

Connecticut Apprenticeship and
Education Committee Report
July 2020

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Connecticut Apprenticeship and Education Committee Members

Co-Chairs:

- Dr. James P. Lombella, President, Northwest Regional President, Connecticut Community Colleges
- Dr. Melissa K. Wlodarczyk Hickey, Reading/Literacy Director, Connecticut State Department of Education

Committee Members:

- Margaret Van Cott, Executive Assistant to the Regional Presidents, Connecticut State Colleges and Universities
- Richard Dupont, Housatonic Community College
- Todd G. Berch, Connecticut Department of Labor
- Alyce Stiles, Connecticut Center for Advanced Technology
- Cristina Stisser, Connecticut Technical Education and Career System (CTECS)
- Juliette Khan, Connecticut Department of Labor
- Cliff Thermer, Goodwin University
- Roxanne Amiot, Connecticut Technical Education and Career System
- Mary Bidwell, Asnuntuck/Tunxis Community College
- Karen Woscyna-Birch, Connecticut College of Technology, Tunxis Community College
- Tracy Ariel, Manchester and Middlesex Community Colleges
- Kathy Marioni, Connecticut Employment and Training Commission
- Cyndi Zoldy, Connecticut Manufacturers Collaborative, Small Manufacturers Association of Connecticut and Women in Manufacturing
- Sonia Dinnall, Hartford Public Schools
- Dr. Matthew Conway, Derby Public Schools
- Lawrence Covino, Connecticut Association for Adult and Continuing Education

Connecticut Apprenticeship and Education Committee Meetings to Date

January 7, 2020
January 28, 2020
February 10, 2020
February 28, 2020
March 10, 2020
March 26, 2020 (cancelled Covid-19 Pandemic)
May 20, 2020 (virtual)
June 3, 2020 (virtual)
June 17, 2020 (virtual)
June 24, 2020 (virtual)

Stakeholder Presentations

January 28, 2020:

- Todd G. Berch, Office of Apprenticeship Training/Connecticut Department of Labor (Apprenticeship and Pre-apprenticeship program integration)
- Dr. Melissa Hickey, Connecticut Department of Education (Perkins V funding, Work-based Learning, Connecticut Career Clusters)

February 28, 2020:

- Dr. Karen Birch, Connecticut College of Technology (Community College Student Opportunities)
- Mary Bidwell, Dean Advanced Manufacturing Technology Centers (AMTCs) at Asnuntuck and Tunxis Colleges, Chair of AMTC's Directors Committee

March 10, 2020:

- Thomas Dzimian, Workforce Development Careers and Education at German American Chambers of Commerce, Inc. (European Apprenticeship Training Model)

May 20, 2020:

- Roxanne Amiot, CTECS Bullard-Havens (Automotive Program and Apprenticeship Opportunities)

June 17, 2020:

- Roxanne Amoit, CTECS Bullard-Havens (Automotive Program and Apprenticeship Opportunities, continued)
- Jodi Greenspan Kirsch, The Hartford Financial Services Group in Hartford, Connecticut (Apprenticeship Program)
- Eric Brown, CBIA (Connecticut Manufacturers Collaborative and CBIA)
- Shannon Marimón, ReadyCT (Governor's Workforce Council)

Full Statutory Charge

Section 10-21j(c) of the Connecticut General Statutes

(a) The Commissioner of Education, in collaboration with the Board of Regents for Higher Education, shall establish the Connecticut Apprenticeship and Education Committee to coordinate and identify (1) potential pre apprenticeship and apprenticeship training program integration, and (2) leveraged funding identification of career technical education programs within high schools and programs within higher education institutions for careers in various industries. Such committee shall include, but not be limited to, (A) representatives from the Department of Economic and Community Development, the Labor Department, the Connecticut Center for Advanced Technology, the Connecticut Manufacturers Collaborative, the Technical Education and Career System, the advanced manufacturing centers at the regional community-technical colleges, independent institutions of higher education in the state that offer training in the field of manufacturing, the Connecticut Employment and Training Commission, companies and employee organizations that represent manufacturing workers, and (B) teachers, guidance counselors, school counselors, principals and superintendents.

(b) On or before July 1, 2020, and annually thereafter, the committee established pursuant to subsection (a) of this section shall report, in accordance with the provisions of section 11-4a, to the joint standing committees of the General Assembly having cognizance of matters relating to commerce, higher education and workforce development and labor and public employees an analysis of whether current apprenticeship training programs available to Connecticut residents are meeting workforce needs. The committee shall consult with members of the manufacturing industry when producing such report. In addition to consulting with manufacturing industries, the committee shall consult with members of insurance, health care, financial technology, biotechnology, STEM, construction trades and hospitality industries and any other appropriate industry to coordinate and identify potential modern pre-apprenticeship and apprenticeship training programs and shall review and consider European apprenticeship training programs when producing such report.

(c) The Commissioner of Education, in consultation with the committee established pursuant to subsection (a) of this section, shall introduce middle school and high school students, their parents or guardians, guidance counselors and school counselors to careers in the industries described in subsection (b) of this section. The commissioner may enter into partnerships with one or more private sector entities to further the goals of this subsection.

(d) The Department of Education, in consultation with representatives from the industries described in subsection (b) of this section, shall develop a best practices guide to help local and regional boards of education to incorporate relationships with the industries described in subsection (b) of this section in their middle school and high school curricula.

Approved June 26, 2019

Pre-Apprenticeship and Apprentice Programming Defined

As demand for highly skilled workers increases, Pre-Apprenticeship and Registered Apprenticeship strategies have proven to successfully meet employer and industry driven training approaches for acquiring and retaining employees. This training approach addresses the considerable challenges employers face by developing a talent pipeline to fill middle-skilled jobs. By accelerating necessary training and cultivating talent, these employer-designed programs provide screened, well-prepared workers new to an industry by receiving a combination of industry-based formalized and contextualized training and classroom instruction.

Pre-Apprenticeship

Section 31-23c of the Connecticut General Statutes (C.G.S.) clarifies the employment laws for minors under the age of eighteen years:

No minor under the age of eighteen years shall be employed or permitted to work in any occupation which has been or shall be pronounced hazardous to health by the Department of Public Health or pronounced hazardous in other respects by the Labor Department. This section shall not apply to (1) the employment or enrollment of minors sixteen years of age and over as registered apprentices or registered pre apprentices in a bona fide registered apprenticeship program or registered pre apprenticeship program in manufacturing or mechanical establishments, technical education and career schools or public schools, (2) the employment of such minors who have graduated from a public or private secondary or technical education and career school in any manufacturing or mechanical establishment, (3) the employment of such minors who are participating in a manufacturing or mechanical internship, registered apprenticeship or registered pre apprenticeship in any manufacturing or mechanical establishment, or (4) the enrollment of such minors in a cooperative work-study program approved by the Commissioner of Education and the Labor Commissioner or in a program established pursuant to section 10-20a. No provision of this section shall apply to agricultural employment, domestic service, street trades or the distribution of newspapers. For purposes of this subsection, (A) “internship” means supervised practical training of a high school student or recent high school graduate that is comprised of curriculum and workplace standards approved by the Department of Education and the Labor Department, (B) “cooperative work-study program” means a program of vocational education, approved by the Commissioner of Education and the Labor Commissioner, for persons who, through a cooperative arrangement between the school and employers, receive instruction, including required academic courses and related vocational instruction by alternation of study in school with a job in any occupational field, provided these two experiences are planned and supervised by the school and employers so that each contributes to the student's education and to his employability. Work periods and school attendance may be on alternate half days, full days, weeks or other periods of time in fulfilling the cooperative work-study program, (C) “apprentice” means a person (i) employed under a written agreement to work at and learn a specific trade, and (ii) registered with the Labor Department, and (D) “pre apprentice” means a person, student or minor (i) employed under a written agreement with an apprenticeship sponsor for a term of training and employment not exceeding two thousand hours or twenty-four months in duration, and (ii) registered with the

Labor Department.

As evidenced C.G.S. Section 31-23(c), minors may participate in a wide range of work-based learning (WBL) experiences (e.g., cooperative work education, supervised entrepreneurial experience, internships, pre-apprenticeships, school-based enterprises, and simulated work environments) that support the development of academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of an industry.

Pre-Apprenticeship programs are occurring in numerous high schools across Connecticut as a coordinated effort between the Connecticut Office of Apprenticeship Training (CT-DOL/OAT) and Connecticut State Department of Education (CSDE) to provide high school students with authentic opportunities to develop career employability skills and establish relationships with employers. Students engaged in Pre-Apprenticeship programs approved by the CT-DOL/OAT:

- Explore and learn about exciting, high-tech, in-demand careers;
- Benefit from classroom and career technology education based training;
- Get a start on career-specific training with career pathway opportunities;
- Build work-readiness skills employers desire;
- Earn an industry recognized Pre-Apprenticeship completion credential; and
- Advance into an employer's Registered Apprenticeship program post-graduation.

