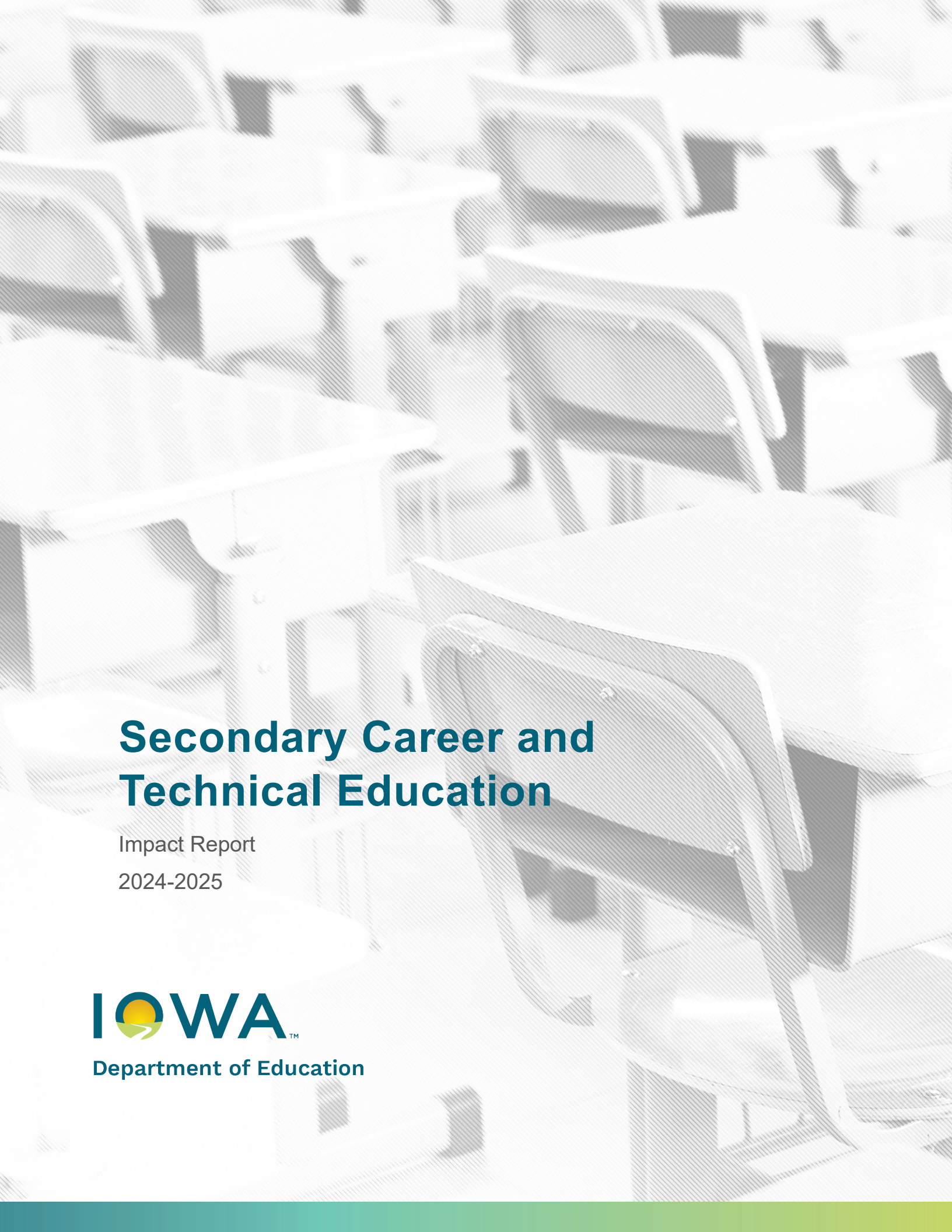


Secondary Career and Technical Education

Impact Report

2024-2025

IOWA™

Department of Education

State of Iowa
Department of Education
Grimes State Office Building
400 E. 14th Street
Des Moines, IA 50319-0146

Administration

McKenzie Snow, Director

Bureau of CTE and Postsecondary Readiness

Cale Hutchings, Chief

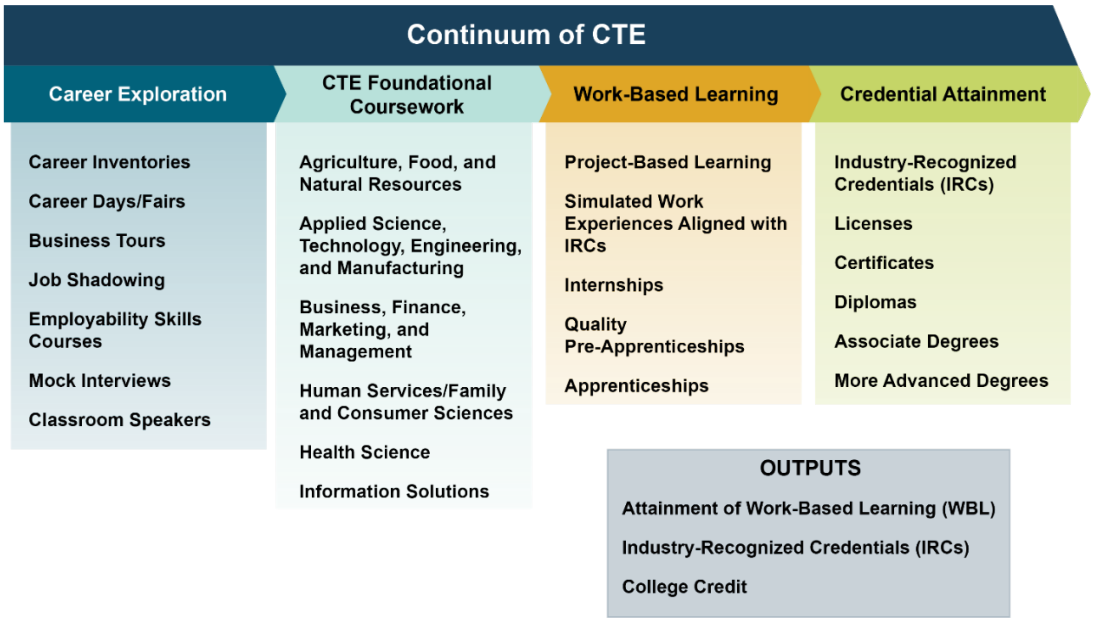
Heather Meissen, Administrative Consultant – CTE

Jeffrey Fletcher, Education Program Consultant – IowaGrants Lead, Perkins Accountability, Monitoring, Reporting

Contents

Executive Summary

Iowa's career and technical education (CTE) system plays a critical role in building the state's talent pipeline by preparing students for postsecondary education, training and high-demand careers. Beginning with career exploration in the middle grades and extending through high school, Iowa students engage in sequenced CTE coursework, hands-on learning experiences and work-based learning opportunities aligned to industry needs. Through these experiences, students earn credentials of value and develop academic, technical and employability skills that support success after graduation.



