Expanding Career-Technical Education in Ohio

July 2022

Ohio Department of Education & Workforce

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Department of Education & Workforce

Foreword

PURPOSE

The goal of this white paper is to examine the key components, benefits and strategies of the current Career- Technical Education (CTE) system, identify potential barriers to expansion and propose policy considerations to enhance and expand opportunities for students in CTE. The intended audience of this white paper is state agencies involved in workforce development initiatives, state legislators and CTE administrators who can deepen their understanding of CTE and workforce development in Ohio in order to update policy and promote new CTE initiatives and expansion.

SUMMARY

CTE improves student success and provides an answer to the existing skills gap and labor needs of Ohio. In the 2020-2021 school year, there were 83,256 Ohio students who were enrolled in workforce development CTE pathways, and this number is included in the total of 127,785 Ohio students participating in at least one CTE course. In order to enhance and expand the opportunities of students in CTE, this white paper examines the key components, benefits and strategies of the current CTE system, identifies potential barriers to expansion and proposes policy considerations.

Flexibility, collaboration with stakeholders and career exploration are cornerstones in CTE and in creating buy-in for expansion, while keeping quality and the needs of students at the forefront.

With those key components in mind, there are four main strategies for expanding CTE in Ohio:

- Strategy 1: Program Design
- Strategy 2: Nontraditional Scheduling
- Strategy 3: Delivery of Industry-Recognized Credentials
- Strategy 4: Expand Work-Based Learning

These four strategies incorporate innovative ideas to increase access, enhance experiences and develop new programs. In implementing these strategies, Ohio's instruction and reporting requirements, teacher licensure options, adult education, facility expansion and integration and college credits must all be considered as they present both limitations and opportunities for growth.

Based on the discussion of the existing CTE system in Ohio, the following policy changes are recommended:

- Removing the state share percentages from the weighted funds in the state CTE supplemental funding
- Offering different weighted funds for the different types of CTE programs
- Requiring one credit of CTE for all Ohio students
- Expanding the simultaneous credit awarded for other required courses through CTE
- Increasing flexibility in teacher licensure
- CTE and Ohio Technical Centers (OTCs) following the model for College Credit Plus and community colleges
- Enabling year-round open CTE-26 application for new CTE programs

Collaboration, innovation and flexibility in CTE are necessary to meet the needs of Ohio and its students.

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Expanding Career-Technical Education in Ohio

INTRODUCTION

WHAT IS CAREER-TECHNICAL EDUCATION?

Career-Technical Education (CTE) is defined in the Strengthening Career and Technical Education for the 21st Century Act of 2018 as "organized educational activities that… provides individuals with rigorous academic content and relevant technical knowledge and skills needed to prepare for further education and careers in current or emerging professions,… includes competency-based, work-based, or other applied learning that supports the development of academic knowledge,… coordinates between secondary and postsecondary education programs through programs of study… and may include career exploration at the high school level or as early as the middle grades."

WHY IS CAREER-TECHNICAL EDUCATION IMPORTANT?

CTE has a positive impact on student success. CTE is associated with higher levels of student engagement, reduced rates of dropout, higher graduation rates and higher rates of enrollment in postsecondary education.[1] Eight years after their expected graduation date, students who pursued CTE courses while in high school had higher median annual earnings than students who did not pursue CTE.[2] There are 30 million jobs in the United States that do not require a bachelor's degree and pay median earnings of $55,000 or more. Many CTE students will graduate with the skills, licensures, industry credentials or certificates needed for these jobs.

Additionally, CTE benefits the workforce and economy. The US and Ohio economies are experiencing a skills gap. There is a projected deficit of 6.5 million skilled workers over the next decade in the US, which CTE can help fill; 74% of employers in the US report a persistent mismatch between desired skills and the skills of workers; 54% of jobs in Ohio require skills training— more education than high school but less than a four-year degree, but only 46% of Ohio workers are trained at this level.[3] CTE provides an important avenue for young adults to gain these skills beginning in high school.

CAREER-TECHNICAL EDUCATION IN OHIO

In the 2020-2021 school year, there were 83,256 Ohio students who were enrolled in workforce development CTE pathways, and this number is included in the total of 127,785 Ohio students participating in at least one CTE course. CTE at the secondary level in the state of Ohio is primarily delivered through 89 Career- Technical Planning Districts (CTPDs), designed to make sure every high school student in Ohio has access to high-quality CTE. As defined by the Ohio Department of Education, there are 16 career fields, 41 pathways and three types of delivery systems: Joint-Vocational School District (JVSD), Compact and Comprehensive. Each of the delivery models is intended to respond to local needs, as well as the needs of students and business and industry.

[1] CTE-Works_Fact-Sheet_Final-1.pdf (acteonline.org)
[2] CTE Data Story
[3] OH-Skills-Mismatch-Fact-Sheet-2020.pdf (nationalskillscoalition.org)

Technical Planning Districts (CTPDs), designed to make sure every high school student in Ohio has access to high-quality CTE. As defined by the Ohio Department of Education, there are 16

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Figure 1

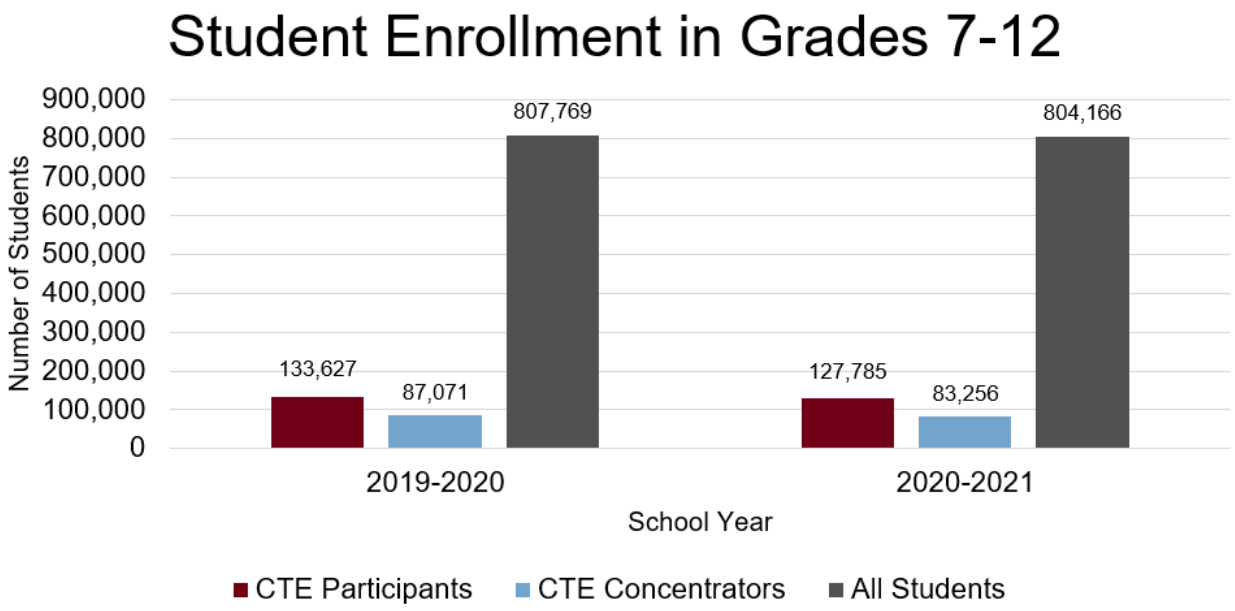

Figure 1 depicts the number of students enrolled in all schools across Ohio in grades 7-12, as well as the number of students enrolled as CTE Participants and CTE Concentrators. A student is a CTE participant if the student is funded in and completes one or more CTE workforce development courses and is a CTE concentrator if the student is funded in and completes two or more CTE workforce development courses within the same pathway. In 2020-2021, 16% of students in grades 7-12 were CTE Participants and 10% were CTE Concentrators, which is a decrease from 16.5% and 10.8% in the previous year (2019-2020). Data broken down by Tech Prep Region can be found in the appendix. The six Ohio Tech Prep Regional Centers serve as liaisons to CTPDs, community colleges and universities to ensure high-quality CTE programs. These regions are based on the JobsOhio regions, which is a regional network comprised of six economic development partners. Each region's unique strengths, perspective, and experience come together to strategically serve companies in Ohio. The Tech Prep and JobsOhio regions align to connect the education and economic strengths of each region. The highest number of CTE Participants and Concentrators are in the Northeast region of the state; however, the Northeast region also has the highest number of total students in comparison to the other tech prep regions.