A student may earn additional on-the-job credits toward a Registered Apprenticeship if employed, on a part-time basis, after school or as part of a WBL release program that may be established by the school and an apprenticeship employer sponsor that is approved by the Office of Apprenticeship Training. Pre-Apprentices can carry up to 2,000 hours of on-the-job experience into their registered apprenticeship program upon graduation. Some Pre-Apprenticeship program participants can start taking college level instruction requirements and receive college credits while still in high school.

It is critical that Pre-Apprenticeships link directly to a Registered Apprenticeship program; ensuring students are prepared for entry into an existing apprenticeship employment opportunity. A quality Pre-Apprenticeship program contains these core framework components for approval:

- A partnership comprised of a Registered Apprenticeship sponsor, a school, and the Office of Apprenticeship Training;
- A training curriculum designed and/or approved by a Registered Apprentice employer or association;
- Hands-on training (if applicable); and
- Industry-recognized credentials (if applicable).

Registered Apprenticeship Programming

Registered Apprenticeship is a nationally recognized, occupational training program provided by industry employers. Registered apprentices learn specific occupational skills on-the-job and

supplement their learning by taking formal classes throughout their program. At completion, most apprentices have earned the skills and confidence needed to be successful in a career, receive top wages, and attain a college degree at the same time. As more industries need skilled workers and specialized training tailored to specific occupations, Registered Apprenticeship programs have grown outside of the traditional industries. Registered Apprenticeship has also been utilized to assist employers with employee recruitment.

C.G.S. Sections 31-22m through r describe various aspects of apprenticeship:

- Sec. 31-22m. Apprenticeship. Definitions.

When used in sections 31-22m to 31-22q, inclusive, "apprentice" means a person employed under a written agreement to work at and learn a specific trade; "apprentice agreement" means a written agreement entered into by an apprentice, or on his behalf by his parent or guardian, with an employer, or with an association of employers and an organization of employees acting as a joint apprenticeship committee, which agreement provides for not less than two thousand hours of work experience in approved trade training consistent with recognized requirements established by industry or joint labor-industry practice and for the number of hours of related and supplemental instructions prescribed by the Connecticut State Apprenticeship Council or which agreement meets requirements of the federal government for on-the-job training schedules which are essential, in the opinion of the Labor Commissioner, for the development of manpower in Connecticut industries; "council" means the Connecticut State Apprenticeship Council.

- Sec. 31-22n. Apprenticeship council.

The Governor shall appoint twelve members to the Connecticut State Apprenticeship Council, each of whom shall have some association with apprentice training. Four shall be representative of Connecticut industry, with one representative each from the manufacturing, building, mechanical and service industries, provided at least one such member represents a business that operates without a collective bargaining agreement; four shall be Connecticut members of national labor organizations with apprentice training programs; four shall represent the public, one of whom shall be the Labor Commissioner. Members shall each serve a term which is coterminous with the term of the Governor, each member to hold office until a successor is appointed. Any vacancy in the membership of the council shall be filled by the Governor for the unexpired term. It shall meet on the call of the chairman, who shall be the Labor Commissioner. On or before August first of each year, the council shall prepare a report describing the activities of the council, this report to be included in the Labor Commissioner's report to the Governor. The members of the council shall not be compensated for their services, but the members, except the Labor Commissioner and any state employee, shall be reimbursed for necessary expenses incurred in the performance of their duties.

- Sec. 31-22o. Powers and duties of council.

The council may adopt recommendations for minimum standards of apprenticeship and

for related and supplementary instruction, encourage registration and approval of apprentice agreements and training programs, and issue certificates of completion upon the verification by employers or joint apprenticeship committees of the satisfactory completion of the term of apprenticeship. The council shall formulate policies for the effective administration of sections 31-22m to 31-22q, inclusive. Such policies by the council shall not invalidate any apprenticeship provision in any collective bargaining agreement between employers and employees. All apprentice programs adopted and registered with the council under said sections shall be on a voluntary basis and shall be installed for the purpose of developing skilled workers for the service trades and industries of Connecticut.

- Sec. 31-22p. Labor commissioner's powers and duties.

The Labor Commissioner, with the advice and guidance of the council, shall formulate work training standards which will ensure necessary safeguards for the welfare of apprentices and a full craft experience in any skill, in order to provide equal opportunities to all, without regard to their race, color, religion, sex, age or national origin, and to provide training, employment and upgrading opportunities for disadvantaged workers to acquire a comprehensive skilled work experience and to extend the application of such standards of skill training by inclusion thereof in apprenticeship agreements, and shall bring together representatives of management and labor for the development of training programs and terms of apprenticeship incidental thereto and cooperate with state and federal agencies similarly interested in furtherance of training requirements in keeping with established and new processes of Connecticut industries. The Labor Commissioner shall publish information relating to existing and proposed work standards of apprenticeship, hold area conferences throughout the state for the purpose of promoting interest in skilled trades training and appoint such advisory committees as may be deemed necessary to evaluate the skilled manpower requirements of Connecticut in order to cope with any new technological changes in industry.

- Sec. 31-22q. Program of apprentice training.

To assist in the administration of sections 31-22m to 31-22q, inclusive, there shall continue to be maintained in the Labor Department a program of apprentice training. The Labor Commissioner is authorized to appoint, in accordance with the provisions of chapter 67, such personnel as may be necessary for effective administration of said sections.

- Sec. 31-22r. Apprenticeship registration; apprentices, sponsors. (a)(1) Each person who registered as an apprentice with the Labor Department before July 1, 2003, and has not completed an apprenticeship as of July 9, 2003, shall pay to the Labor Department a registration fee of twenty-five dollars on or before July 1, 2003, and a renewal registration fee of twenty-five dollars on or before July first of each subsequent year until (A) such registration is withdrawn, or (B) such person has completed an apprenticeship and possesses a valid journeyman card of occupational license, if required.

(2) Each person who initially registers as an apprentice with the Labor Department on or after July 1, 2003, shall pay to the Labor Department a registration fee of fifty dollars at the time of registration and an annual renewal registration fee of fifty dollars until (A) such registration is withdrawn, or (B) such person has completed an apprenticeship and possesses a valid journeyman card of occupational license, if required.

(b) Each person sponsoring an apprenticeship program registered with the Labor Department as of July 1, 2003, shall pay to the Labor Department an annual registration fee of sixty dollars for each apprentice participating in such program until the apprentice has completed the apprenticeship and possesses a valid journeyman card of occupational license, if required, or such program is cancelled by the sponsor or deregistered for cause by the Labor Department in accordance with regulations adopted pursuant to this chapter, whichever is earlier.

(c) Fifty per cent of any amount collected by the Labor Department pursuant to this section shall be deposited in the General Fund and fifty per cent of such amount shall be credited to a separate nonlapsing appropriation to the Labor Department, for the purpose of administering the department's apprentice training program and sections 31-22m to 31-22p, inclusive.

(P.A. 03-207, S. 1; June Sp. Sess. P.A. 09-3, S. 368; Sept. Sp. Sess. P.A. 09-7, S. 108.)

History: P.A. 03-207 effective July 9, 2003; June Sp. Sess. P.A. 09-3 increased registration fees in Subsec. (a)(2) from \$25 to \$50, increased registration fee in Subsec. (b) from \$30 to \$60 and deleted provision re credit of amount collected to separate nonlapsing appropriation to Labor Department and purpose of same in Subsec. (c); Sept. Sp. Sess. P.A. 09-7 amended Subsec. (c) to provide that 50% of amount collected be credited to separate nonlapsing appropriation to Labor Department for purpose of apprentice training program and Secs. 31-22m to 31-22p.

Stakeholder Survey of Current Programs

Design of the Survey

The purpose of this analysis was to examine the reports of the members of the manufacturing, insurance, health care, financial technology, biotechnology, STEM, construction trades and hospitality industries and any other appropriate industry on whether current apprenticeship training programs available to Connecticut residents are meeting workforce needs.

On June 3, 2020, the Committee completed the development of the June 2020 Survey of Connecticut Companies about Apprenticeship, Pre-apprenticeship, and Paid Internship Programs. The completed survey link was sent on June 5, 2020, to various business and industry stakeholders including:

- Aerospace Components Manufacturers (ACM);
- Connecticut Automobile Retailers Association (CARA);
- Connecticut Manufacturers Collaborative (CMC);
- Colin Cooper – Chief Manufacturing Officer, State of Connecticut;
- Joint Apprenticeship Training Director Committee of Connecticut and leadership of Connecticut Union Building Trades;
- Construction Education Center and leadership of the non-unionized Associated Builders and Contractors of Connecticut;
- Independent Electrical Contractors of New England;
- Connecticut Technical Education and Career Systems adult apprenticeship programming;
- Connecticut Business and Industry Association (CBIA);
- Manufacturing Innovation Fund Advisory Board;
- Smaller Manufacturers Association of CT, Inc.;
- Connecticut Center for Advanced Technology (CCAT) Advanced Manufacturing Employer Partnership companies and partners;
- New England Spring Manufacturers Association;
- Manufacturers Alliance Service Corporation (MASC);
- CCAT President Ron Angelo; and
- Connecticut Technology Council (CTC).