This impact report highlights statewide priorities, participation and outcomes for secondary CTE during academic year (AY) 2024-2025. More information about CTE in Iowa can be found at the Department of Education career and technical education webpage. Additionally, in-depth data can be found at the Iowa Student Outcomes webpage.

Key highlights from AY 24-20 include:

- Statewide, 69.3% of high schoolers were classified as CTE participants and 23.9% of high schoolers were classified as CTE concentrators.
- The most common CTE content areas were Human Services; Applied Sciences, Technology, Engineering and Manufacturing; and Business, Finance, Marketing and Management.
- Iowa met or exceeded the 90% federal performance threshold for all Perkins V secondary core indicators of performance.
- A total of 45.1% of high school students participated in at least one work-based learning experience, with simulated work experiences aligned to an industry-recognized credential representing the most common model.
- In addition, 8,637 students earned at least one industry-recognized credential, most frequently OSHA-10, ServSafe Food Handler, Certified Nursing Assistant, Youth Quality Assurance Program and Basic Life Support.
- A total of 50,131 students were members of career and technical student organizations. There were 1,228 CTSO chapters reported.
- Of the CTE students at high school locations, 16.2% were enrolled in concurrent enrollment CTE coursework.
- Thirty regional centers served 6,688 students through 205 career academies. Several different types of IRCs and WBL opportunities were provided to students through these career academies.

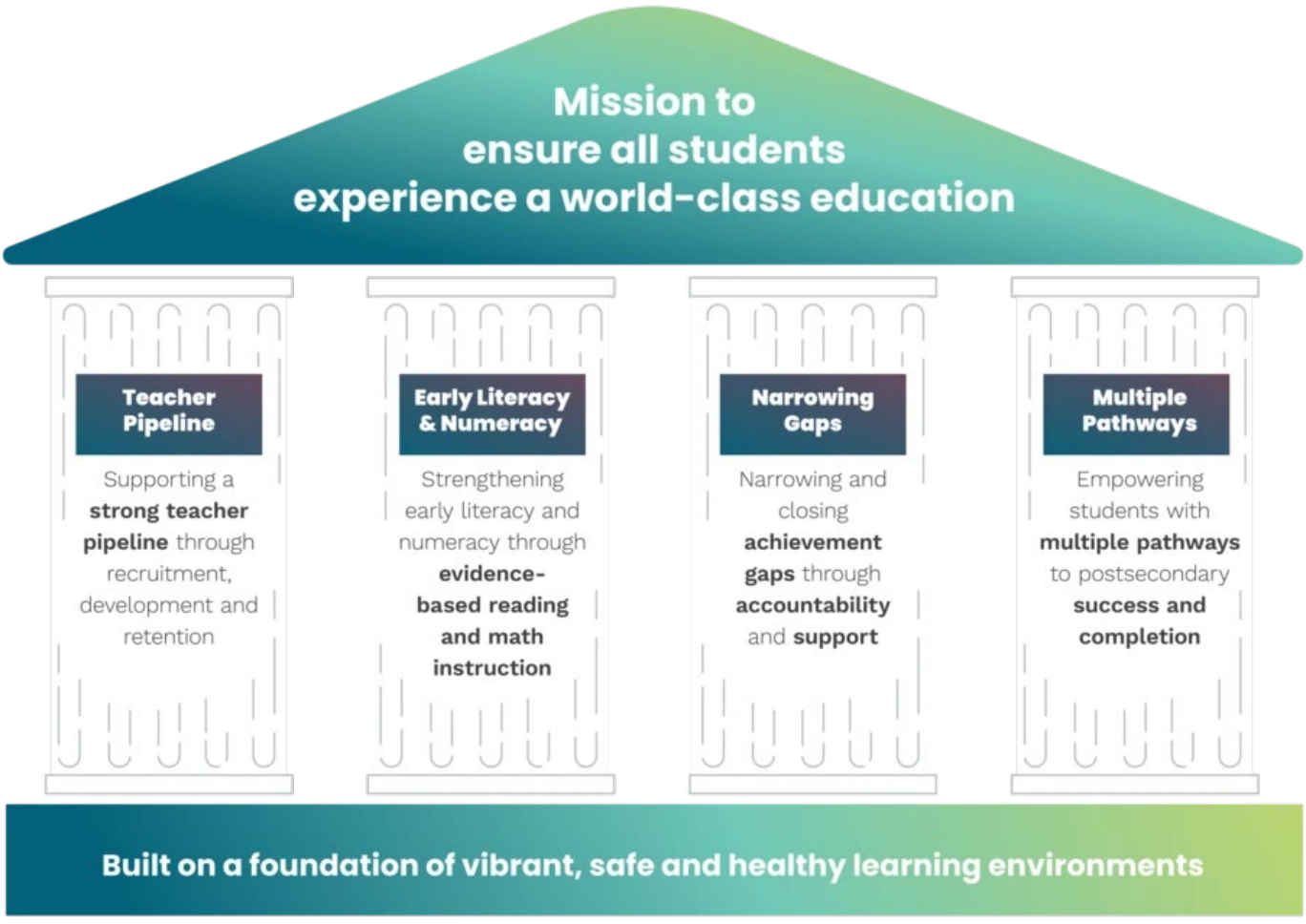
CTE in Iowa

CTE in Iowa consists of organized educational programs of study that provide a sequence of courses aligned to preparation for employment in current or emerging occupations or for continued education at the postsecondary level. These programs integrate academic content with technical instruction to ensure students are prepared for both career and college pathways.