Figure 2

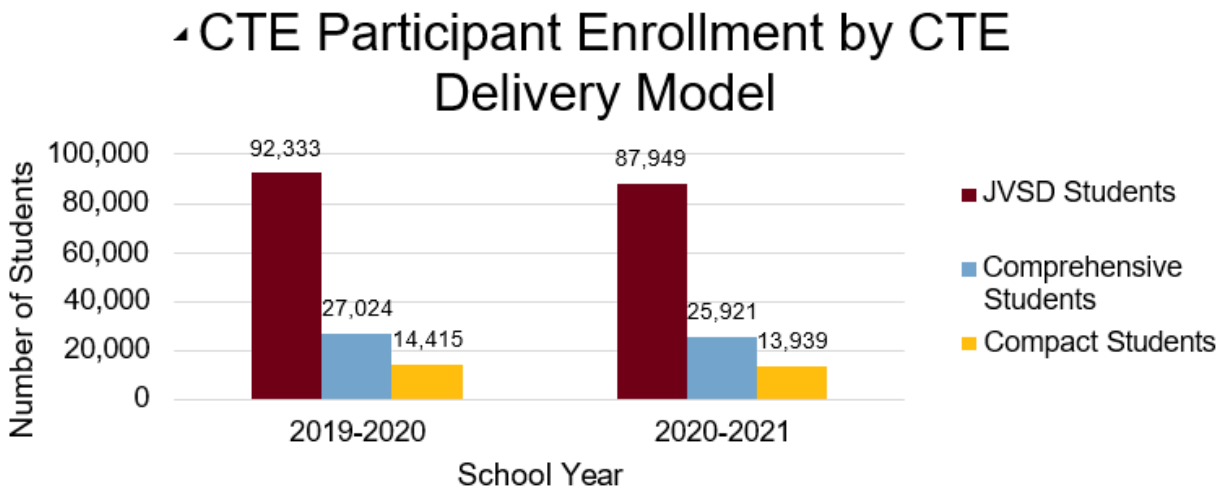

Figure 2 shows CTE Participants enrolled in the three CTE delivery models. JVSD students make up the majority of CTE Participants. Figures 3-5 allow for comparison between CTE Participants and all Ohio students in grades 7-12 for gender, race and economic disadvantage by examining subgroups as a percentage of the total enrollment for its respective population.