Survey questions addressed apprenticeship, pre-apprenticeship, and/or paid internship programs and collected respondents' perceptions pertaining to: program familiarity, programmatic ease, program benefits, needed supports, challenges, enrollment in registered CT-DOL programs, and hiring of an apprentice, a pre-apprentice, and/or an intern.

On June 17, 2020, the Committee discussed preliminary survey data from 105 respondents. This report was created using the data compiled from the 161 participants responding before the survey closed on June 22, 2020 (Appendix A: June 2020 Survey Data of Connecticut Companies about Apprenticeship, Pre-apprenticeship, and Internship Programs).

Summary of the Findings of the June 2020 Survey of Connecticut Companies about Apprenticeship, Pre-apprenticeship, and Internship Programs

According to the June 2020 Survey of Connecticut Companies about Apprenticeship, Pre-apprenticeship, and Paid Internship Programs, a majority of survey respondents:

- Represent Construction, Transportation, Distribution, Logistics, and Manufacturing;
- Are extremely/very familiar with apprenticeship, pre-apprenticeship and/or paid internship programs;
- View construction, manufacturing, transportation, and healthcare as the occupations that would most benefit from an apprenticeship, a pre-apprenticeship, or a paid internship program;
- Indicate their organizations have enrolled in a registered CT-DOL apprenticeship/pre-apprenticeship program. Those organizations not enrolled indicated they do not know how to enroll or were unaware of program;

- Sponsor a wide span of apprentices (anywhere from two to thousands) and not only hired the apprentices but retained them;
- Find an apprentice, a pre-apprentice, or a paid intern from the Connecticut Technical Education Career System (CTECS), local high schools, and Community Colleges;
- Are extremely/moderately likely to implement an apprenticeship, a pre-apprenticeship, or a paid internship program in the next three years;
- Indicate the top two challenges of having an apprentice, a pre-apprentice, or a paid intern are the inability to find qualified or interested candidates and the lack of knowledge about where to find an apprentice, a pre-apprentice, or a paid intern. The next challenge was the availability of staff for onboarding, training, and supervision;
- Are motivated to engage in or expand upon an apprenticeship, a pre-apprenticeship, or a paid internship program, by having a qualified and interested pipeline of candidates and 1:1 ratio/ratio relief benefits; and
- Report a variety of apprenticeship, pre-apprenticeship, and internship programs including, electrical, CTECS, service and body technicians, Lincoln Technical, Comprehensive High Schools, MA manufacturing, CNC machine setup/MasterCam/Solidworks/TPM, OEM, Community College (e.g., Gateway), CT-DOL, paid internships, in-house programs, motor control, IT, accounting, IEC, Women can Weld, plumbing/heating/cooling, HVAC, E/S/SM/P/Insulation journeyman training, CCI, construction craft laborers pre-apprenticeship, HVACR, and irrigation.

27 respondents provided their email-addresses and indicated interest in learning more about an apprenticeship, a pre-apprenticeship, or a paid internship program.

The Committee acknowledges that these survey data are limited as the COVID-19 pandemic impacted the data collection process. The business and industry stakeholders from whom the Committee was required to gather feedback continue to be immersed in assisting others at this difficult time. For example, a majority were deemed essential as they are treating patients and manufacturing personal protective equipment or have been working at decreased capacity (e.g., restaurants, hotels, casinos).

It has been a challenging time to ask individuals to fill-out surveys and participate in focus groups. However, the Committee was successful in disseminating a survey and collecting responses from 161 individuals. The Committee will use these data and the reports gathered from a variety of stakeholders throughout the 2020 meetings to develop focus group questions to further inform the Committee's analysis. These focus groups will occur before July 1, 2021.

Conclusions

The following conclusions were derived from the data provided by the June 2020 Survey of Connecticut Companies about Apprenticeship Programs. Additionally, these conclusions include perceptions gathered from a variety of stakeholders present at 2020 Committee meetings. These combined data suggest:

- **Conclusion 1.0:** A model that relies on apprenticeships and on-the-job training is essential to the development of the skilled Connecticut workforce.

- **Conclusion 2.0:** Connecticut needs to raise awareness about apprenticeship, pre-apprenticeship, and paid internship programs available to Connecticut high school students and adults.
- **Conclusion 3.0:** Those manufacturing, transportation, and healthcare stakeholders having an apprenticeship, a pre-apprenticeship, or a paid internship program retain the majority of their apprentices, pre-apprentices, and/or interns after program completion.

Current Programs and Funding Sources

In addition to this 2020 July report, the Connecticut Apprenticeship and Education Committee (Committee) has been charged with the coordination and identification of (1) potential pre-apprenticeship and apprenticeship training program integration, and (2) leveraged funding identification of career technical education programs within high schools and programs within higher education institutions for careers in various industries. *Appendix B: Pre-Apprenticeship Programs* outlines the current youth pre-apprenticeship programs administered by the Connecticut Office of Apprenticeship Training (OAT). The major sources of funding that support apprenticeship and pre-apprenticeship programs come from Connecticut Bond authorizations, the Strengthening Career and Technical Education for the 21st Century Act (Perkins V), and the Workforce Innovation and Opportunity Act (WIOA). However, many business and industries develop and fund their own apprenticeship programs (e.g., The Hartford Insurance Apprenticeship Program, all unionized training centers).

Perkins V

On July 31, 2018, President Trump signed the Perkins V act into law. The passage of Perkins V provides new opportunities to improve employability skills and enables more flexibility for Connecticut to meet the unique needs of our learners, educators, and employers. The United States Department of Education, Office of Career, Technical, and Adult Education administers and provides the formula grant Perkins V funding to the Connecticut State Department of Education (CSDE).

Perkins V federal funds are used by local eligible recipients to support and grow opportunities for high school students to earn registered pre-apprenticeship certificates and participate in a variety of work-based learning (WBL) opportunities. These funds can assist eligible secondary and postsecondary recipients in the delivery of required related classroom instruction by covering the costs of textbooks for new courses, software for instruction, applied learning lab equipment, and transportation to employer on-the-job partners to observe all aspects of an industry.

WBL has been defined as a program of structured work experiences (e.g., cooperative work education, internships, pre/apprenticeships, school-based enterprises, supervised agricultural or entrepreneurial experiences, simulated work environments, certificate/certification or license endorsed by Connecticut) that is coordinated with related classroom instruction and undertaken in partnership with local businesses or organizations. WBL programming is designed to enable students to learn and apply career and technical education skills and knowledge in a real-world work environment. The [Introducing Students to Manufacturing: Best Practices Guide and](#)

[Program Resources \(2018\)](#) created previously by this Committee shares models of practice as well as examples of work-based learning experiences that expose, engage, and develop students' college/career readiness skills.

The draft [2020 Connecticut Strengthening Career and Technical Education for the 21st Century Act \(Perkins V\) State Plan](#) ensures the CSDE meets the needs of all learners and includes: (1) CSDE goals and levels of performance of CTE activities, (2) evidence-based and innovative strategies and activities to improve and modernize CTE and align workforce skills with labor market needs, and (3) a strategic vision and goals for preparing an educated and skilled Connecticut workforce. The CSDE has incentivized districts to offer students opportunities to participate in work-based learning (i.e., Next Generation Accountability System, Perkins V quality measures, and specialized Perkins V competitive grant opportunities). To be provided with Perkins V funds, eligible secondary and postsecondary recipients must provide or expand upon work-based learning opportunities for CTE students

WIOA

The United States Department of Education, Office of Career, Technical, and Adult Education administers and provides the formula grant Workforce Innovation and Opportunity Act (WIOA) funding to the Connecticut Department of Labor (CT-DOL). WIOA funding is designed to strengthen and improve our nation's public workforce system and help get Americans, including youth and those with significant barriers to employment, into high-quality jobs and careers and help employers hire and retain skilled workers.

The CT-DOL WIOA office works closely with the CT-DOL Office of Apprenticeship Training (OAT) and the CSDE in regard to the registered apprenticeship and pre-apprenticeship programming. Some examples of programs include:

- Goodwin College Insurance Pre-apprenticeship: creates a talent pipeline for insurance distributors in Connecticut. Students obtain an Insurance Sales and Service Certificate, sit for licensing, and enter paid pre-apprenticeship. After completing the 150 hours of pre-apprenticeship, they move into their full-time job as an apprentice.
- Women Can Weld - The North Central Region Jobs Funnel Program partnered with the Ironworkers Local 15 Apprenticeship Training Program to conduct a pre-apprenticeship program targeted specifically for women participants to get an introduction into welding.
- Future Bankers' Apprenticeship Program - pairs instruction to pre-apprentices at Crosby High School with on-the-job training in local banks
- Youth Manufacturing Pipeline Initiative (YMPI) - focuses on high school students in addressing the hiring needs of Electric Boat, members of the East Advanced Manufacturing Alliance (EAMA), and other manufacturers.