With Iowa's next Strengthening Career and Technical Education for the 21st Century Act (Perkins V) four-year state plan, Iowa is focusing on several key initiatives:

- Student attainment of industry-recognized credentials (IRCs)
- Increased emphasis on work-based learning (WBL)
- CTE instructor recruitment, retention and professional development
- CTE in the middle grades
- Career and technical student organizations (CTSOs)
- Expansion of career academies through regional centers
- Adoption of the updated National Career Clusters Framework

These focus areas guide statewide investment, technical assistance and accountability efforts to ensure alignment with labor market demand and equitable student access. The work of secondary CTE is aligned with the Iowa Department of Education's vision, mission and priorities, building an excellent education system that empowers all students to achieve their full potential and ensuring all students experience a world-class education.



CTE by the Numbers

At the secondary level in Iowa's public school districts, CTE programs are organized into six broad content areas:

- Agriculture, Food and Natural Resources
- Applied Sciences, Technology, Engineering and Manufacturing (including Transportation, Distribution, Logistics, Architecture and Construction)
- Business, Finance Marketing and Management
- Health Sciences
- Human Services
- Information Solutions

Secondary CTE Enrollment

In Iowa, every public school district is required to offer and teach at least three sequential CTE units within at least four of the six CTE content areas in order to meet secondary accreditation requirements. A unit is defined as a course or equivalent related components taught throughout the academic year and is equivalent to 200 minutes per week for 36 weeks, or a minimum of 120 instructional hours. Most semester-long courses are equivalent to 0.50 units.

In AY24-25, there were:

328	public high schools offering career and technical education
1,662	CTE programs – 10 more programs than the previous year
107,508	unique CTE participants in grades 9-12
37,034	unique CTE concentrators in grades 9-12
17,830	CTE course instances
1,995	full-time CTE teachers
117	part-time CTE teachers

At the secondary level in Iowa,

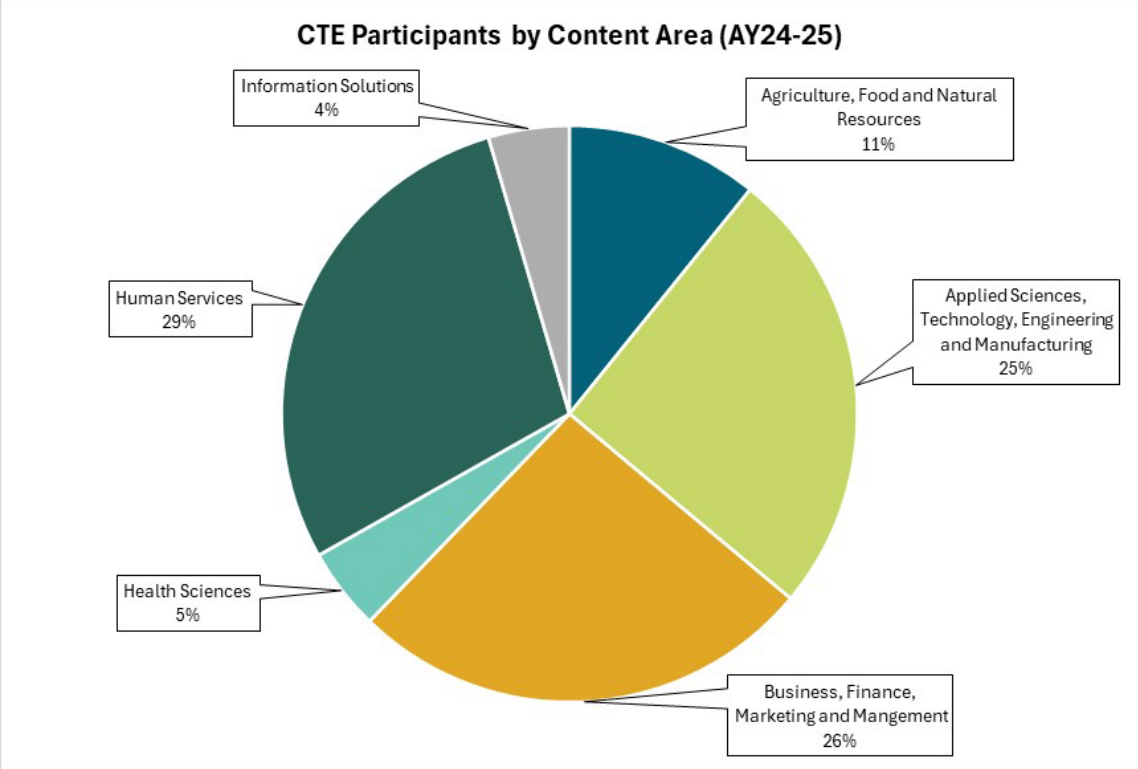
CTE participants are defined as students who are enrolled in at least one CTE course, and

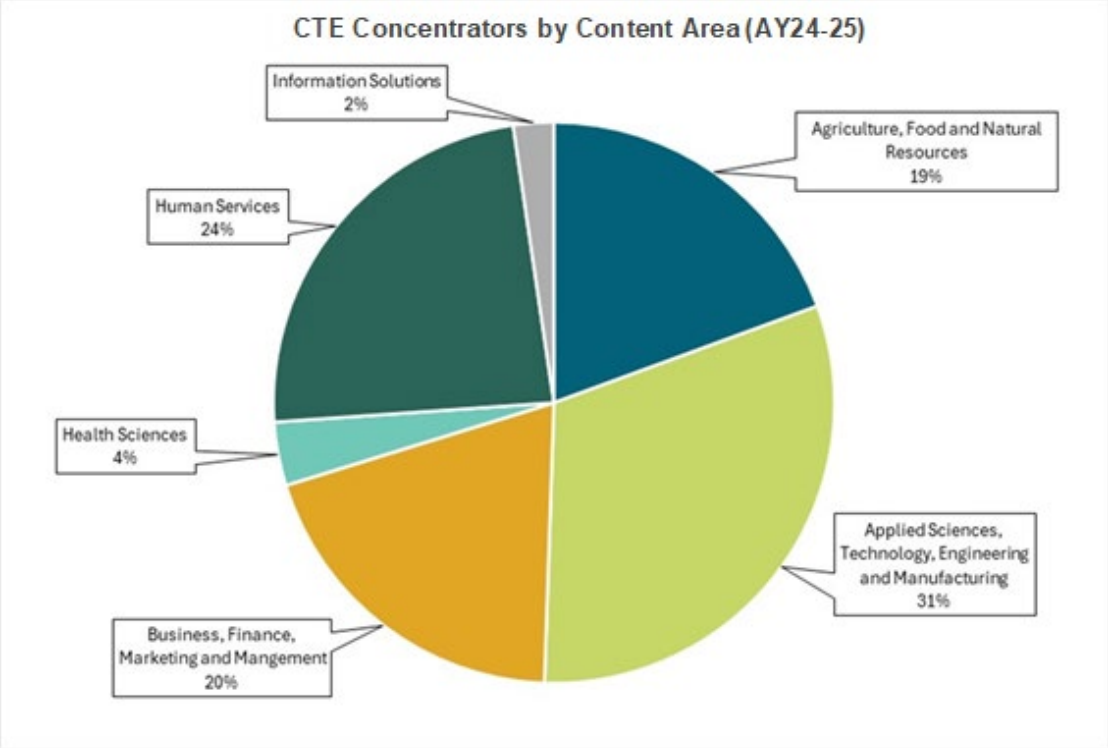
CTE concentrators are defined as students who have earned credit for two or more units within a state-approved CTE program.