Figure 3

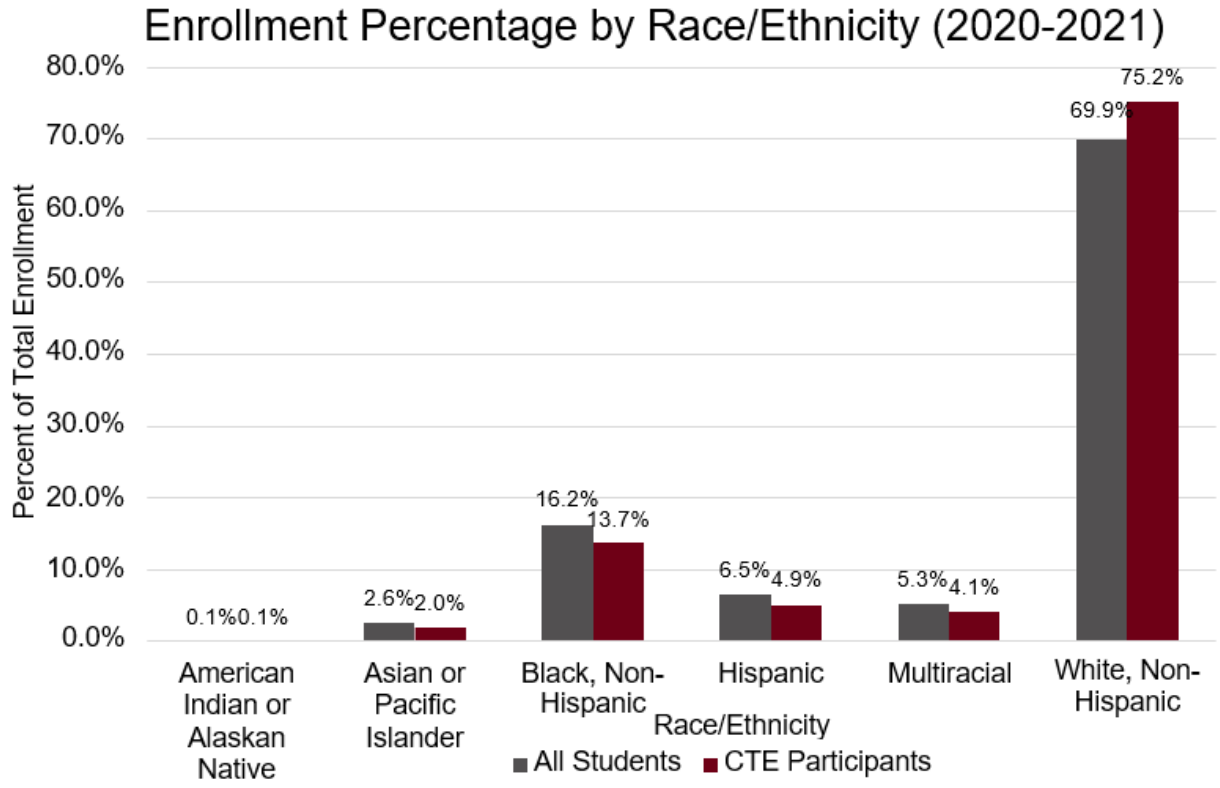

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Figure 4

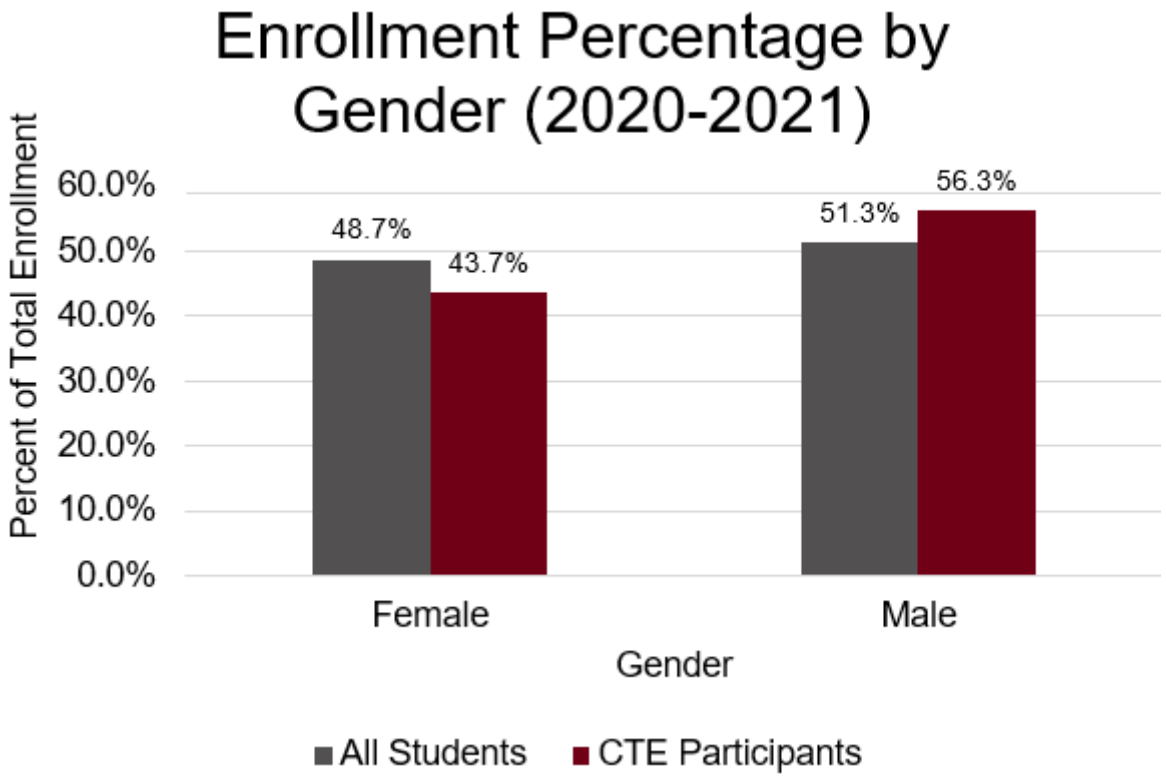
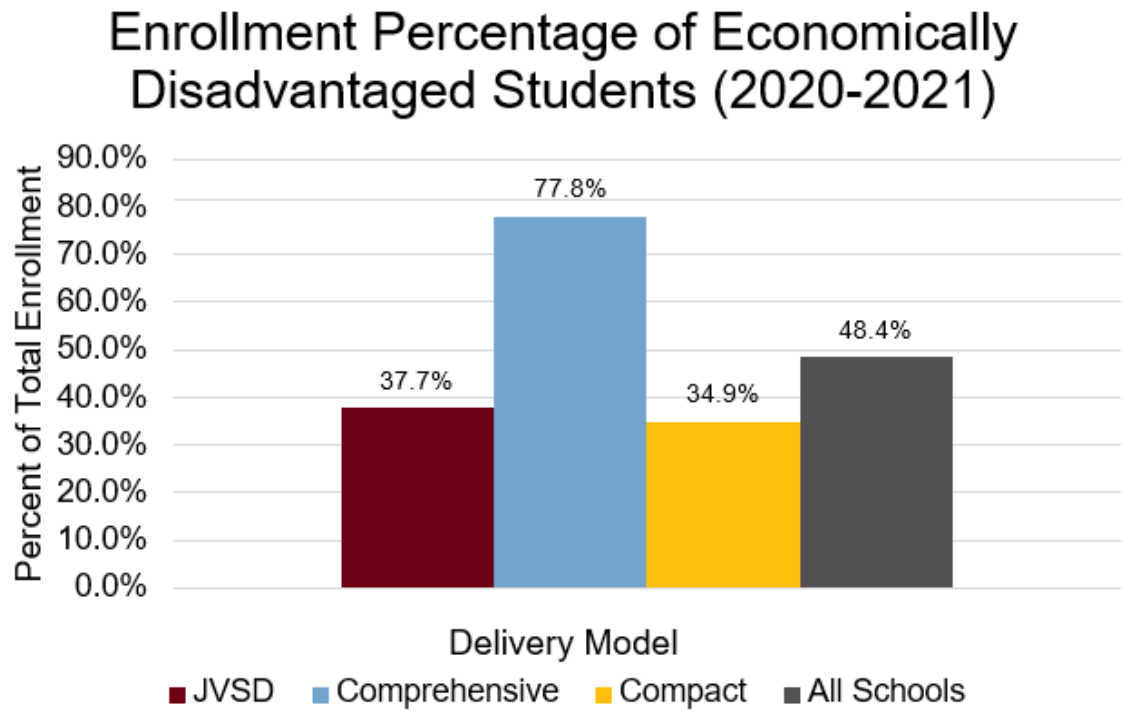


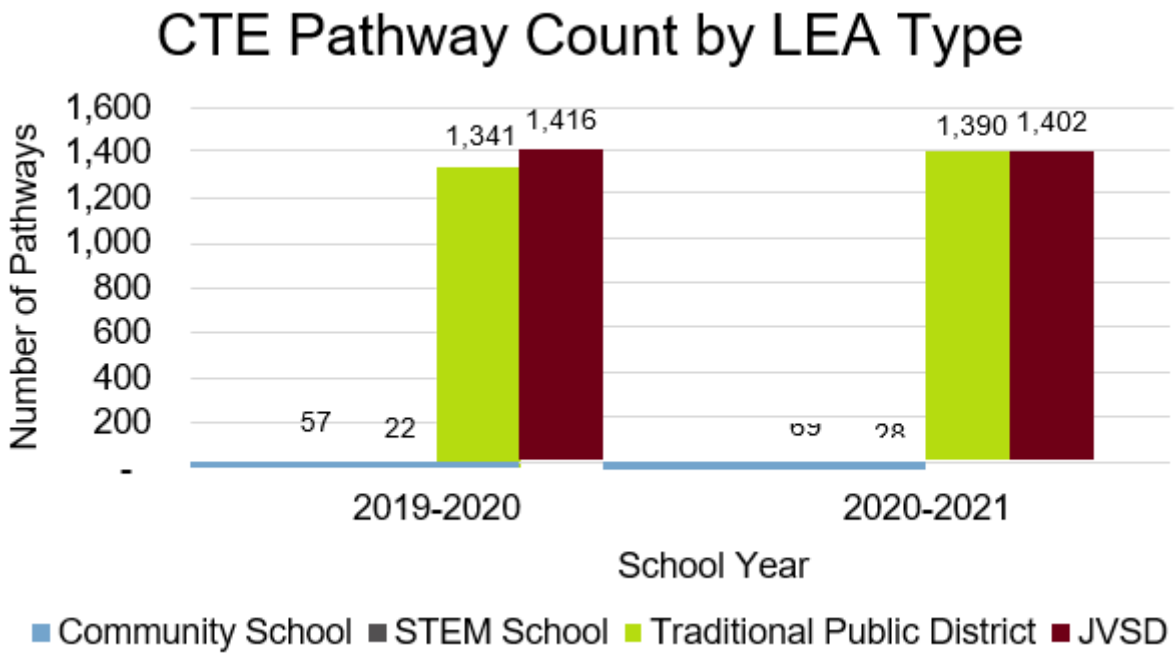
Figure 5



In comparing CTE Participants and all students in Ohio for grades 7-12, female, Asian or Pacific Islander, Black (Non-Hispanic), Hispanic and Multiracial students are underrepresented in CTE

programs. Students who are economically disadvantaged are well represented in Comprehensive CTPDs but are underrepresented in CTE as a whole. These special populations are considered throughout the exploration of expanding CTE programs in Ohio.

Figure 6



There was a total of 2,836 CTE Pathways in 2019-2020 and 2,889 CTE Pathways in 2020-2021.The largest portion of CTE Pathways were in the Northeast and existed in JVSDs.