Connecticut Department of Labor/ Office of Apprenticeship Training Apprenticeship Connecticut Initiative (ACI)

In July of 2018, Connecticut Public Act No. 18-178 was signed into law, pursuant to Conn. Gen. Statute Sec. 31-111r authorizing up to \$50 million dollars in the establishment of the

Apprenticeship Connecticut Initiative (ACI) to develop workforce pipeline programs to train qualified entry-level workers for job placement with manufacturers and employers in other industry sectors in the state experiencing sustained workforce shortages. To date, \$15 million have been allocated by the Bond Commission to this effort. As required by the act, a report to the General Assembly was submitted in accordance with the provisions of section 11-4a of the general statutes, that set forth the most pressing workforce needs within the Workforce Development Board(s) (WDB) local area identifying the industry sector or sectors in which such needs were the greatest. The act further required the Labor Commissioner to issue a request for qualification to solicit proposals from the WDB's Regional Industry Partnerships and submit these proposals to the Labor Commissioner through their local area WDB.

Through this process, an initial award of 5 million (M) dollars was allocated by the Bond Commission for ACI to CT-DOL and granted to two WDB's Regional Industry Partnerships in April 2019 although proposals totaling over 18 million dollars were received. Subsequently, an award of 1.25M was made to Northwest Regional Workforce Investment Board Partnership and 3.45M to the Workforce Alliance Partnership. In September 2019, an award of additional 10M was unanimously approved by the Bond Commission. These funds were allocated to CT-DOL to continue to address Connecticut's sustained manufacturing workforce shortage by expanding the number of manufacturing workforce pipeline job placements within the state and providing training to entry-level workers for job placement with manufacturers as other industry sectors experiencing long-term workforce shortages. Proposals from Connecticut's five WDB Regional Partnership were submitted to CT-DOL in February 2020 and March 2020 awards to each of the regional partnerships to meet their respective needs (e.g., Capital Workforce Partnership, 2.2M; Eastern Workforce Investment Board Partnership, 3M; Workplace Inc. Partnership, 2.2M; Northwest WIB Partnership 1.5M; and Workforce Alliance Partnership, 500K).

The scope of work defined by ACI and responded by the WDB's Regional Industry Partnerships demonstrates the targeted goal of preparing qualified entry-level workers for careers that provide a living wage. Each program consists of a four-year workforce pipeline program including the following core program components:

- A. Addressing the identified industry sector(s) and workforce need(s) through CT ACI funds and taken from the report initially provided to the General Assembly;
- B. Delivering detailed plan proposals to serve the employment needs of workers residing in all towns within the specified region, focusing on those areas with the most concentrated employment needs;
- C. Rolling-out two required separate training programs, consisting of 5-26 weeks of consecutive duration and reflective of the respective proposed regional plan of service for participants comprising of participants in the eleventh or twelfth grade, participants 18 years of age or older who are not currently enrolled in eleventh or twelfth grade; and with one training program offered for each age group provided through a registered pre-apprenticeship program approved by the Labor Commissioner.
- D. Ongoing commitment of those identified employers, who over the four years have committed to hire individuals who successfully complete the program.
- E. Targeting outreach, recruitment, and referrals for the programs to potential job seekers including:

1. Screening and assessing individuals interested in employment in sectors targeted by the partnership. Including methods of assessments for work readiness, aptitude for the relevant work skills and on other metrics as specified by businesses committed to hire trainees;
2. Ensuring underserved populations including youth are included in the recruitment process.
3. Redirecting or connecting individuals determined through the screening and assessment process not to be suited for participation in the program to/or with alternative career resources or services available to residents in their area.
4. Placing individuals screened, assessed, and trained by the partnership.
5. Developing each training program through consultation with employers targeted for job placement of program participants, and revisions or updates according to their developed plan as needed over the next four or more years and via subsequent consultation with active partnership employers.
6. Using identified, specific existing resources available to the respective partnership through the WDB, the United States Department of Labor's American Job Center system, the CT-DOL, employers, apprenticeship, or other work force training programs, educational institutions in the state or other public or private funds.
7. Leveraging of public or private resources per their projected and planned use.

With the initial 5M awarded to date, two regional partnerships have implemented their respective manufacturing ACI programs through contractual agreements with the CT-DOL. The Northwest Regional Workforce Investment Board Partnership and the Workforce Alliance Partnership both deployed their programs beginning spring of 2019 and have been meeting their first-year training goals and objectives. With the latest allocation of 15M, The Capital Workforce Partnership and Northwest Workforce Investment Board Partnerships have thus far initiated new contracts with their recent awards. Of note, The Capital Workforce Partnership expedited the initiation of their program since a primary aspect of their program, healthcare training and placement, is critical to their current regional needs. It is anticipated that the remaining regional partnerships will formulate their contractual programs next, as this has been delayed due to the current Covid-19 pandemic.

A concept map of the CT-DOL model is attached in this report (*Appendix C: Apprenticeship and Educational Pathways Map*).

German/European Apprenticeship Training Model

Thomas Dzimian, senior manager at Workforce Development Careers and Education at German American Chambers of Commerce, Inc., informed the Committee of the European Apprenticeship Training Model and the work being led by his organization here in Connecticut.

Germany has a “dual education system” in which technical schools and business and industry partners are formally connected. German students engage in paid internships that directly apply what they are learning in the classroom to the workplace. Although the exact German model

cannot be copied, the German American Chamber of Commerce has been working with many states (including Connecticut) to adapt their model of work-based learning and create a sustainable paid apprenticeship model. Students benefit as they get real-world experience and important work-based experiences. Business and industry stakeholders benefit as they gain skilled employees and reduce recruiting costs/turnover.

Important design principles emerged that will boost the success and sustainability of current and future apprenticeship, pre-apprenticeship, and paid internship programs in Connecticut. These principles reflect the shared goals of education and business. Applying these design principles across programs will assist in creating synergy, sustainability, and consistency:

1. Alignment: Classroom secondary/postsecondary instruction is paired with on-the-job training.
2. Application: Academic, technical, and employability/cross-sector skills are applied in a real-world workplace.
3. Compensation: Apprentices, pre-apprentices, and interns are paid by business and industry partners.
4. Formalized partnerships: Business and industry formally partners with education stakeholders to provide apprentices with structured training, mentorship, and guidance.
5. Cultural and economic sustainability: Government subsidizes and strongly supports the collaborative work of company/employer, educational institutions, and Chambers of Commerce to prepare the future workforce.
6. Early introduction to career pathways: Students and families are exposed to career pathways early in their educational career (e.g., Germany begins exposure in elementary school).

Next Steps for the Committee

The Committee consulted with members the manufacturing, insurance, health care, financial technology, biotechnology, STEM, construction trades and hospitality industries on whether current apprenticeship training programs available to Connecticut residents are meeting workforce needs. The findings and conclusions of this report support the remaining charges of the Committee and offer the Committee valuable insight. The Committee will continue its statutory work, as outlined in Section 10-21j(c) of the Connecticut General Statutes, as there is still a great deal of information left to gather, perspectives to solicit, and ideas to discuss before the Committee will be in a position to develop and administer the remaining charges.