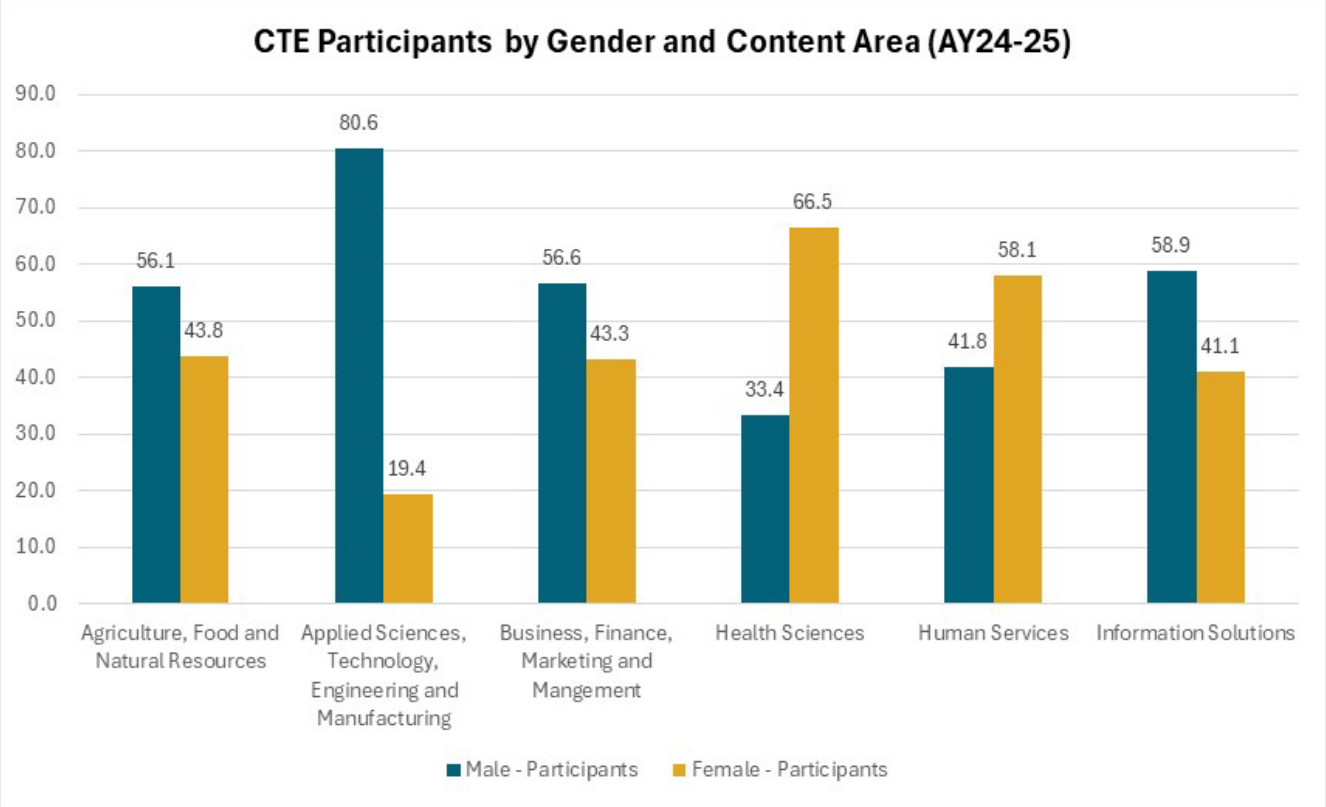
In AY 24-25, 107,508 high school students enrolled in at least one CTE course. This is an increase of 110 students from the previous academic year and represents 69.3% of the total number of high school students in Iowa (an increase of 0.54%). Additionally, these high school CTE students accounted for 69.5% of all CTE students in either secondary or postsecondary education. A total of 37,034 students were defined as CTE concentrators, an increase of 131 students from the previous academic year. This represents 23.9% of the total number of high school students, an increase of 0.25%.