Figure 7

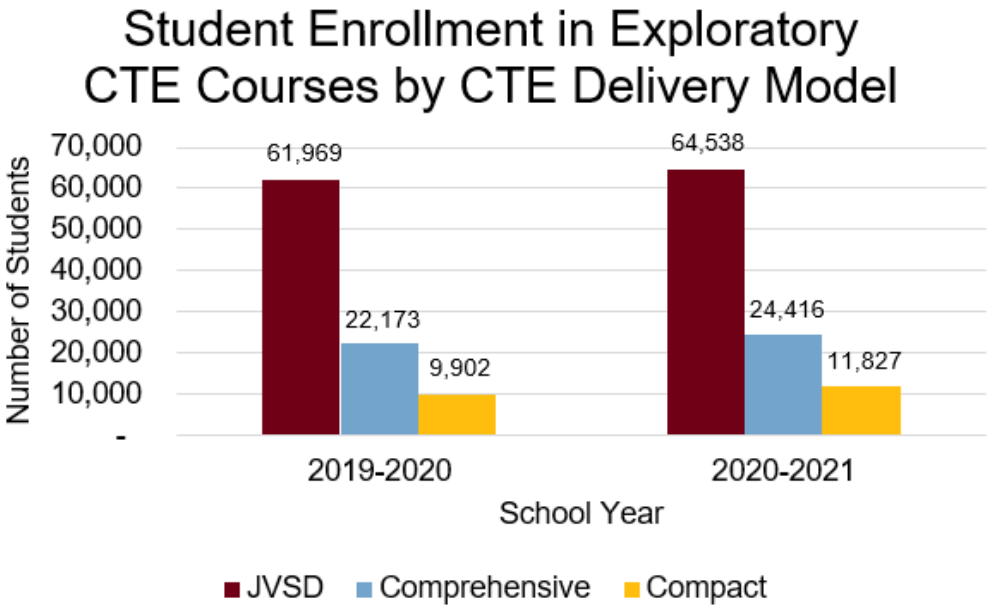
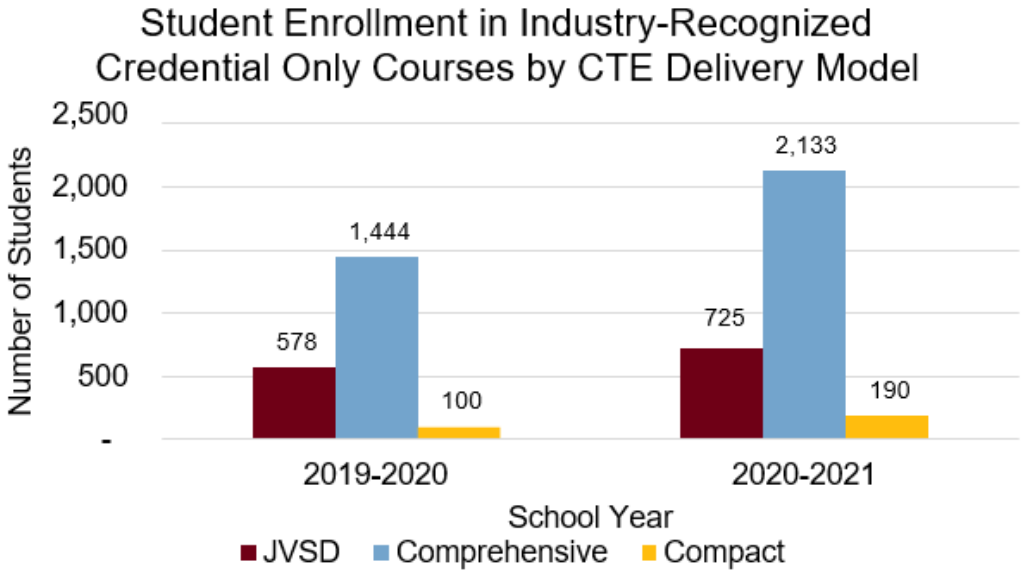


Figure 7 shows the number of students enrolled in an Exploratory CTE course or VM course, which is the curriculum code for 30–120-hour introductory level CTE courses offered to students grades 7-10. VM courses do not count towards a student's CTE concentrator status and students in VM courses are not subject to CTE technical testing. There were 93,839 students enrolled in VM course in 2019-2020 and 100,574 students in 2020-2021. The highest number of students enrolled were in the Northeast region and in JVSDs for both years.

Figure 8



Figures 8 shows the number of students enrolled in Senior Only Credential courses, which is a program for students in their senior year who have completed most of their curriculum

requirements. There were 2,122 students enrolled in Senior Only Credential courses in 2019-2020 and 3,046 students in 2020-2021.

Expansion of Quality CTE Programs

The Office of Career-Technical Education convened a workgroup consisting of cross-agency staff members, leaders of executives of Ohio CTE Associations and innovative administrators from the CTE community.
Rising workforce and student needs in Ohio demonstrate the need for this workgroup in order to expand high-quality CTE programs. Recent data regarding applications for enrollment in CTE across Ohio indicates there is a significant increase in the number of high school students interested in career technical education programs. In addition, the number of new companies locating in Ohio and the current shortage of workers to meet the rising demands of employers speak to the need for this workgroup.

The goal of this workgroup is to examine the key components, benefits and strategies of the current CTE system, identify potential barriers to expansion and propose policy considerations to enhance and expand opportunities for students in CTE. Many schools utilize innovative thinking to capitalize on opportunities to expand existing CTE structures, which provided inspiration and examples of implementation for this workgroup.

After discussing these examples, members of the workgroup determined the following criteria as necessary to the success of expanding high-quality CTE programs across Ohio.

- Expansion without duplication of efforts
- Consistent CTE curriculum across the state
- Regional and coordinated systematic framework for expansion
- Connection with K-12 school leadership for an education continuum beginning in elementary grades
- Coordination between the Ohio Department of Education and Ohio Department of Higher Education to provide seamless postsecondary options for CTE students

A systematic approach and buy-in from various stakeholders send the message CTE is valuable for our students and the economic future of Ohio.

Key Components of Expansion

The key components of expansion are important concepts to consider in discussions of expansion. Flexibility, collaboration with stakeholders and career exploration are cornerstones of CTE and in creating buy-in for expansion, while keeping quality and the needs of students at the forefront.

FLEXIBILITY

Flexibility is key to allowing districts to think outside of the box to meet the individual needs of their school, community, state and students. The following demonstrate the current flexibility in Ohio's CTE system:

- Three different delivery models (JVSD, Compact and Comprehensive)
- Innovative Pathway Program
- Partnerships with Adult Education

There are three delivery models within Ohio's CTE system: JVSD, Compact and Comprehensive. Each model functions in a different manner. A JVSD serves at least two adjacent school districts and is governed by a board consisting of representatives from the participating districts (e.g., Tolles Career and Technical Center, Upper Valley Career Center)**.** A Compact district is an area in which a number of school districts enter into a contract of operation to provide career-technical education (e.g., Tri Star Career Compact, Four Cities Compact). A Comprehensive district is one that has 1,500 or more students and offers career-technical education in career centers and/or at existing high schools in the district (e.g., Massillon City Schools, Akron Public Schools).