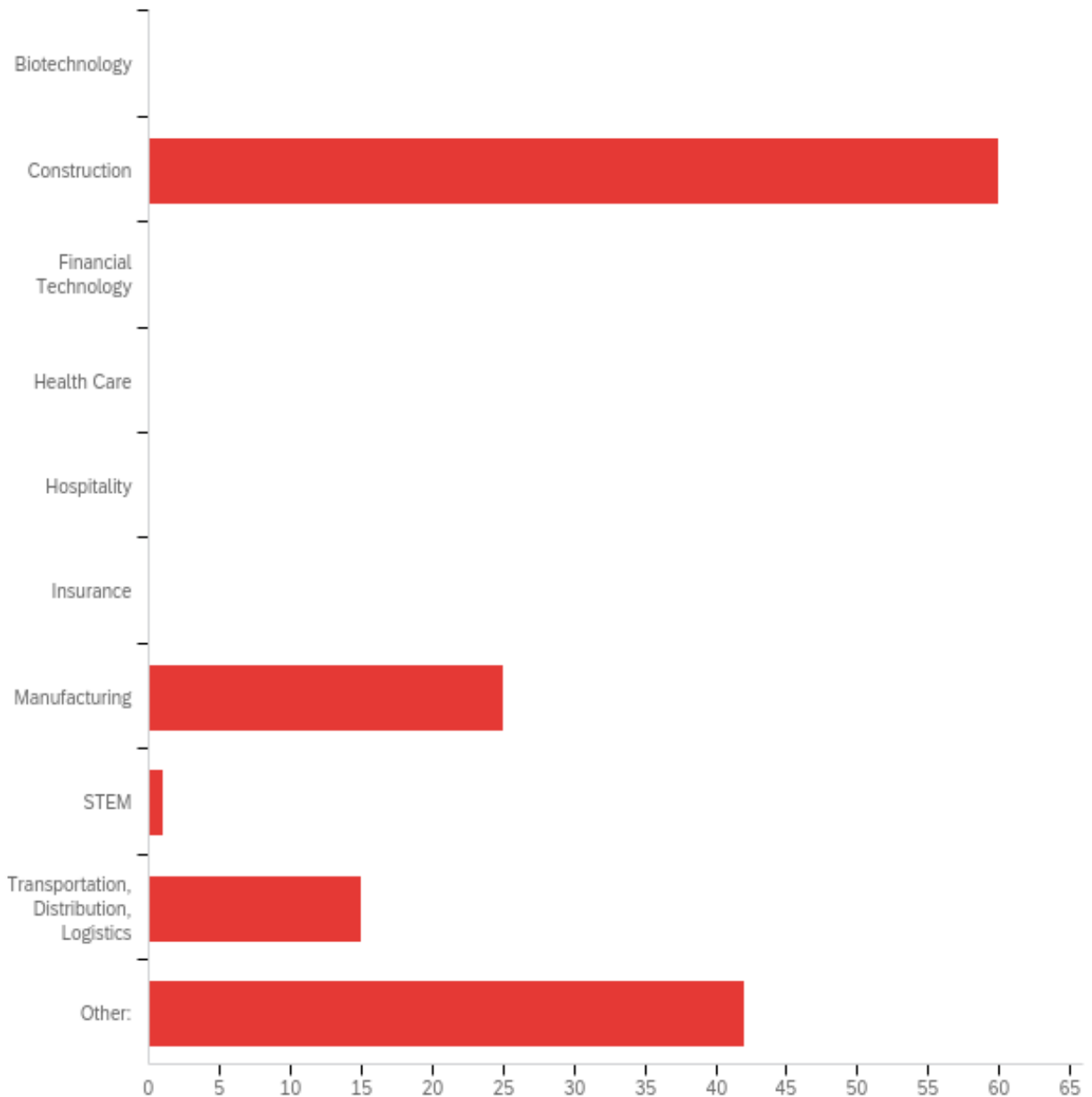
This committee will continue to conduct itself in a collaborative manner and will look to students, teachers, parents, administrators, business and industry stakeholders and both state and national experts to assist with our charges.

Appendix A: June 2020 Survey Data of Connecticut Companies about Apprenticeship, Pre-apprenticeship, and Internship Programs

(please note comments from survey are direct quotes and were not edited)

Survey of CT Companies about Apprenticeship Programs
June 22nd 2020, 6:57 am MDT

Please choose the industry that most closely matches the organization you are representing as you fill-out this survey.



#	Answer	%	Count
1	Biotechnology	0.00%	0
2	Construction	41.96%	60
3	Financial Technology	0.00%	0
4	Health Care	0.00%	0
5	Hospitality	0.00%	0
6	Insurance	0.00%	0
7	Manufacturing	17.48%	25
8	STEM	0.70%	1
9	Transportation, Distribution, Logistics	10.49%	15
10	Other:	29.37%	42
	Total	100%	143

TEXT - Other:

Other: - Text

automotive

Automotive retail

New & Used Dealership

AUTOMOTIVE

Electrical

automotive

Auto sales

Electrical

CAR DEALERSHIP

Automotive Repairs

Automotive

ELECTRICAL

Retail Auto-Sales and Service

Automotive

AUTO SALES and SERVICE

AUTOMOTIVE

Auto Dealership

AUTOMOTIVE RETAIL

Automotive repair

New Car Dealer

automotive technicians

Automotive / Diesel Repair Technicians

Auto dealership

Automotive

Auto Repair

Automotive

Automotive Technology

Automotive

automotive

Automotive

automotive

automotive

Automotive Service

automotive

Automotive

Electrical

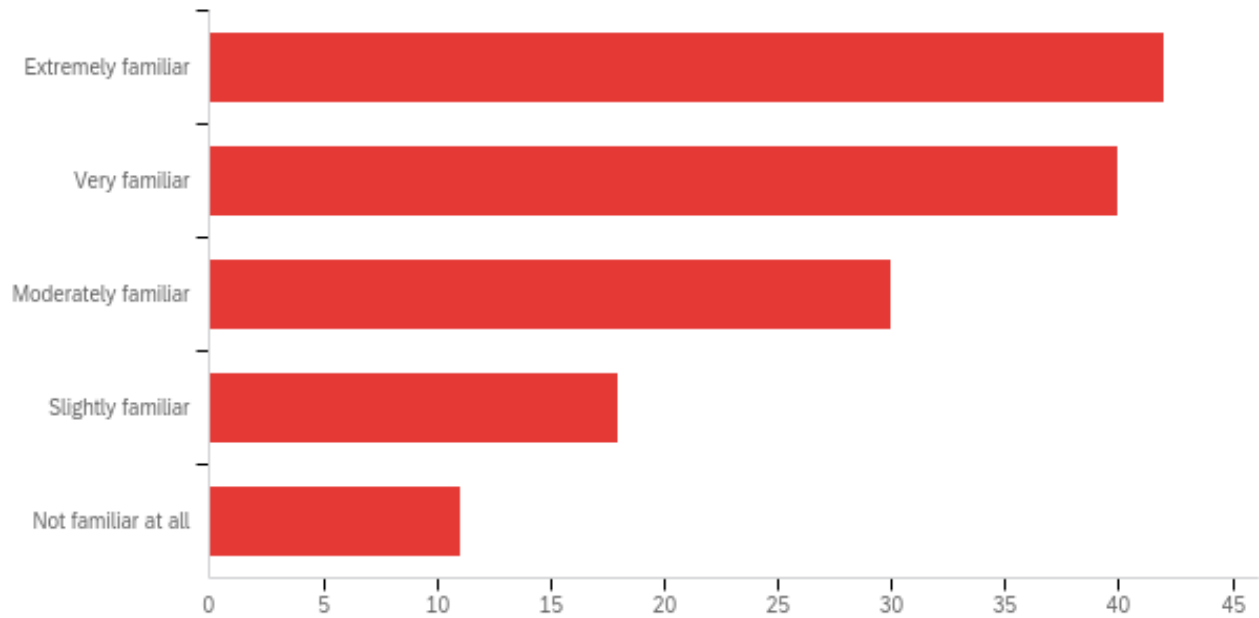
Automotive collision repair

HVAC

Farming Cider Farm Winery

government

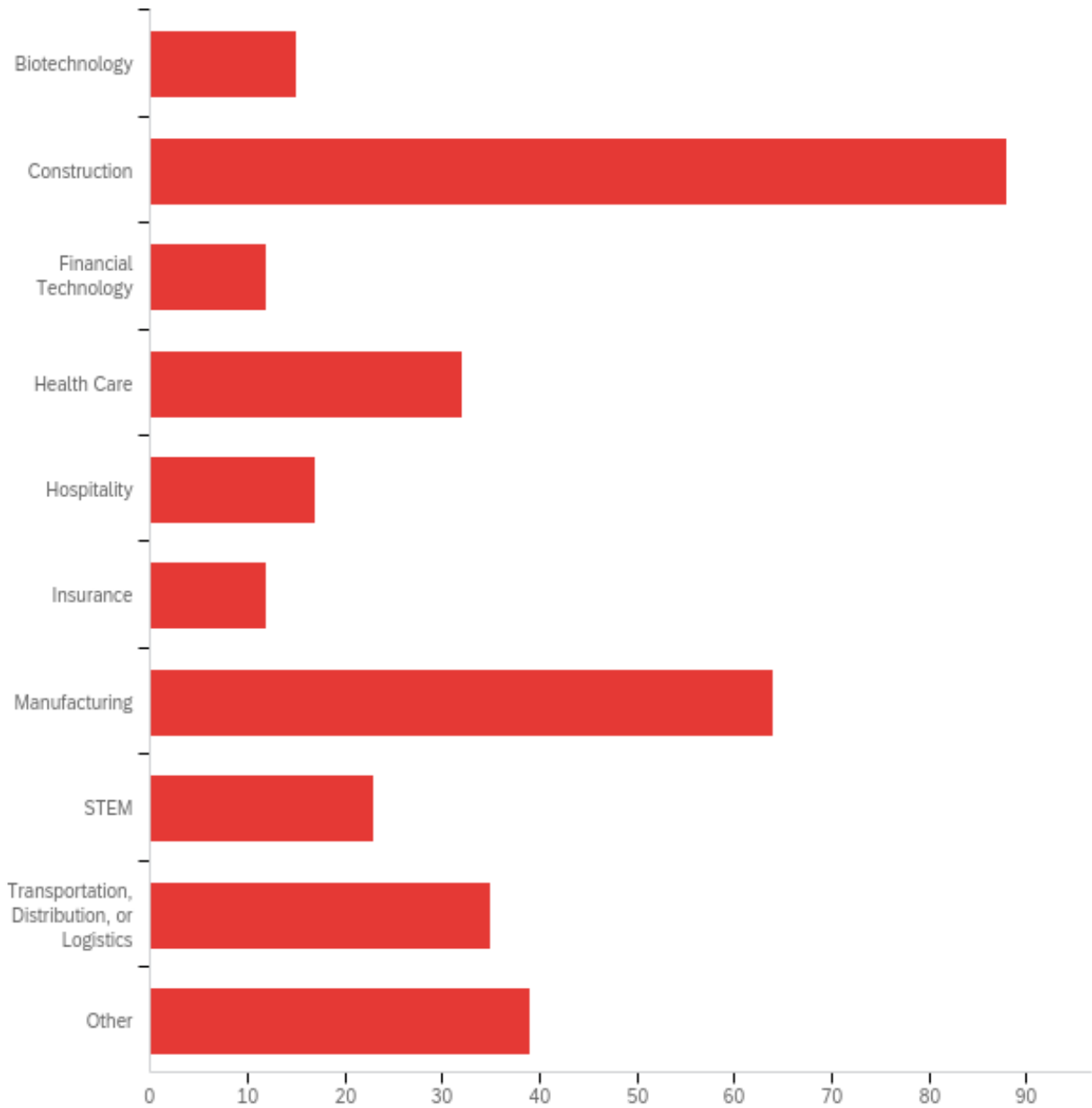
How familiar are you with apprenticeship, pre-apprenticeship, and/or paid internship programs available as voluntary workforce training programs?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How familiar are you with apprenticeship, pre-apprenticeship, and/or paid internship programs available as voluntary workforce training programs?	1.00	5.00	2.40	1.25	1.56	141

