6%	0.0%	48.3%	48.3%	0.0%	51.8%
	Grade 13	0.2%	0.2%	0.0%	0.3%	0.3%	0.0%	0.1%
Sex	Male	51.1%	51.1%	0.0%	46.4%	46.4%	0.0%	53.5%
	Female	48.9%	48.9%	0.0%	53.6%	53.6%	0.0%	46.5%
Ethnicity	Asian	3.7%	3.7%	0.0%	4.1%	4.1%	0.0%	3.6%
	Black / African American	10.2%	10.2%	0.0%	15.6%	15.6%	0.0%	7.4%
	Hispanic	5.8%	5.8%	0.0%	7.4%	7.4%	0.0%	5.0%
	American Indian / Alaska Native	1.6%	1.6%	0.0%	1.9%	1.9%	0.0%	1.4%
	Pacific Islander / Hawaiian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	White	78.8%	78.8%	0.0%	71.2%	71.2%	0.0%	82.7%
	Non-White	21.2%	21.2%	0.0%	29.0%	29.0%	0.0%	17.3%

Data will automatically prefill cells based up and 2. Comparison is sheet 2 v. sheet 1. D bolded. You may then peruse the data and

Career and Technical Education Data

HOW TO USE DATA?...*Ideas for implementing data*

- Show your district stakeholders how CTE participants have a higher graduation rate than their non-CTE participant peers.
- Use the Labor Market Information to leverage program support.
- Show demographic information and how it can leverage support for non-traditional participation.
- Show participation trends
- Identify disproportionate enrollment trends between CTE and the entire population



Career and Technical Education Data

Resource: **Cooperative Education State Skill Standards**

Web: <http://www.dpi.wi.gov/cte/cteskills.html>

	
Please Log in:	
Application:	Skills Standards Certificate Program
School Year	2011 - 2012 <input type="button" value="v"/>
Continue Log In:	<input type="button" value="NEXT >>"/>
DPI Contact Information:	

Contact application coordinator: Debra Motiff	
Contact Email: debra.motiff@dpi.wi.gov	
Contact Phone:  (608)267-0360 	

WHAT CAN YOU ACCESS?...

- See which Wisconsin Cooperative Education Skill Standards programs are available
- Learn about administering the WI Skill Standards in your CTE programs
- Register for Skill Standards programs
- See program completion information for up to five years prior
- **NEW** Employability Skills Certificate Program (21st Century Skills)—below



Wisconsin Employability Skills Certificate Program Assessment

Reinforcing 21st Century Skills

The intent of the *Wisconsin Employability Skills Certificate Program* is to recognize a student's mastery of employability skills valued by employers, to help students explore their career interests, and to provide a state credential of student mastery. This program allows:

- students and workers to document their employability skills
- employers to assess the skills they are looking for in quality employees
- educators to customize instruction to help students to acquire skills that today's workplace requires.

HOW TO USE THE DATA?...Ideas for implementing data

- Compare enrollment in CTE Co-op courses to State Certified Skill Standards program number of completers
- Share data with stakeholders regarding regional labor market needs vs. current course offerings

Personal and Professional Development	
12. Fulfills training or certification requirements for employment <i>Examples of this requirement may include. . .</i> <ul style="list-style-type: none"> • Participation in required career-related training and/or educational programs • Passing certification tests to qualify for licensure and/or certification • Participation in company training or orientation 	Choose one here: <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 Choose one or more here: <input type="checkbox"/> WB <input type="checkbox"/> SB <input type="checkbox"/> CB
13. Sets personal goals for improvement <i>Examples of this requirement may include. . .</i> <ul style="list-style-type: none"> • Setting goals that are specific and measurable • Setting work-related goals that align with the organization's mission • Identifying strategies to reach goals • Reflecting on goal progress to regularly evaluate and modify goals 	Choose one here: <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 Choose one or more here: <input type="checkbox"/> WB <input type="checkbox"/> SB <input type="checkbox"/> CB
Job Specific Examples: <input type="text"/> Comments: <input type="text"/> Goals: <input type="text"/>	
Personal and Professional Development Subtotal Student/Employee must earn a subtotal of at least 4 out of a possible 6 for certification.	