The Innovative Pathway Program is an opportunity to prepare students for employment in emerging careers that cross multiple career field pathways supported by in-demand or critical occupation through business and industry partnerships resulting in direct employment, preferential training or earning a postsecondary industry credential. These pathways must be designed to expand access to CTE courses specific to an occupation or cluster of occupations not directly aligned to a current workforce development pathway. For example, Cleveland Metropolitan School District partners with the Port of Cleveland and United Airlines to offer the Davis Aerospace & Maritime High School. Cleveland has applied for the Innovative Pathway Program to place the programs at Davis fully under CTE. The first pilot of this program will take place in Fiscal Year 2023.

College Credit Plus currently allows for adult learners and high school students to mix in the classroom. The flexibility to partner with Adult Education would offer more opportunities to high school students with less duplication of effort. Allowing for flexibility in the delivery and design of CTE programs provides increased opportunity for collaboration.

COLLOABORATION WITH STAKEHOLDERS

Ohio's students represent the future of our economy and workforce; therefore, supporting and training these students is mutually beneficial to a multitude of stakeholders within CTE. Stakeholders include community colleges, career centers, OTCs, universities, businesses, parents, students, educators and local, state and federal government. Collaboration with these stakeholders helps to ensure high-quality, timely and consistent CTE programming across associate schools and postsecondary institutions.

CAREER EXPLORATION

A major goal of CTE is career awareness and exploration. Ohio utilizes the career connections framework, which was developed by the Governor's Office of Workforce Transformation, Ohio Department of Higher Education, OhioMeansJobs and Ohio Department of Education in 2021 to help engage K-12 students in career awareness, exploration and planning.

Schools may start to offer CTE courses in middle school. In middle grades (6-8), students explore their career interests through embedded activities. Career exploration strategies are opportunities for students to discover work environments and understand the various aspects of the workplace. In high school (9-12), students continue career exploration while focusing on career planning. Activities provide advanced experiences that offer hands-on opportunities in a workplace. Career planning strategies focus on making clear links between career options and educational decisions. Students may engage in career exploration through advanced academic and technical education, workplace visits, career courses, mentorship, career research, service learning, career-technical student organizations, industry-recognized credentials, work- based learning, pre-apprenticeship programs and part-time work.

Educators and legislators alike are pushing for more career exploration within the classroom. Many districts in Ohio have already implemented career exploration courses in grades 6-10. This workgroup recommends embedding CTE curriculum in core classes in the middle grades to expose students to the opportunities CTE curriculum offers. Ohio House Bill 110, which was signed June 2021, set aside funds for the purpose of career awareness and exploration. These funds must be used for the following purposes: delivery of career awareness programs to students K-12; provision of a common, consistent curriculum to students K-12; assisting teachers in providing career development to students; developing a career development plan for each student that stays with that student throughout their entire education or providing opportunities for students to engage in career focused activities across all pathways at each grade level.

Strategies for Expansion

STRATEGY 1: PROGRAM DESIGN

Program design entails the course and pathway offerings, facilities, time, teachers and other resources needed to implement quality CTE programs. Innovative program design has allowed several districts in Ohio to expand their CTE offerings. While innovative program design is necessary for expansion, it also is necessary to keep in mind quality, understanding of full-time equivalent (FTE) and reporting requirements, partnerships with stakeholders and constraints on resources. The goal is not simply expansion – it is the expansion of *high-quality* CTE programs.

The following list provides examples of innovative program designs already in place in schools across Ohio:

- Career academies "Wall to Wall" High Schools
- Expanded satellite programming
- Creative school days
- Partnerships with businesses to train teachers and hire part-time instructors
- Blended online learning
- Expanding workforce development pathways to grades 9 and 10 in all delivery models

Examples in Practice

Akron Public Schools, ConxusNEO and Ford Next Generation Learning partnered to develop the College & Career Academies, which provide all students with opportunities to pursue their interests and passions related to high-demand careers. The student-selected pathway is integrated into the core academic knowledge of the small learning community environment and lessons are connected to the student's postsecondary plan. All students must take at least one CTE course each year starting in grade 10; however, some students may need more CTE courses to earn an industry credential.

Cleveland Metropolitan School District has embedded PACE curriculum in grades 6-12, which provides students with knowledge, skills and opportunities to discover different careers. The core components of PACE are self-knowledge and self-awareness, career awareness and exploration, active career planning and decision-making, work-based learning and associated skills, such as financial literacy, employability and networking. By partnering with local businesses and organizations, PACE offers students opportunities to engage in career camps, capstone projects, classroom and virtual sessions, informational interviews, site tours, mentorship and work-based learning experiences.

South-Western City Schools offers an innovative program in customer service with a bilingual component. The school partners with Central New Mexico Community College to offer a Customer Service certificate, bilingual and nonbilingual. This certificate works to meet the needs of students and the local economy, with 81 different languages spoken within the district and 14,000 customer service openings in central Ohio. This program is a part of the

Customer Service Senior Only program with National Retail Federation (NRF) industry-recognized credentials.

STRATEGY 2: NON-TRADITIONAL SCHEDULING

Nontraditional scheduling looks at opportunities outside the normal 8 a.m.-3 p.m. or late August to late May schedule many schools follow. This allows for more flexibility in work-based learning opportunities, available instructors and student enrollment.

The following list provides examples of nontraditional scheduling schools in Ohio have already implemented:

- Semester experiences
- Second shift programming
- Four-day instructional school week and Fifth Day Experience
- Summer programming
- Partnerships with OTCs

Examples in Practice

The Fifth Day Experience at Butler Tech is a second semester, four-day school week for students and teachers. This innovative approach reconfigures the traditional school calendar to meet the required instructional hours while allowing students more flexibility and choice in how they spend their time. Students can utilize the Fifth Day Experience to work, volunteer, job shadow, visit a college, take a college course, earn an industry credential or anything else they may choose.

Tri-County Career Center offers a nontraditional schedule with the Early Childhood and Carpentry programs. Seniors in these programs go to a job site or lab for three days a week and have a block schedule for academics two days a week. The two programs trade off on academic time. This scheduling allows program participants more time to engage in work-based learning. Early Childhood students work at local daycares and preschools, which allows them to earn enough hours for the Childhood Development Associate Exam. Carpentry students build a custom home off-site each year. Students from other programs may be added to the block schedule if they get early placement or an individual internship.

STRATEGY 3: DELIVERY OF INDUSTRY-RECOGNIZED CREDENTIALS

Industry-recognized credentials are important in preparing students for the workforce in developing their technical and employability skills. Additionally, many schools have expanded their industry-credential offerings in response to the new graduation requirements.

Initiatives around the delivery of industry credentials include:

- Micro-credentials in middle grades
- Industry credential-based sprint classes
- Integration of Senior Only programs with OTCs

Examples in Practice
The RISE UP Credentialing Program is provided by the National Retail Federation (NRF) and is made up of two courses worth 6 industry credential points apiece: Retail Industry Fundamentals and Customer Service and Sales. This opportunity was offered to associate schools through Butler Tech's Traveling Credentialing Instructor. The instructor met face to face with students two times per week for approximately 45 minutes and students also completed online content between instructor visits.

Mentor Schools offers industry credentials through elective courses. The Business Essentials course allows students to earn Microsoft Office and Rise Up credentials, with access to six industry credentials worth over 24 points combined.

STRATEGY 4: EXPAND WORK-BASED LEARNING

Federal law defines work-based learning as "sustained interactions with industry or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that fosters in-depth, firsthand engagement with the tasks required in a given career field, that are aligned to curriculum and instruction." These learning activities help a young person explore careers and choose an appropriate career path. Work-based learning benefits schools by strengthening partnerships with the community, reinforces instruction for better comprehension and provides an alternative to expansion outside of building additional space. It also reduces drop-out rates, makes school more relevant for students and develops students' problem-solving and life skills. Additionally, work-based learning is a federal performance indicator that Ohio did not meet for Fiscal Year 2021, thus highlighting the importance of expansion.