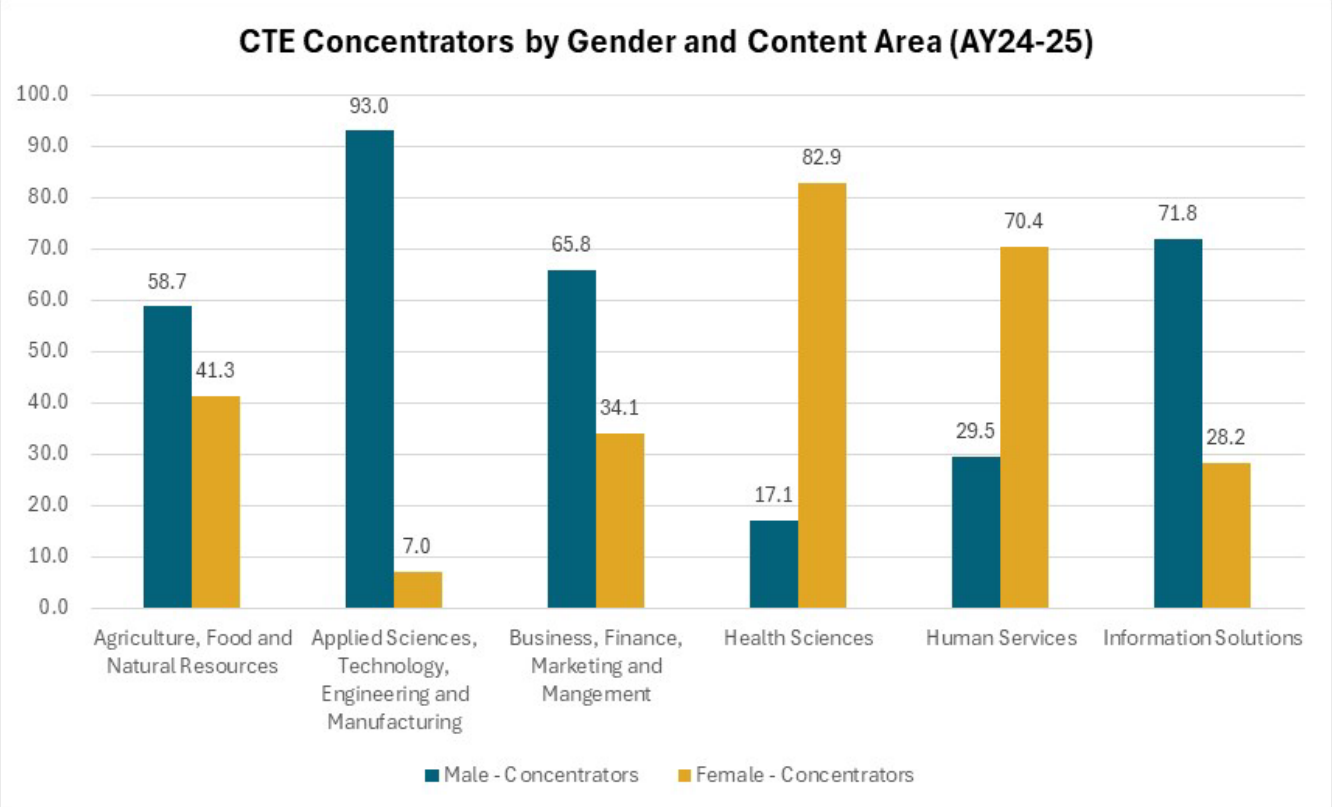
Of the CTE participants, 57.4% identified as male and 42.5% identified as female. Additionally, 62.6% of CTE concentrators identified as male and 37.3% of CTE concentrators identified as female. These participation patterns vary by content area and continue to inform statewide efforts related to access and nontraditional program participation.

The graphs on the following pages illustrate the breakdown of CTE participants and concentrators by content area. Data with the breakdown of male and female students by content area is also shown. As shown in the figures, a majority of high school students enrolled in the Human Services; Applied Sciences, Technology, Engineering and Manufacturing; and Business, Finance, Marketing and Management content areas.


CTE Participants by Content Area (AY24-25)
Information Solutions
4%
Agriculture, Food and Natural Resources
11%
Human Services
29%
Applied Sciences, Technology, Engineering and Manufacturing
25%
Health Sciences
5%
Business, Finance, Marketing and Mangement
26%


CTE Concentrators by Content Area (AY24-25)
Information Solutions
2%
Agriculture, Food and Natural Resources
19%
Human Services
24%
Health Sciences
4%
Applied Sciences, Technology, Engineering and Manufacturing
31%
Business, Finance, Marketing and Mangement
20%


CTE Participants by Gender and Content Area (AY24-25)
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
56.1
43.8
80.6
19.4
56.6
43.3
33.4
66.5
41.8
58.1
58.9
41.1
Agriculture, Food and Natural Resources
Applied Sciences, Technology, Engineering and Manufacturing
Business, Finance, Marketing and Mangement
Health Sciences
Human Services
Information Solutions
Male - Participants
Female - Participants


CTE Concentrators by Gender and Content Area (AY24-25)
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
58.7
41.3
93.0
7.0
65.8
34.1
17.1
82.9
29.5
70.4
71.8
28.2
Agriculture, Food and Natural Resources
Applied Sciences, Technology, Engineering and Manufacturing
Business, Finance, Marketing and Mangement
Health Sciences
Human Services
Information Solutions
Male - Concentrators
Female - Concentrators

Regional Planning Partnerships

Regional CTE planning partnerships (RPPs) were established to assist school districts in providing an effective, efficient and economical means of delivering high-quality secondary CTE programs. The main responsibilities of RPPs include, but are not limited to, developing a multi-year plan to address the delivery of quality CTE programs by school districts, reviewing and recommending the approval of secondary CTE programs and coordinating local advisory councils for CTE programs. By sharing capital, resources and talent, RPPs play an active and prominent role in the planning and delivery of quality CTE programming within each region. RPPs support program quality, reduce duplication of services and promote regional alignment with workforce and economic development needs.

Perkins V Core Indicators of Performance

Under Perkins V, states are required to report annually on multiple indicators of performance, such as graduation rates, academic proficiency and placement, to ensure accountability in CTE programs. Iowa establishes state-determined levels of performance for each Perkins V core indicator. To meet federal accountability requirements and remain eligible for Perkins funding, actual performance must meet at least 90% of the state-determined performance level.

The following table shows the core indicators of performance at the secondary level in Iowa for AY 24-25, with the corresponding state-determined level of performance and the actual performance.

Additional and disaggregated performance information, including state determined levels of performance and actual performance for previous years, can be found on the https://iowastudentoutcomes.com/secondary-cte website.

Core Indicator of Performance	State-Determined Performance Level (%)	90% of Adjusted Level of Performance	Actual Performance (%)	Target Met?
Four-Year Graduation Rate	94.00	84.60	95.73	Yes
Academic Proficiency in Reading Language Arts	69.38	62.44	68.72	Yes
Academic Proficiency in Mathematics	66.19	59.57	67.53	Yes
Academic Proficiency in Science	65.86	59.27	60.87	Yes
Post-Program Placement	90.03	81.03	90.87	Yes
Non-Traditional Program Concentration	27.19	24.47	24.77	Yes
Attained Recognized Postsecondary Credential	4.00	3.60	18.65	Yes
Participated in Work-Based Learning	26.73	24.06	57.72	Yes

Reference: U.S. Department of Education, Office of Career, Technical and Adult Education. (2025). Indicators of Performance. https://cte.edu.gov/accountability/core-indicators

*For indicators where actual performance is below the state-determined level, the target is considered met if the actual performance reaches at least 90% of the state-determined level, consistent with federal Perkins V accountability requirements.