Career and Technical Education Data Fact Sheet

Resource: **School District Performance Reports (SDPR)**

Website: <https://wlds.dpi.wi.gov/spr/spr.action>

- The School District Performance Report is a review of the district's annual progress.
- The report serves a distinct purpose under state and federal education laws.

WHAT YOU CAN ACCESS?...

Below is a list of topics covered by the report with comparisons to other districts in the same athletic conference.

- Achievement Test Results (grades 3, 4, 8 and 10)
- ACT, AP® Exam, Retention
- Attendance, Dropouts, Truancy
- High School Completion, Post-graduation Plans
- Program Offerings and Participation
- Staffing, Finance
- Suspensions and Expulsions



Wisconsin District and School Performance Reports

Each year, two types of performance reports are created for all public school and districts in Wisconsin. The contents of each report are listed below. Both reports—and the many and varied measures of progress contained within—should be considered when reviewing a school or district's annual progress. While some of the same data appears in both the state and federal report, each serves a distinct purpose under state and federal education laws, and therefore it is recommended that readers consider them together, not independent of one another. For additional information on the district, see the Data Analysis section of [WINSS](#).

State	Federal
<p style="text-align: center;">Wisconsin School District Performance Report (SDPR)</p> <p>The SPR was created in 1991 with the passage of s.115.38 WI Statutes. It serves as a district's annual public school report. Below is a list of topics covered by the report with comparisons to other districts in the same athletic conference.</p> <p>School District Performance Report (SDPR)</p> <ul style="list-style-type: none"> • Achievement Test Results (grades 3, 4, 8 and 10) • ACT, AP® Exam, Retention • Attendance, Dropouts, Truancy • High School Completion, Post-graduation Plans • Program Offerings and Participation • Staffing, Finance • Suspensions and Expulsions <p>School Year: <input type="text" value="2008-09"/></p> <p>District: <input type="text" value="Select a district..."/> <input type="button" value="Go"/></p> <p>Linking directly to your district's report</p>	<p style="text-align: center;">ESEA Report Card</p> <p>The federal Report Card includes data used for AYP and other related information. District and school statewide test results, attendance, teacher qualifications data, graduation rates, and much more can be found on the Wisconsin Department of Public Instruction WINSS webpages.</p> <p>To find a specific type of statewide, district, or school data, click on a link: Graduation Attendance State Test Results Teacher Qualifications NAEP Results</p> <p>Adequate Yearly Progress (AYP) Reports Under the federal Elementary and Secondary Education Act (ESEA) No Child Left Behind (NCLB), all Wisconsin public schools and districts must meet the state's four Adequate Yearly Progress (AYP) objectives: Test Participation; Reading Performance; Mathematics Performance; and Graduation or Attendance.</p> <ul style="list-style-type: none"> • Test Participation Rates • Reading Performance (grades 3-8 and 10) • Mathematics Performance (grades 3-8 and 10) • Other Indicator (Graduation or Attendance) <p>Accountability Reports</p> <p>Special Education District Profile Reports Further questions regarding the Local Performance Plans should be directed to the LPP contact for the district.</p>

HOW TO USE THIS DATA?...*Ideas for implementing data*

- Show key people and groups how CTE can positively impact test scores, graduation rates, and other positive behavior leading to college and careers.
- Cross referencing this information with other data sources (i.e., CTEERS) strengthens the findings.

Career and Technical Education Data Fact Sheet

Resource: **National Student Clearinghouse**

Website: <http://www.studentclearinghouse.org/default.asp>

NOTE: State contract providing district access to the NCS expires May 31, 2012; check DPI website for updated access information.



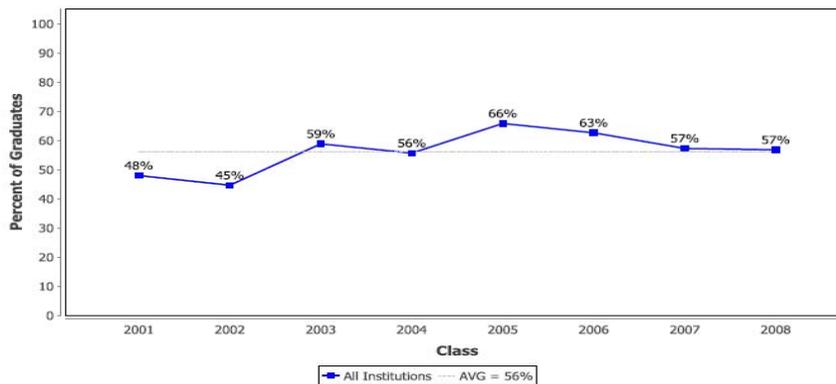
HOW TO USE DATA?...*Ideas for implementing data*