To expand work-based learning, schools should consider:

- Expanding apprenticeship opportunities to nontraditional programs
- Establish or consult a business advisory council
- Promoting Tax Credit Certificate Program for Work-Based Learning Experiences
- State supported internships

Examples in Practice
Cardinal Connect is a web-based initiative to connect local businesses with Mentor Public Schools to create partnerships. By completing a simple form online, businesses inform the district on how they would like to partner and what opportunities the business believes would be mutually beneficial. The goal of this initiative is to expand work-based learning opportunities and partnerships to benefit students of all grades.

Transportation is a barrier for many students to participate in work-based learning. To help overcome this barrier, Mentor Public Schools has partnered with Laketran on a two-year pilot program of Cardinal Go, which allows Mentor students in grades 9-12 to ride several of Laketran' s routes for free. Additionally, Laketran launched a new route which connects

Mentor High School directly to Lakeland Community College, Mentor-on-the-Lake, Mentor Headlands and other key places in Mentor.

South-Western City Schools has created a “remote” workspace at their career academy to offer Cyber Security students a place to intern remotely with Ohio Health. Having a “remote” workspace in the building outside of the lab has provided students the opportunity to work in a professional setting without having to rely on their own home. This program is growing to include Medical Data Management and Interactive Media Design. Additionally, the Mobile Application Development program has partnered with Wemblr, a financial services application, to offer students a six-week period to work on the application. Students presented their work to Wemblr and the Columbus Chamber of Commerce.

Components to Consider in Implementation

CTE faces several barriers to expansion, including competition and duplication of effort, keeping pace with the growth of industries and funding. The following are components to consider when implementing the strategies for expansion discussed above in order to overcome potential barriers.

OHIO’S SECONDARY EDUCATION SCHOOL DAY AND REPORTING

In innovative program design and nontraditional scheduling, it is important to understand the meaning of full- time equivalency (FTE) and the requirements for instruction and reporting set forth by the state. School districts, JVSDs and chartered nonpublic schools must be open for instruction for a minimum of 1,001 hours for students in grades 7-12 and community schools must provide a minimum of 920 hours (Ohio Revised Code 3313.48). However, there are no requirements on the number of days a school must be open for instruction.

Students also must complete graduation requirements, which includes 20 credits across general subjects (e.g., English, Math, etc.), economics, financial literacy and fine arts. Ohio measures competency through three options – career-focused activities, military enlistment and college coursework completion. CTE helps students demonstrate competency in career-focused activities through WebXam tests, industry credentials, pre-apprenticeships or apprenticeships and work-based learning.

Additionally, it is important to understand how FTE relates to school funding, as program expansion often can come with additional costs. Supplemental state funding for CTE is calculated using FTE; however, each student can only generate one FTE, regardless of how many credits a student is carrying.

Other items to consider in expansion are transportation, Education Management Information System (EMIS) reporting and scheduling conflicts with other student activities.

TEACHER RECRUITMENT AND FLEXIBLE TEACHER OPTIONS

There is a nationwide teacher shortage, with this shortage more drastic in high-demand, high-paying CTE fields, such as Information Technology. The expansion of programming also requires more teachers and more flexibility outside the traditional educator pathway. Recruitment and teacher options to consider include:

- Partnerships with business and industry
- Teacher training programs
- Upskilling of existing teachers

Industry partners can train existing employees once a week or over the summer in a cohort model. By upskilling an existing employee, the school can reduce costs and improve employee retention. Partnerships with business and industry also ensure teachers stay up to date on industry standards. Part-time instructors also can come directly from local businesses.

ADULT AND SECONDARY EDUCATION

Partnerships with adult and secondary education are encouraged to prevent a duplication of effort. Many CTE programs already are offered at OTCs and by working together, programs can lower the demand on resources. Ideas to consider include:

- OTC classes for high school students
- Utilize adult educators for Senior Only courses
- Develop OTC pathways
- Contract training with associate schools

To avoid duplication of effort and competition, adult and secondary education can integrate to share facilities, teachers and other resources. Additionally, this partnership helps to create alignment for a high school to OTC pathway for students. However, accreditation also must be considered as it can slow the development of new programs and may impact the granting of postsecondary credits for students.

Example in Practice

Auburn Career Center runs sprint classes for high school students through its OTC, which is free thanks to a gift to their foundation. Auburn identified high-interest employment areas in which students could earn an industry credential, points and meet graduation requirements where needed. Classes are offered in summer, fall, winter and spring for four to five weeks in the summer and six to eight weeks during the school year.

Auburn currently offers MIG Welding, Machining and Fanuc Automation and is looking to expand offerings. To overcome transportation obstacles, Auburn has partnered with county transportation to get students home in the evening. Sprint classes at the OTC give students more opportunities to build a path to a career, provide the on and off ramps to classes that

help remove barriers and enable high school students to expand their skills and try something new.

FACILITY EXPANSION AND INTEGRATION

Space is a barrier to program expansion. Integration and collaboration are key to overcoming this barrier. Working with local secondary schools, postsecondary institutions, businesses and community organizations can help mitigate the cost of facilities and be mutually beneficial. Schools can:

- Partner with other secondary schools, postsecondary schools and/or other CTPDs to creatively share space
- Create programs located at a place of business

Secondary schools, OTCs and postsecondary schools often run similar programs with similar needs. Partnership and sharing facilities and resources cuts costs for all involved parties. Additionally, creating programs at a place of business creates opportunity for businesses to train potential future employees and for students to engage in work-based learning experiences.

Example in Practice

Mentor Public Schools has partnered with several local employers to expand CTE programs and industry credential offerings. In a partnership with Classic Auto Group, the school opened an Automotive Technology Program within an existing building at the Classic Automotive Training Center. Additionally, Mentor Public Schools works with Mentor Fire and the City of Mentor to offer an Emergency Medical Technician (EMT) program and EMT-Basic industry-recognized credential. Through these partnerships, the district responds to regional industry demands while maintaining fiscal responsibility and students work with area employers and gain valuable experience.

INTERGRATION OF COLLEGE CREDITS

Part of the stigma surrounding CTE is the idea that it is an alternative to postsecondary education; however, 25% of CTE students in Ohio earned three or more transcripted college credits in FY 2021. Students earn college credit through Career-Technical Assurance Guides (CTAGs) and Industry-Recognized Credential Assurance Guides (ITAGs). CTAGs and ITAGs should be considered when planning for expansion and in career planning for individual students. Additionally, the transition of OTC clock hours to postsecondary credit hours through ITAGs and One Year Option, which enables graduates of 900-or-greater hour programs to earn a block of technical credit toward an Associates of Technical Studies, greatly benefits students. Collaboration with local postsecondary institutions is important.

Policy Considerations

FUNDING MODEL

As previously mentioned, funding is one of the largest barriers to expansion. More resources need to be made available to allow for JVSDs, Compacts and Comprehensives to offer more programming. The workgroup recommends the policy consideration of removing the state share percentages from the weighted funds in the state CTE supplemental funding to allow for increased funds to be used for expansion. Some districts are seeing a decrease in CTE funds due to a decrease in the state share under the new school funding formula. Additionally, the workgroup recommends considering a programmatic approach in funding by offering different weighted funds for the different types of CTE programs, such as Industry Credential Only, Career-Based Intervention, Career field pathways, Family and Consumer Science programs and Job Training Coordination.