#	Answer	%	Count
1	Extremely familiar	29.79%	42
2	Very familiar	28.37%	40
3	Moderately familiar	21.28%	30
4	Slightly familiar	12.77%	18
5	Not familiar at all	7.80%	11
	Total	100%	141

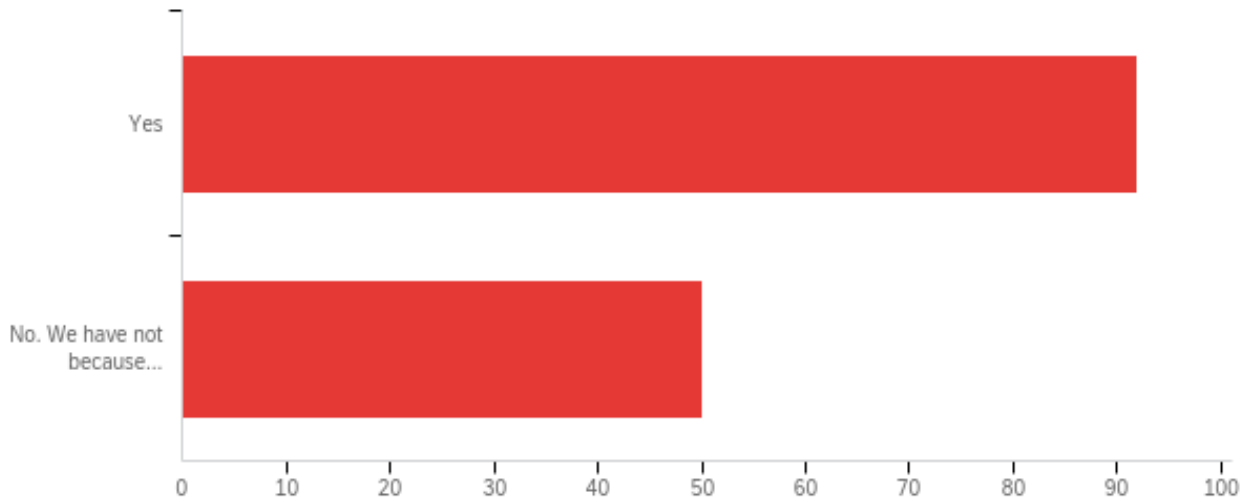
Which occupations do you believe benefit the most from an apprenticeship, a pre-apprenticeship, or a paid internship program?



#	Answer	%	Count
1	Biotechnology	4.45%	15
2	Construction	26.11%	88
3	Financial Technology	3.56%	12
4	Health Care	9.50%	32

5	Hospitality	5.04%	17
6	Insurance	3.56%	12
7	Manufacturing	18.99%	64
8	STEM	6.82%	23
9	Transportation, Distribution, or Logistics	10.39%	35
10	Other	11.57%	39
	Total	100%	337

In the last five years, has your organization enrolled in a registered Connecticut Department of Labor apprenticeship or pre-apprenticeship program?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	In the last five years, has your organization enrolled in a registered Connecticut Department of Labor apprenticeship or pre-apprenticeship program? - Selected Choice	1.00	2.00	1.35	0.48	0.23	142

#	Answer	%	Count
1	Yes	64.79%	92

2	No. We have not because...	35.21%	50
	Total	100%	142

No. We have not because...

No. We have not because... - Text

Snap-on does not have manufacturing facilities in CT

we were not very familiar with it

NA

DIDN'T KNOW IT

we know nothing about it

Didn't know about it

We have redued work force due to non profitable work

I'm not aware of the program. This was forwarded to me by someone who use to work for me.

no good reason other than time constraints

I don't know enough about how apprenticeships work and from what I do know it doesn't seem to fit into our model

did not have knowledge of the availability

We have a partnership with Tech schools

I work with trade schools anddo Have a work release program

wasn't aware of it in first place

DON'T KNOW HOW TO

too much bureaucracy @ the time

NOT AWARE OF AUTO APPRENTICESHIP

Not sure how to.

never offered

I do not believe this is available to us as an option.

not aware of any that operate in our industry

Not aware

didnt know it was available

we have been on the craft community vocational tech school

We were doing it on our own

was unaware of program

its too cumbersome. We have however hired directly out of the tech schools and the candidates, in general are good.

not aware of the program

Get out apprentice tech from Gateway Community College.

Age of apprentices

DoL has told us we don't qualify

Hire Through the Union

Not Familiar

Welding & Metal Fabrication are not included in the list of trades allowed

not aware how to

How many apprentices or pre-apprentices have you sponsored?

How many apprentices or pre-apprentices have you sponsored?

30+

Dozens

2

at least 35

hundreds

9

100 plus

10

5

4

2

5

5

3

2

1

8

40 plus

2

9

3

Seven

2

3

5

35

100

10

8

8

19

we are currently sponsoring 5 apprentices

10

4

5

too many to count

Losr count

15

6+ in last 3 years

45

12

23 currently, over 50 in past

many

6

5

10

50

8

6

8

Several

125

4

Approximately 500

3 thru the union programs

hundreds

35

150

125

33

7

thousands

200 this year, Thousands over time

90

100

20 a year

80 + or - each year

80

100 per year

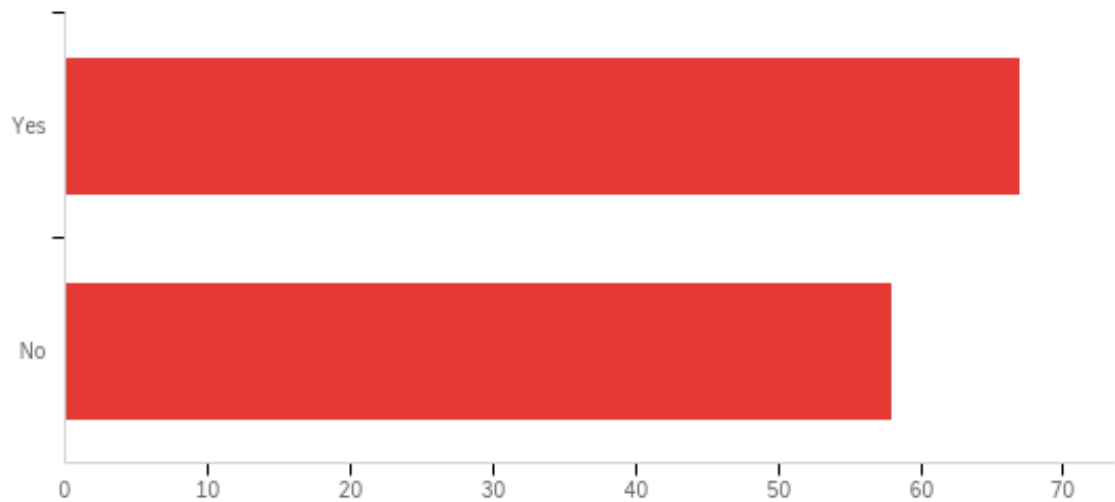
55

25

100

5

In the last five years, has your organization implemented some other type of apprenticeship, pre-apprenticeship, paid internship, and/or other work-based learning program?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	In the last five years, has your organization implemented some other type of apprenticeship, pre-apprenticeship, paid internship, and/or other work-based learning program?	1.00	2.00	1.46	0.50	0.25	125

#	Answer	%	Count
1	Yes	53.60%	67
2	No	46.40%	58
	Total	100%	125

What is the primary reason that your institution has or has not participated in an apprenticeship, a pre-apprenticeship, or a paid internship program?