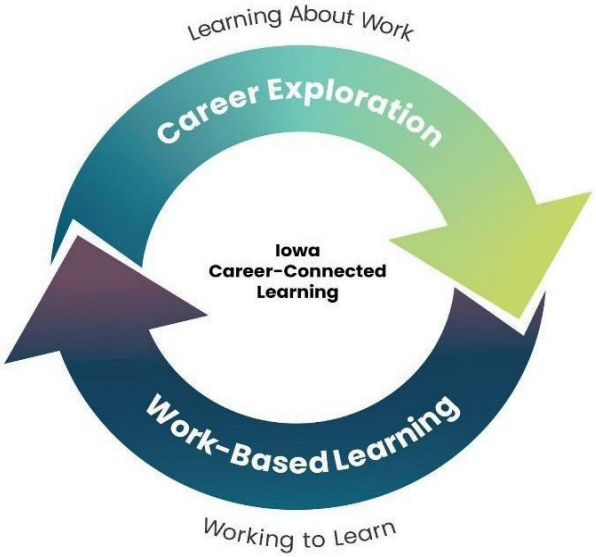
Career-Connected Learning

In Iowa, Career-Connected Learning includes a continuum of structured activities utilizing the partnership between industry and education to engage student learning. Through real or simulated experiences with industry professionals, participants are able to foster first-hand engagement with in-depth application of

academic technical or professional skills to the tasks required of a given career field while meeting specific learning objectives.

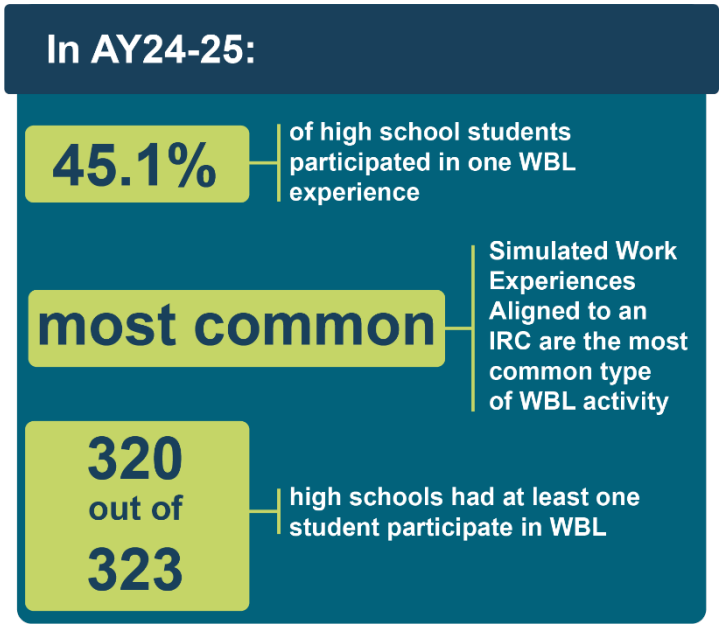
Career-Connected Learning is a progression through two stages of career exploration and WBL to support learning for future success. Activities such as career fairs, business tours, job shadowing and employability skills courses are considered career exploration, whereas work-based learning (WBL) includes:

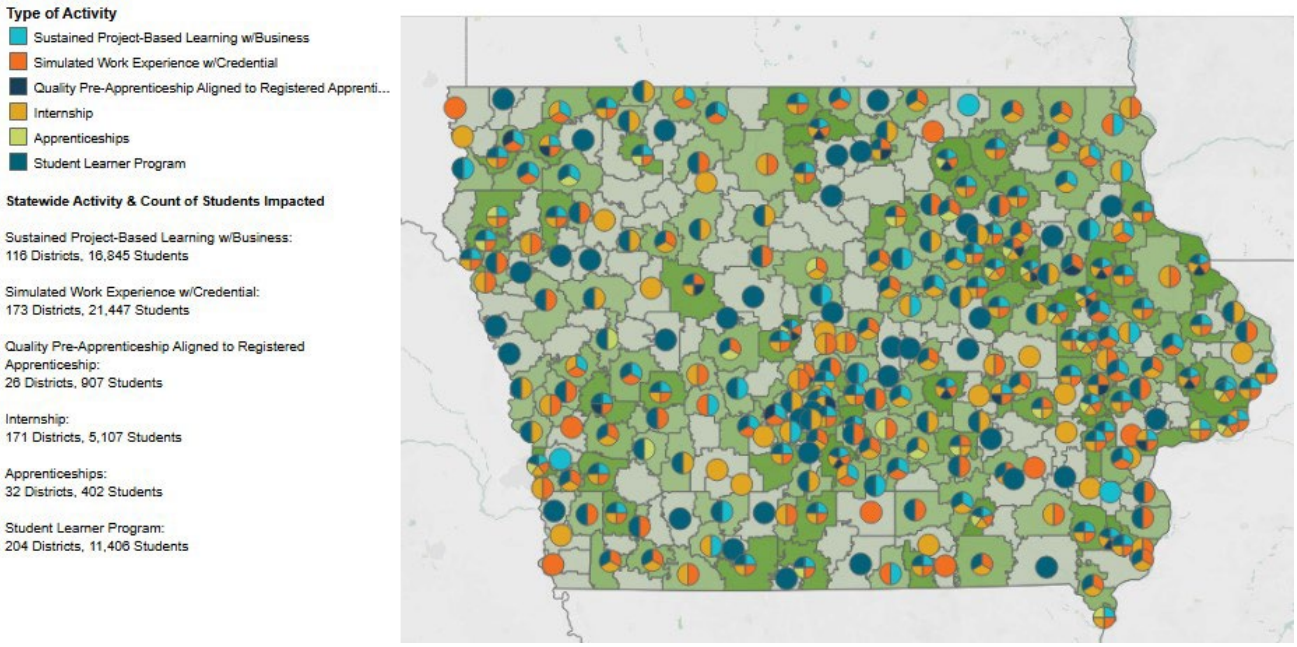
- Sustained project-based learning in partnership with an employer
- Simulated work experiences aligned with industry-recognized credentials
- High-quality pre-apprenticeships aligned to an apprenticeship
- Student learning programs
- Internships
- Apprenticeships



Thus, career exploration activities help students in learning about work, while WBL supports students working to learn toward the knowledge and skills they need to succeed in the workplace and beyond. These two stages are connected and build upon each other, ensuring students get the best possible learning experience, develop important skills and are prepared for success after high school.

Detailed WBL data can be found at https://iowastudentoutcomes.com/work-based-learning.