GRADUATION REQUIREMENTS

CTE courses often are the first to be cut from a student's schedule to meet graduation requirements; however, CTE provides students with technical and employability skills that prepare them for higher education and the workforce. The workgroup recommends the policy consideration of requiring one credit of CTE for all Ohio students. Additionally, expand the simultaneous credit awarded for other required courses through CTE to offer more options to graduation for students.

TEACHER LICENSURE

In response to the teacher shortage and to ensure quality, industry-connected teachers, the workgroup recommends increasing flexibility in teacher licensure. A variety of licenses should be available to allow for teachers who work in the field and for adjunct instructors. The workgroup recommends the following policy considerations to increase flexibility in teacher licensure:

- Allow one-year or four-year adult education permit be allowed for students enrolled in secondary education (Ohio Administrative Code 3301-24-05 (I))**;**
- 40-Hour Industry Career-Technical Workforce Development Teaching Permit;and
- New career technical workforce development license based on competencies and mentorship program designed by local districts, the Department and Ohio's CTE associations.

COLLEGE CREDIT

The workgroup recommends CTE, and OTCs follow the model for College Credit Plus and community colleges. If a high school student wants to take a course at an OTC, it should be paid for, and the student should earn credit. This model is mutually beneficial to OTCs and students.

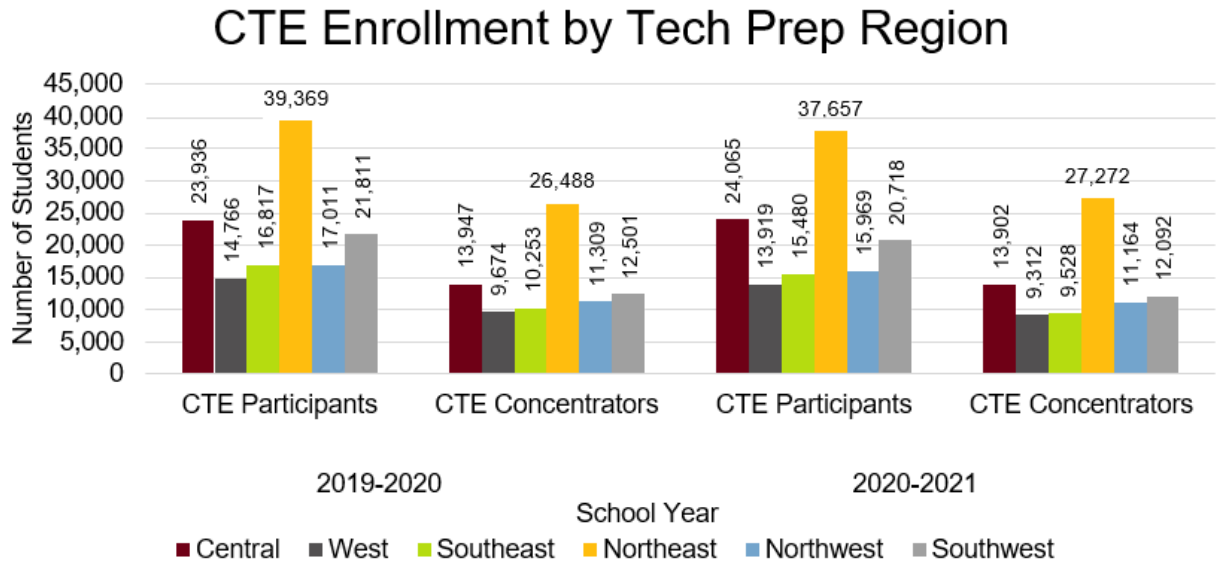
PROGRAM APPROVAL

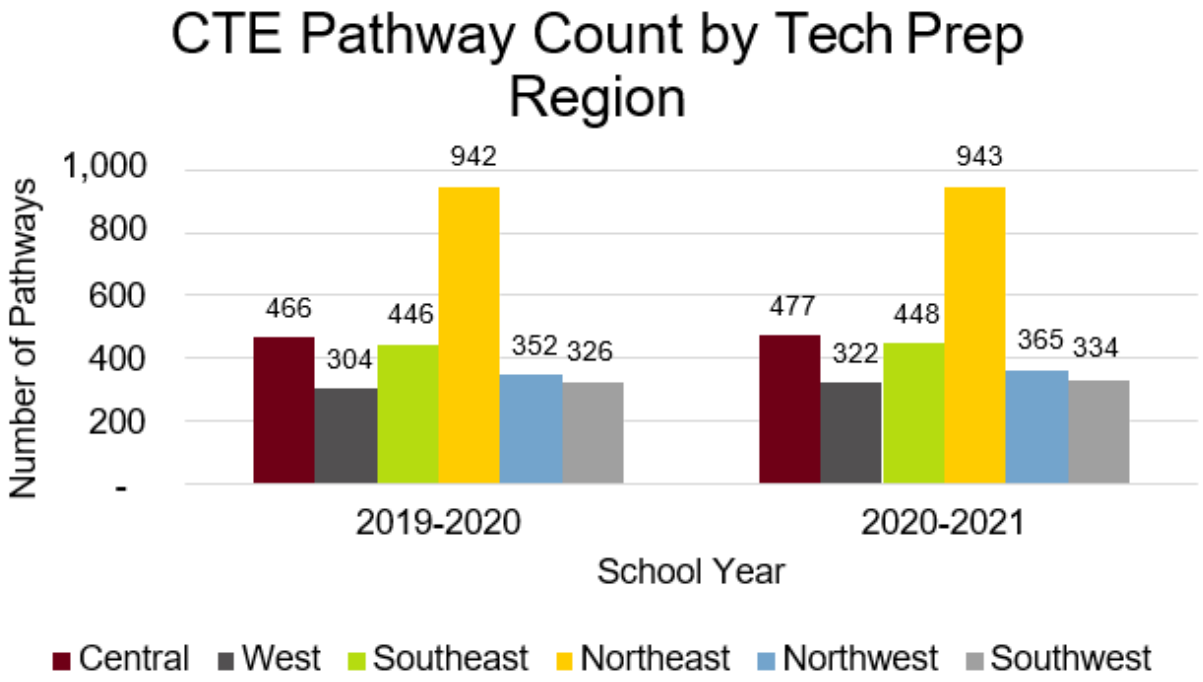
The CTE-26 is the application system for CTE program approval, which includes program renewals and new programs. The current application window is from early November to mid-March, with a second window in the summer for industry credential only programs (Ohio Revised Code 3317.161). The workgroup recommends a year-round open application for new CTE programs.