- ✓ Track your students' college attendance nationwide
- ✓ Compare to CTE Graduate follow up data from CTEERS
- ✓ Calculate the value added to a high school diploma with transcribed credit, advanced standing and advanced placement
- ✓ Accurately assess your college preparation efforts
- ✓ Measure your graduates' persistence in college

WHAT CAN YOU ACCESS?...

- Listing of Participating School Districts
http://www.studentclearinghouse.org/highschools/pdfs/HSDistricts_list.pdf
- Student Tracker: factual information on enrollment and graduation patterns nationwide, enabling a district to evaluate student acquisition and retention efforts, assess the effectiveness of educational policies and programs, track placement into four-year institutions and graduate schools, and perform other educational research studies.
http://www.studentclearinghouse.org/highschools/pdfs/StudentTracker_HS.pdf

Percent of Students Enrolled in College the Fall Immediately Following Graduation From High School



Career and Technical Education Data Fact Sheet

Resource: **Wisconsin Knowledge and Concepts Examination (WKCE)**

Website: <http://dpi.wi.gov/oea/wkce.html>

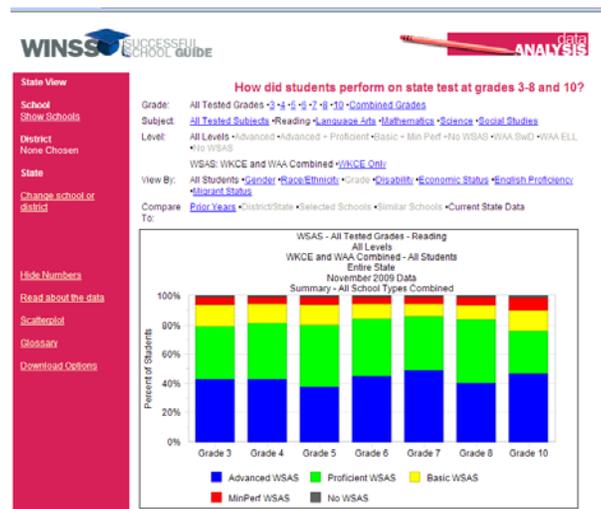
Beginning in the 2005-06 school year, the federal No Child Left Behind Act required all states to test all students in reading and mathematics in grades 3 through 8 and once in high school (grade 10 under s.118.30 Wis Stats). These standardized tests are referred to as the Wisconsin Knowledge and Concepts Examination (WKCE) and are designed to measure Wisconsin academic standards in the areas of language applications, mathematics, science, and social studies using multiple-choice and short-answer questions. Students also provide a rough draft writing sample.

WHAT YOU CAN ACCESS?...

- Student performance on these assessments is reported in proficiency categories and used to determine the adequate yearly progress of students at the school, district and state levels.
- WKCE scores are used as one of several criteria for advancing students from fourth to fifth grade and from eighth to ninth grade.
- The other criteria are academic performance
- Teacher recommendations based on academic performance
- Other academic criteria specified by the local school board
- WKCE for [Reading](#), [Mathematics](#), [Science](#), [Language Arts](#), [Social Studies](#)
- WINNS- includes all the WKCE data for the state as well as each individual school district.
<http://data.dpi.state.wi.us/data/>

HOW TO USE THIS DATA?...Ideas for implementing data

- How special needs students test results compare to overall student population
- How English Language Learner students test results compare to overall student population
- How Free/Reduced lunch students test results compare to overall student population
- Overall strength of academic preparation
- Identify improvement goals that CTE can focus on