What is the primary reason that your institution has or has not participated in an apprenticeship, a pre-apprenticeship, or a paid internship program?

we were not very familiar with it

We have never been approached

TO DEVELOP TECH

state mandate

growing workforce

sets a strong training foundation

Never really thought about it

we do participate

N/A

NOT NEED FOR IT

We have employed apprentices in the hopes of keeping them employed when they are licensed.

Union has caused harm to open shop electrical companys, ratio shll be 1 to 1, not under single dictator ship ruling.

To educate skilled workers

Critical to our industries advancement

we participate

To up skill, provide advancement opportunities, improve productivity, problem solving and critical thinking skills, and retention of employemes

Develop a pipeline to support growth and retiring workforce

Not aware.

internal resources - highly skilled people don't have enough time for training, documenting etc.

I don't know enough about how it works

Expensive and regimented

didn't need the help

do not have in-house trainer

again not knowledgeable of these

To build skill levels

Skill development

Not to knowledgeable in aspect

None available;

to bring in potential talented work candidates

IVE ATTEMPTED TO CONTACT TECH SCHOOLS TO GET RECENT GRADUATES AND HAVE NOT BEEN SUCCESSFUL

excessive paperwork and process

Did not know about it. We partnered with a local high school a few years ago.

not available

Availability of a local, certified or accredited program

Retention

not aware of any established programs in our industry

The need for INTELLIGENT service technicians is HUGE in our area & is getting worse every year with our aging workforce & an insufficient number of new recruits entering the industry.

difficult product line

Availability of apprentices

We have been using these programs for years

Many students are told they need a 4 year degree and they believe that misinformation, which has created a major shortage of tradesmen.

no did not know there was any

time, and the students are not even close to a level to start a apprenticeship

Youth under 18 are difficult to insure in our enviornment.

to comply with the DOL requirements for the apprentice to complete their obligation to the program to become a license electrician

Electricians have to have apprentice program

Accounting and IT depts have taken in interns.

we participate so that we can hire and train new employees.

Difficulty identifying talent sources and in identifying an accredited program type that I can implement

good program but bad ratio requirements

For their Licensing and training

mandatory for construction trades & beneficial to have work-based learning

I only know of the standard apprenticeship program.

training of future worker

We always need entry level

We hire through the local.

Fire protection

CT Labor makes us unaware

We do participate.

Not Familiar

The state doesn't include us in its list of trades - not sure why.

train workforce to satisfy our contractor base.

We are a Labor Union, our Apprentice Program is in our CBA.

we train in order to keep up with the supply on demand for signatory contractors to be able to have adequate manpower

N/A

Training

Federally Registered

Best Training

To give Apprentices a career that pays well, with benefits and a defined pension program. Our contractors receive a competent employee with all the skills and training required to do the job.

costs

not aware i can

What programs have you implemented?

What programs have you implemented?

MA manufacturing

apprenticeship

Incumbent worker training, externships, scholarships

apprenticeship, pre-apprentice, paid intern

CNC machine setup, MasterCam, Solidworks, TPM

In house "classroom" training

Apprenticeship

Industrial electrician apprentice

machinist, CNC operator

ELECTRICAL APPRENTICESHIP

State Tech School Supporter

service and body technicians

tech school grads

WORKED WITH LINCOLN TECH

Wilton High School

Work with local tech schools and have students work at dealership part-time during shop weeks and weekends.

OEM and on the job training

our own tool scholarship program to remove the initial start-up cost as a barrier from entry to the industry. In addition we sponsor CWE students from 3 local regional tech schools as well as Gateway Comm College ASEP program

Hire entry level technicians and train them until they prove eligible to be promoted to a line technician.

apprentice, pre-apprentice, and paid internships, shadowing

Technician Internship, Technician Apprentices

paid internship

Our own

Tech School Apprentice

work base training

Potential technicians enrolled in the Automotive program at Gateway CC have come to work as paid apprentices so that **they** could get a feel for the industry. This also allows us to get a feel for them as a prospective employee.

motor control training

IT and Accounting

Electrical apprentice

IEC

E/S/SM/P/Insulation journeyman training

apprenticeship

5 year apprentice program

CCI pre *apprenticeship*

apprenticeship

apprentice, pre-apprentice

In-house training

internships

Construction Craft Laborers pre *apprenticeship*

Pre Apprenticeship and Apprenticeships

Construction

Plumbing, Heating and Cooling, HVACR, Irrigation

apprenticeship

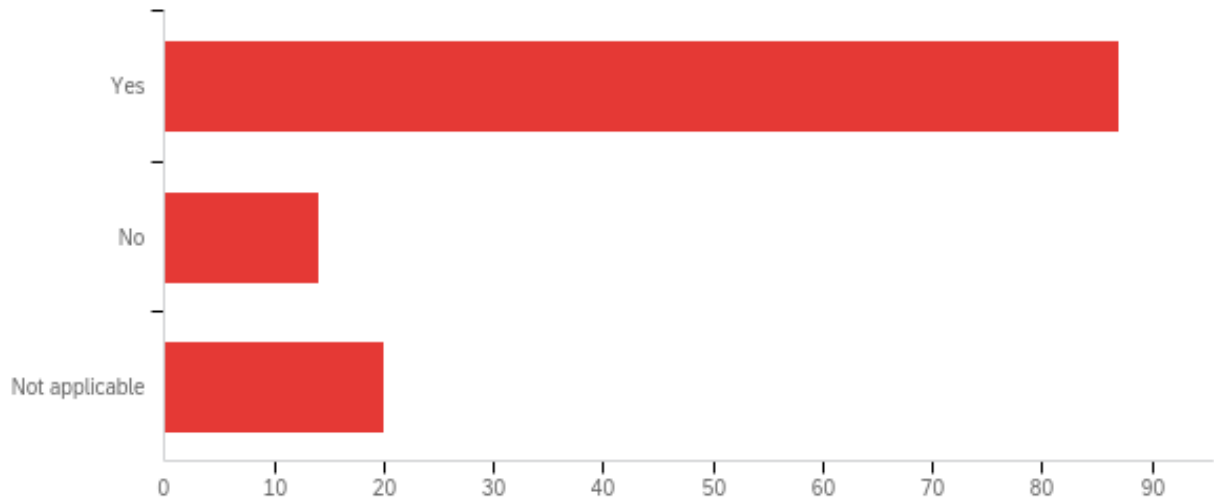
E-2

High school pre apprentice programs

Women can Weld

plumbing, Electrical & HVAC

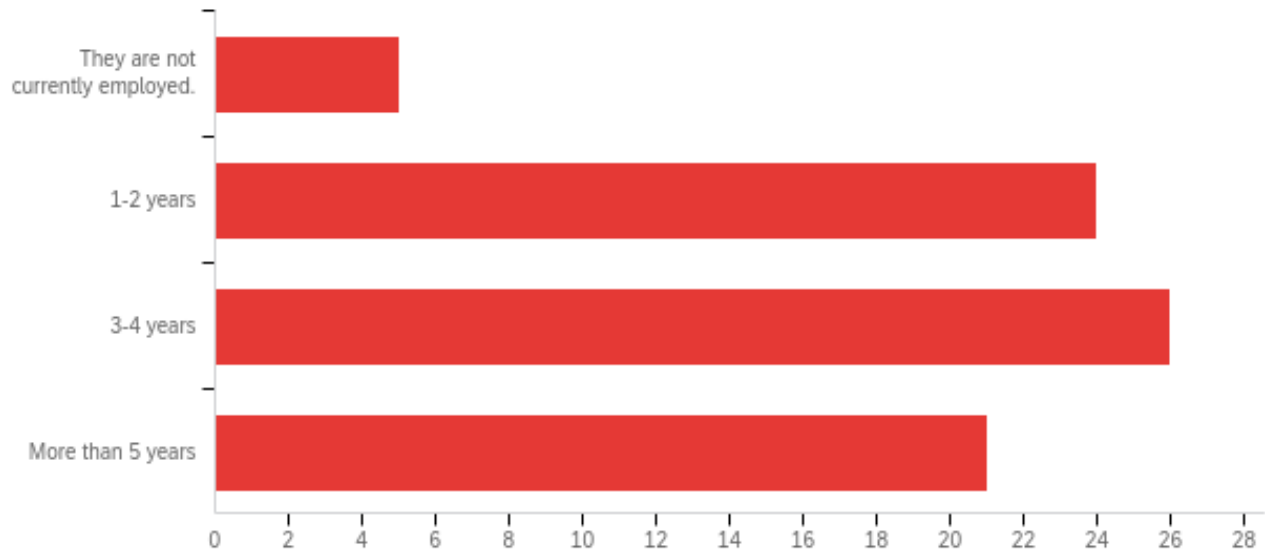
Did your institution hire the apprentice, pre-apprentice, or paid intern?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Did your institution hire the apprentice, pre-apprentice, or paid intern?	1.00	3.00	1.45	0.76	0.58	121