Conclusion

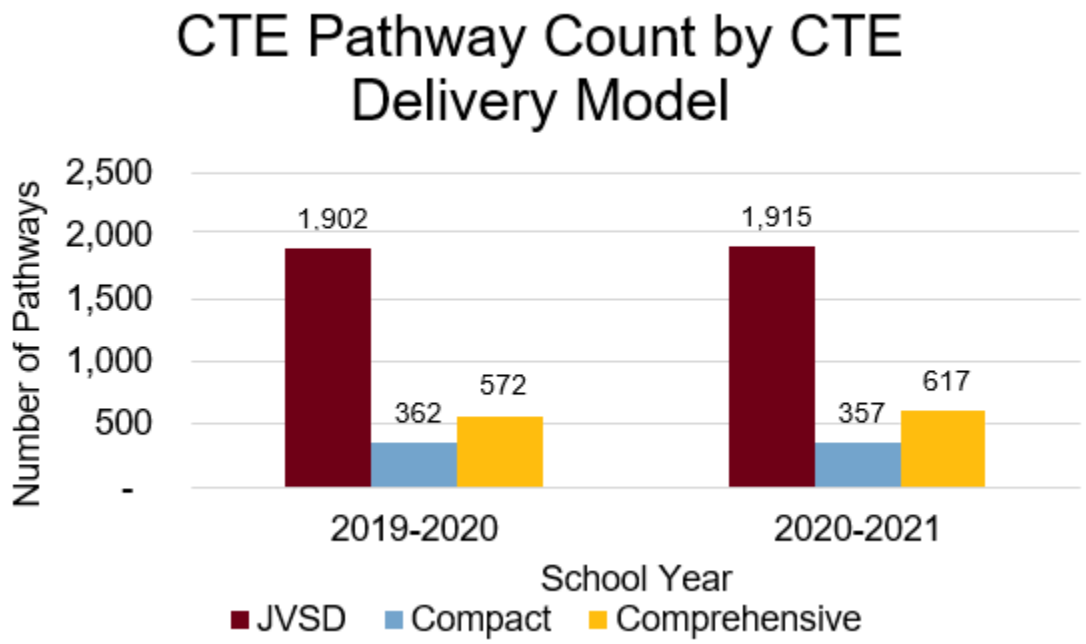
The future of Ohio's workforce needs is rapidly changing, especially with the introduction of Intel in the heart of the state. CTE holds the key to the needed workforce development and must strategically consider how to expand programming while maintaining quality and standards. By working collaboratively and creating a flexible and innovative environment, CTE can help meet the needs of Ohio and its students. This white paper challenges CTE administrators to think outside of the box in terms of program design, nontraditional scheduling, integration of college credits and work-based learning expansion, while also challenging policymakers to think past the rules surrounding funding, graduation requirements, teacher licensure, college credit and program approval. Innovation and collaboration are paramount in creating success for our students, institutions of education and economy on a larger scale.

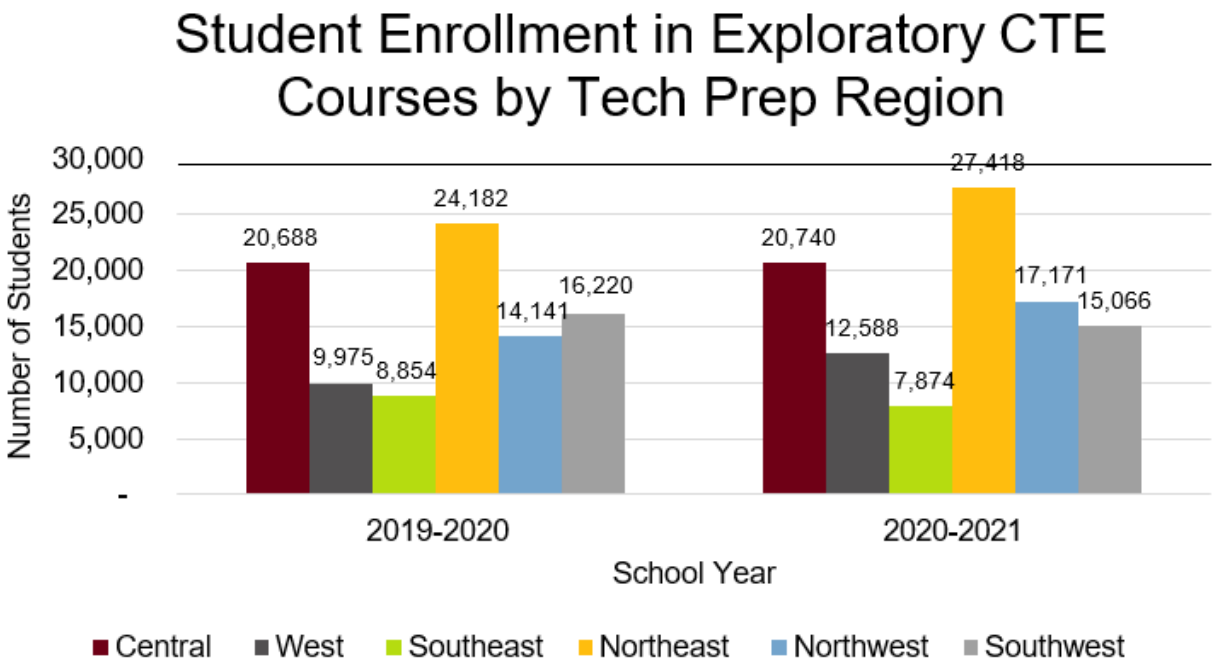
Appendix



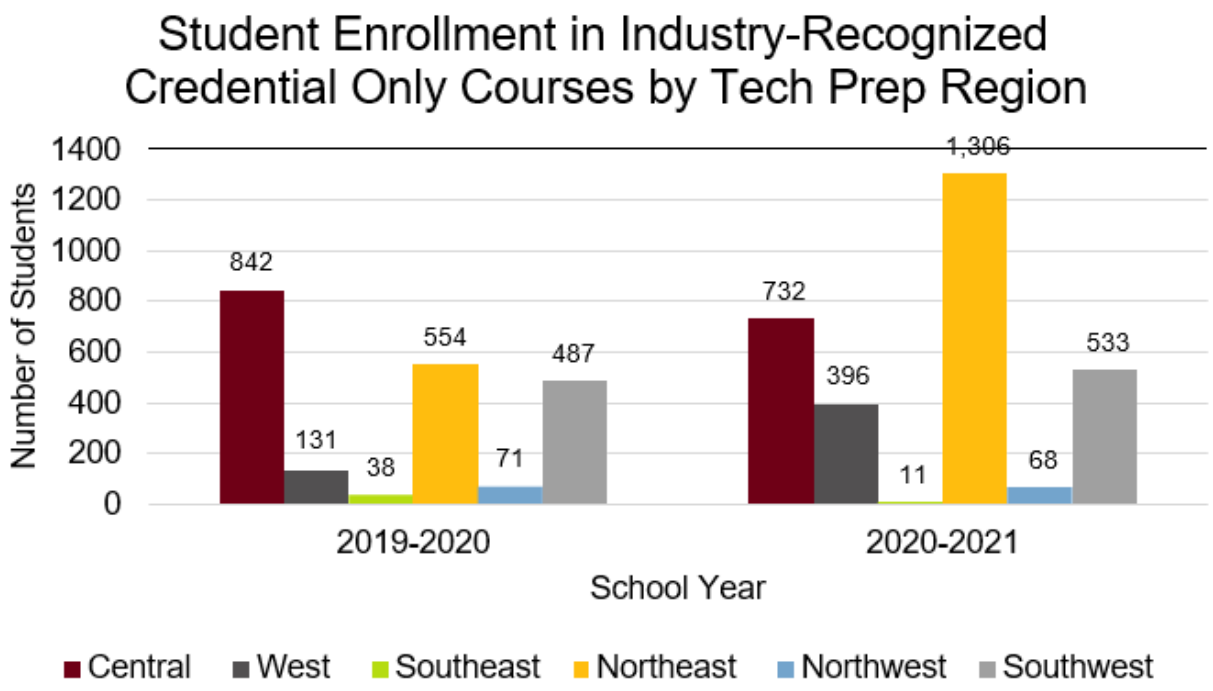


Department of Education & Workforce





Department of Education & Workforce


Student Enrollment in Industry-Recognized Credential Only Courses by Tech Prep Region
Number of Students
1400
1200
1000
800
600
400
200
0
842
131
38
554
71
487
732
396
11
1,306
68
533
2019-2020
2020-2021
School Year
Central
West
Southeast
Northeast
Northwest
Southwest