Career and Technical Education Data Fact Sheet

Resource: **Youth Apprenticeship**

Web: <http://www.dwd.wi.gov/youthapprenticeship/>

YA Program

DWD

P.O. Box 7972

Madison, WI 53707-7972

Amy Phillips

608.267.3214

amelia.phillips@dwd.wisconsin.gov



The screenshot shows the Wisconsin Department of Workforce Development website. The main navigation bar includes links for HOME, WORKERS, EMPLOYERS, YOUTH, PARTNERS & STAFF, and MEDIA. The page title is "Youth Apprenticeship". A sub-header reads "Investing in Wisconsin's Future". Below this, there is a section for "Information for..." with links for Students, Parent, Employer, School, Instructor, and YA Coordinators. A "What's New!" section lists updates such as "YA Curriculum Revisions" and "2019-2021 Request for Proposal (RFP)". On the right side, there are several sidebar sections: "YA Frequently Used" with links to program information, local coordinators, and maps; "Forms and Publications" with links to forms, brochures, and checklists; and "General Information" with links to starting a program, history, and training modules.

WHAT YOU CAN ACCESS?...

- YA compared to other work-based learning programs
- YA programs available in Wisconsin
- A checklist for all programs and information for students, parents, and schools—below is a sample check list.

HEALTH CARE FOUNDATIONS (HCF)

CHOOSE 2 of the following 3 UNITS for **worksite** competencies.

Students performing CNA functions *are required* to earn CNA certification through a DHFS approved CNA program with DHFS approved instructors.

CNA Registry Number: _____

Diagnostic Services		Minimum rating of 2 for EACH Circle rating		
1. Instruct clients in the collection of stool and/or urine specimens	W	1	2	3
2. Collect stool and urine specimens	W	1	2	3
3. Assist in collecting specimens other than urine/fecal	W	1	2	3
4. Assist in performing macro-urinalysis	W	1	2	3
5. Assist in performing laboratory testing	W	1	2	3
6. Assist in preparing diagnostic agents	W/S	1	2	3
7. Assist in diagnostic imaging	W	1	2	3
8. Set up area for client procedures	W	1	2	3
9. Assist in explaining procedures to client	W	1	2	3
10. Assist in administering procedures	W	1	2	3
11. Maintain and QC lab equipment	W	1	2	3
12. Perform an inventory of supplies, equipment, and/or medications	W	1	2	3
13. Order and receive supplies and equipment	W	1	2	3
14. Transfer client	W	1	2	3

HOW YOU CAN USE THE DATA?...

- Connect to school-based and work-based instruction in the district
- Connect to Wisconsin State Certified Skill Standards in Employability Skills
- What information are we not seeing and how can we access that data?

Youth Apprenticeship



Wisconsin's Youth Apprenticeship program is a part of a statewide **School-to-Work** initiative. It is designed for high school students who want hands on learning in an occupational area at a worksite along with classroom instruction.

This **one or two year elective program** combines academic and technical instruction with mentored on-the-job learning. Students in a YA High School Program graduate at a 6% greater rate than the state average and have one of the highest rates of all WI students of attending a post secondary education program. Program Areas by Career Cluster include:

Agriculture, Food and Natural Resources:
290 students

- Animal Pathway
- Plant Pathway

Architecture and Construction Pathway:

- Drafting and Design- Architecture:
7 students
- Drafting and Design- Engineering:
28 students
- Drafting and Design- Mechanical Design:
8 students

Arts, A/V Technology, and Communication:
15 students

- Graphic Arts: Printing

Finance: 201 students

- Business Financial Management Pathway
- Banking and Related Services Pathway
- Insurance Pathway

Health Science: 570 students

- Health Care Foundations
- Health Information management
- Medical Assistant
- Nursing Assistant
- Pharmacy Technician

Hospitality, Lodging, and Tourism:
113 students

- Restaurants & Food/ Beverage Services
Pathway
- Lodging Pathway
- Travel and Tourism Pathway

Information Technology: 63 students

- IT Essentials
- Hardware
- Software
- Web and Digital Media

Manufacturing:

- Welding: 28 students
- Manufacturing: 193 students

STEM: 21 students

- Biotechnology

Transportation, Distribution and Logistics: 129 students

- Auto Collision Pathway
- Auto Technician Pathway
- Logistics/ Supply Chain Management

All enrollment data includes students in the 2009-2010 school year

Resource: **CTSO alignment to standards and technical skill attainment**



HOSA's competitive events are aligned with the National Health Care Skill Standards which are used by teachers in Wisconsin. Health Science offers a national pre and post test that determines competency in the skill standards. Those who qualify receive a certificate from the National Consortium for Health Science Education.