Industry-Recognized Credentials

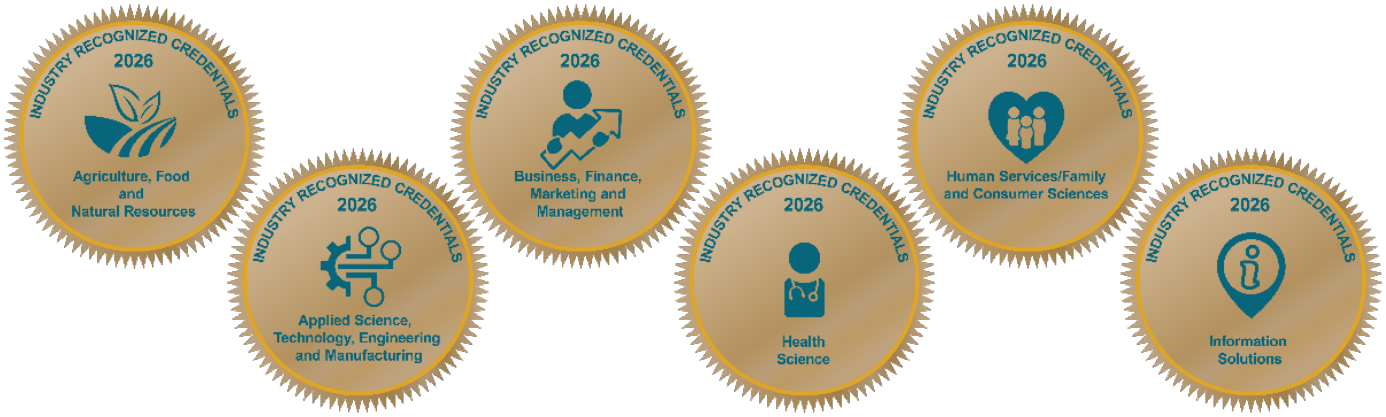
At the secondary level, students have the opportunity to earn industry-recognized credentials (IRCs) that verify skill mastery, educational attainment and the ability to perform a task or operation. These credentials are also valuable to employers, allowing them to determine the skill or education level of job applicants without having to perform an assessment of each one. An IRC is a certification that has been widely acknowledged as holding value within a specific industry or field. Recipients of such credentials have demonstrated that they possess the knowledge, skills and competencies required to perform specific tasks or roles within the industry. IRCs are awarded by certifying bodies, trade associations or professional organizations that have established standards for proficiency and knowledge within that domain.

The Iowa Department of Education supports the attainment of IRCs in multiple ways. For example, an approved IRC list illustrates credentials that have the support of Iowa businesses and are stackable, transferable and portable. Additionally, recent legislation mandates that students who have earned an IRC aligned with their CTE program of study are recognized with a seal on their transcript or diploma.

8,637 students earned an IRC in AY 24-25.

Most popular IRCs:

- OHSA-10 and OSHA-10 Construction
- ServSafe Food Handler
- Certified Nursing Assistant (CNA)
- Youth Quality Assurance Program (YQA)
- Basic Life Support (BLS)



Career and Technical Student Organizations

A career and technical student organization (CTSO) is an organization that engages in CTE activities as an integral part of the instructional program. CTSOs provide opportunities to develop and refine the skills students need in their chosen occupational area. Conferences, competitions, workshops, community service and other activities encourage leadership development and career exploration. Iowa recognizes CTSOs that are members of the National Coordinating Council for Career and Technical Student Organizations (NCC-CTSO):

- Business Professionals of America (BPA)
- DECA
- Future Business Leaders of America (FBLA)
- Family, Career and Community Leaders of America (FCCLA)
- FFA
- HOSA – Future Health Professionals
- SkillsUSA
- Technology Student Association (TSA)

CTSO participation increased in AY 24-25:

50,131	student members
1,228	total chapters
1,666	advisors
8,595	CTSO members that participated in state-level conferences

Career and Academic Planning

Individual and District Career and Academic Planning

Each district has an established district team that has developed and reviews a written district career and academic plan (DCAP) annually. The DCAP is a roadmap for implementation of the career and academic planning process and provides a living context for how each district creates a framework for and supports each student's Individual Career and Academic Plan (ICAP), which is required in grades 8-12.

The DCAP team ensures the district is using an approved Career Information System (CIS) and helps to determine what ICAP activities will be completed in each grade level to ensure students are engaging in activities that support the five essential components of the ICAP framework. The team also reviews financial aid advising activities, including completion of the Free Application for Federal Student Aid (FAFSA), and incorporation in the student/family decision-making process.

Five Essential Components of ICAP

- Self-Understanding
- Career Information
- Career Exploration
- Postsecondary Exploration
- Career and Postsecondary Decision-Making

Career Exploration in the Middle Grades

The state is also committed to building intentional connections with middle school career learning and development. By recognizing the value of early and broad exposure to career-focused exploration and discovery activities, Iowa aims to provide students with a strong foundation in career awareness and connection to self-understanding. With activities starting in the middle grades, CTE programs introduce students to various career opportunities while equipping them with the skills and knowledge to make informed decisions about their academic career paths. By connecting academic work to real-world applications, students gain a clearer understanding of how their education supports their long-term goals. This early engagement in the academic planning process empowers students to think critically about their interests and strengths, setting the stage for thoughtful decision-making as they progress through high school and beyond. Recent legislation supports this concept by requiring career exploration in grades five and six.

College and Career Transition Counselors

66 work with 130 high schools and 12 community colleges to advise students on their career and academic plans.

$1,110,000 has been awarded to implement new CCTCs since AY 20-21

College and Career Transition Counselors (CCTCs) work through community colleges and high schools to support college transition and career exploration through targeted connections with students and families. They work as a liaison to ensure students are supported and receive proper assistance in transitioning into additional training, which can include apprenticeships, military opportunities, two-year colleges, four-year colleges and the world of work.

CTE College Credit

In Iowa, high school students can access community college coursework while still enrolled in high school through concurrent enrollment. This model allows students to take on college-level coursework, earn both high school and college credit, and begin building momentum toward a credential or degree. Many CTE concurrent enrollment courses are delivered as part of career academies, where secondary schools and community colleges collaborate to align high school coursework with community college CTE programs of study.

In 2024–25, the number of students at high school locations enrolled only in concurrent enrollment CTE courses increased by 5.4%, while the number enrolled in both high school credit-only and concurrent enrollment CTE courses increased by 3.3%. These increases highlight the continued value of strong secondary-postsecondary partnerships in broadening student access to high-quality CTE opportunities across Iowa.