Website: http://www.hosa.org/competitive_events.html



All FBLA competitive events are aligned to National Business Education Standards, as well as, Career Clusters and their corresponding knowledge and skill statements. In many cases, competencies for each competitive event are supported by industry standards and/or industry standard testing and are regularly updated.

FBLA members are also provided opportunities to earn industry-based certification at national level competitions. These include, but are not limited to, IC3, MOS, Brainbench, etc.

Website: www.fbla-pbl.org



SkillsUSA has developed the Work Force Ready system. The Skill Connect Assessments were created by industry to ensure relevance to entry-level skills and to meet Perkin IV accountability requirements. Specifically, the welding assessment was developed by Honeywell, Lincoln Electric, Miller, Linweld, Alabama Power, American Welding Society, Smith Equipment among others.

The Work Force Ready System has been in use at the SkillsUSA national conference since 2008 and all students who meet proficiency receive a Skill Connect Certificate.

Website: <http://www.workforcereadysystem.org/>



DECA has aligned all of its competitive events to four major career clusters including: Marketing, Finance, Hospitality and Management. Additionally, the national standards for marketing education are industry validated and correlate to these clusters.

Websites: <http://www.deca.org/docs/college-career-ready-attachments/CurriculumDECA.pdf>
<http://www.deca.org/docs/college-career-ready-attachments/EventstoCurriculum.pdf>

Career and Technical Education Data



FCCLA has seven career preparation competitive events which align with career pathways/cluster and the national Family and Consumer Sciences standards. The events are validated through business and industry national proficiency exams for dual credit enrollment in many 2 and 4 year institutions of higher learning in the United States.

Website: <http://www.fcclainc.org/content/star-events-manual-by-event/>



Revision of the National FFA Award and Recognition programs has been finalized. The FFA Career Development Events have been aligned with the Agriculture, Food and Natural Resources (AFNR) Career Cluster Content Standards and are now available.

Website: <https://www.ffa.org/programs/awards/cde/Pages/default.aspx#>



Community Service

Over \$80,000

raised to support charities
and

Over 15,000

hours donated
by Career & Technical Student Organizations

IN ONE YEAR...

Over 44,000

student members

Over 800

participating chapters

Give back to many charities, including...

Habitat for Humanity

Local Food Pantries

Muscular Dystrophy Association

Autism Speaks

Friends for Health in Haiti

March of Dimes

Children's Miracle Network

Make-A-Wish Foundation

Career & Technical Education Team

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Madison, WI 53703
Phone: 608.267.9251
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www.dpi.wi.gov/cte

The Career and Technical Education Team provides leadership, service and connections to prepare learners for life, work and careers.

Career & Technical Education

Through Career & Technical Student Organizations

Wisconsin's Career & Technical Education programs are in most Wisconsin school districts. An important component of Career & Technical Education is the Career & Technical Student Organization (CTSO). Recent research shows that CTSOs provide students with skills that are directly applicable to the real world.

Organizational Elements of CTSOs

Leadership, professional development, community service and competitive activities are foundations of every CTSO. Students benefit from each of these elements to varying degrees and have far-reaching effects on their experiences in high school.

Level of Involvement in CTSOs

There is a direct correlation to a student's degree of involvement in a CTSO and their ability to perform well throughout their high school experience. They are more academically motivated and have a higher degree of academic engagement as they can see correlations to what they are studying and their future career and college aspirations.

Positive Outcomes of CTSO Membership

Academic engagement, civic engagement, self-efficacy, and employment skills are evident in students who are actively involved in CTSOs. In addition, these students are more highly motivated throughout their years in high school. This is considered value-added and does lead to a more meaningful high school

Alfeld, Corinne and Stone, III, James R. *National Research Center for Career and Technical Education. The complete study is available at www.nrccte.org.*



www.dpi.wi.gov/deca



www.dpi.wi.gov/skillsusa



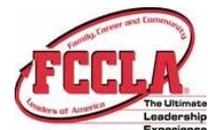
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www.dpi.wi.gov/fccla