Of the CTE students at high school locations in AY 24-25:

83.8% were enrolled in high school credit only CTE courses.

2.1% were enrolled in only concurrent enrollment CTE courses.

14.1% were enrolled in both high school credit only and concurrent enrollment CTE courses.

Want to learn more about earning college credit in high school?

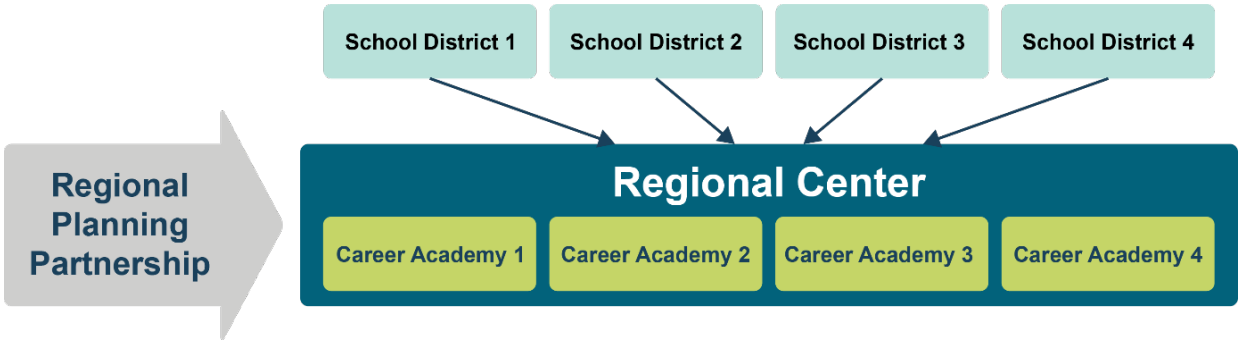
- https://educate.iowa.gov/higher-ed/senior-year-plus

Looking for community college CTE data?

- https://educate.iowa.gov/2024-annual-condition-iowas-community-colleges
- https://www.iowastudentoutcomes.com/home

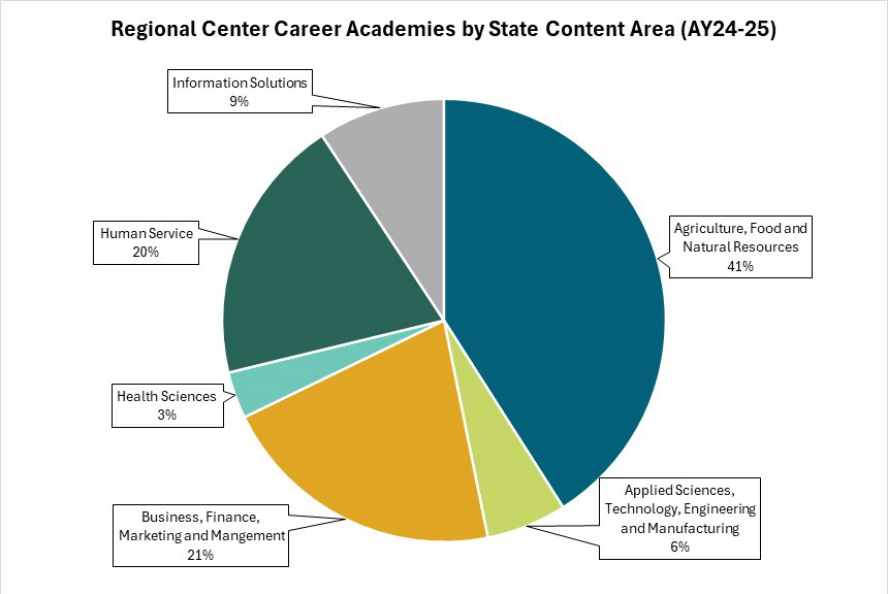
Career Academies and Regional Centers

Career academies are often delivered through regional centers, frequently in partnership with Iowa's community colleges. These centers are designed to expand access to high-quality Career and Technical Education programming by connecting students to advanced coursework, industry-relevant facilities, specialized equipment, and skilled instructors. Through this shared model, regional centers help manage the high cost of delivering advanced CTE programs while ensuring students across Iowa, particularly in rural areas, have consistent access to strong college and career preparation opportunities.



Regional Centers in AY24-25:

30	regional centers
6,688	students served
205	career academies
93	unique IRCs offered
49	unique types of community college awards offered
113	career academies offering a WBL experience



Legislative Impacts and the Future of CTE in Iowa

Several bills have been passed by the Iowa legislature over the last few years to enhance CTE programming in the state. This legislation has had an impact on all aspects of the CTE continuum. Career exploration was historically required to start in grades 7 and 8. However, with the passage of House File (HF) 316, career exploration is now required in grades and 6, allowing students to have an earlier exposure to CTE pathways. HF 2465 provided for more flexibility in the usage of CTE courses for core credit. More specifically, the legislation allows for certain Agriculture courses to count as science credit and Applied Sciences, Technology, Engineering and Manufacturing courses to count as math credit. In regards to postsecondary readiness, Senate File (SF) 2411 defined Work-Based Learning as specific categories directly related to work in the CTE field. HF 316 incentivized the earning of industry-recognized credentials by allowing students to earn a seal on their diploma or transcript.

Future legislation will further strengthen CTE in the state of Iowa. If passed, HF 2547 will standardize the definition of a career academy, extend supplementary weighted funding to summer concurrent enrollment coursework and enhance the career and academic planning efforts. Finally, if passed, SF 2391/HF 2610 will align CTE expenditures with high-wage, high-demand and high-skill occupations.

Continuum of CTE

	Career Exploration	CTE Foundational Coursework	Work-Based Learning	Credential Attainment
2024		HF 2465: CTE courses for science and math credit (e.g. agriculture for science and applied STEM for math)	SF 2411: Consistent definition of high-quality WBL	
2025	HF 316: Career exploration required beginning in 5th grade to support 8th grade Individual Career Academic Plan (ICAP)			HF 316: IRC diploma seal recognizing individual student attainment of high-quality IRCs
2026	HF 2547: Intentional Career Academic Planning	HF 2610: Aligning RPP expenditures to H3; aligning to the National Career Clusters Framework		HF 2547: Expanded summer concurrent enrollment; improved transferability of CTE credit