#	Answer	%	Count
1	Yes	71.90%	87
2	No	11.57%	14
3	Not applicable	16.53%	20
	Total	100%	121

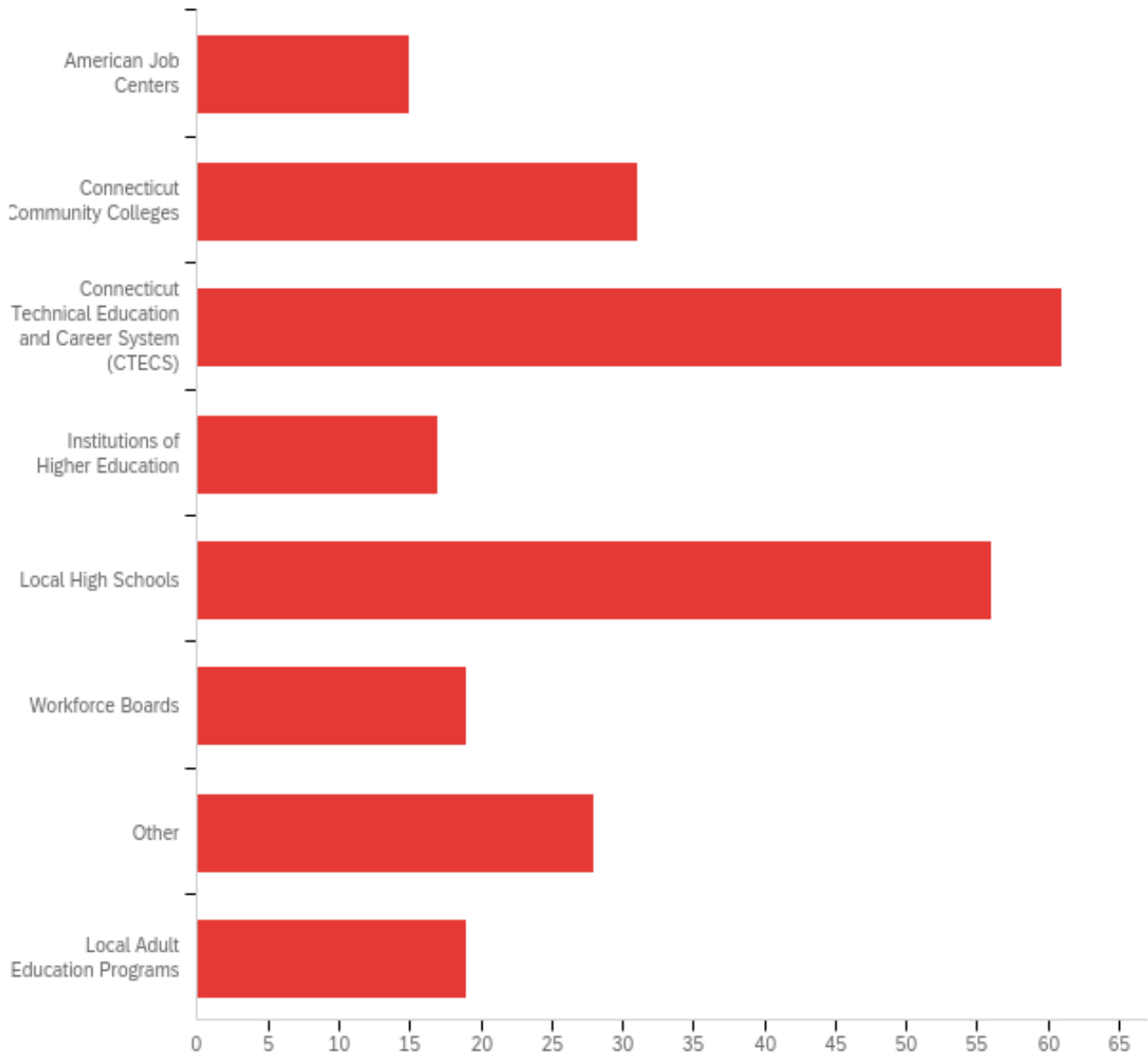
Are they currently employed and for how long have they been employed?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Are they currently employed and for how long have they been employed?	1.00	4.00	2.83	0.91	0.83	76

#	Answer	%	Count
1	They are not currently employed.	6.58%	5
2	1-2 years	31.58%	24
3	3-4 years	34.21%	26
4	More than 5 years	27.63%	21
	Total	100%	76

Where do you go or where would you go to find an apprentice, a pre-apprentice, or a paid intern? Select all that apply.



#	Answer	%	Count
1	American Job Centers	6.10%	15
2	Connecticut Community Colleges	12.60%	31
3	Connecticut Technical Education and Career System (CTECS)	24.80%	61
4	Institutions of Higher Education	6.91%	17
8	Local High Schools	22.76%	56

5	Workforce Boards	7.72%	19
6	Other	11.38%	28
7	Local Adult Education Programs	7.72%	19
	Total	100%	246

TEXT - Other

Other - Text

IEC-NE or borrow from another respected non-union contractor,

word of mouth

Employee Recommendations

Regular new hire process

Trade Schools

BTEC

Gateway Community College

tech schools

TECH SCHOOLS

Mercedes USA

Porter and Chester

word of mouth and the IEC program.

IEC

other employee recommendations

IEC, online, news paper

employee referrals

Responses to posted want ads

Trade Schools

Union

Applications

H2H

unknown

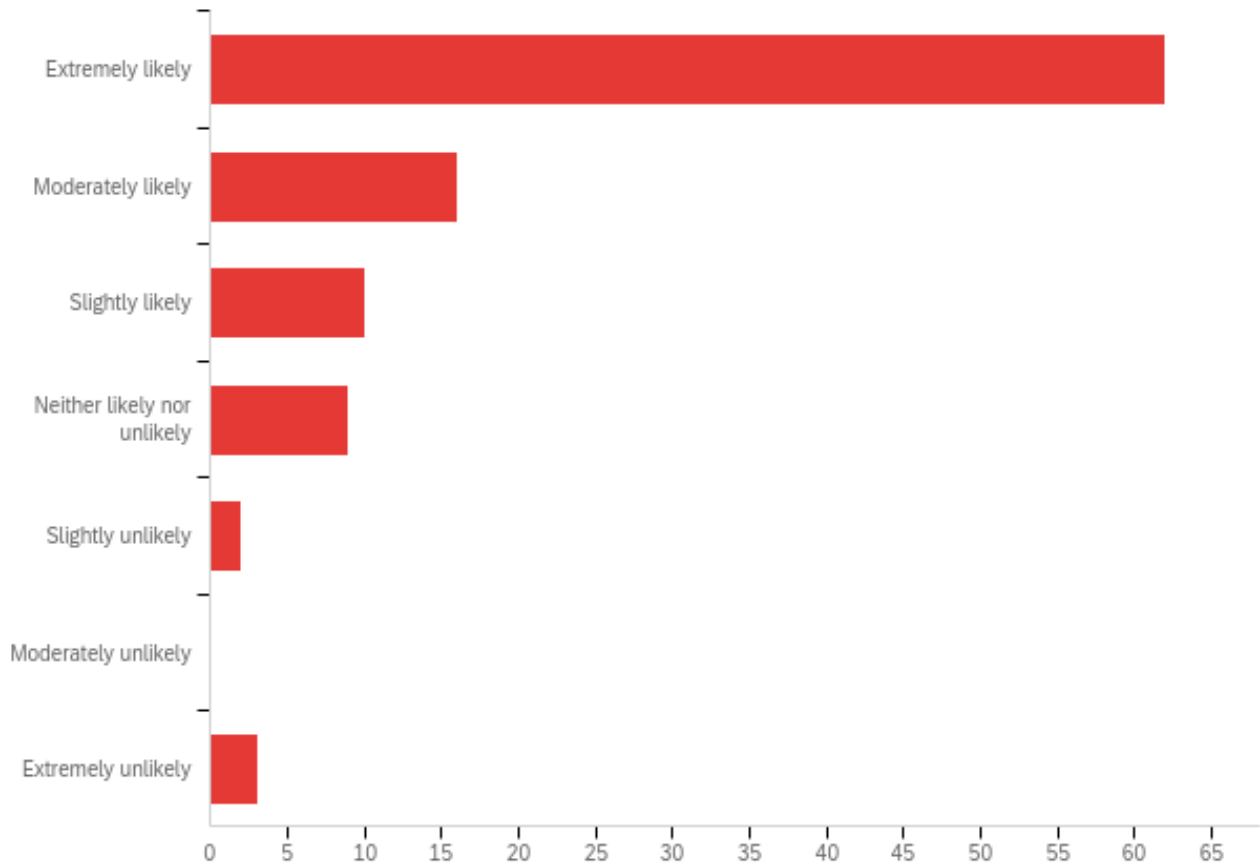
unions

We advertise on CT DOL Apprenticeship Website and we utilize CTHSS, and work with community based pre-apprenticeship programs like Building Pathways

Local Union Halls

temp agencies

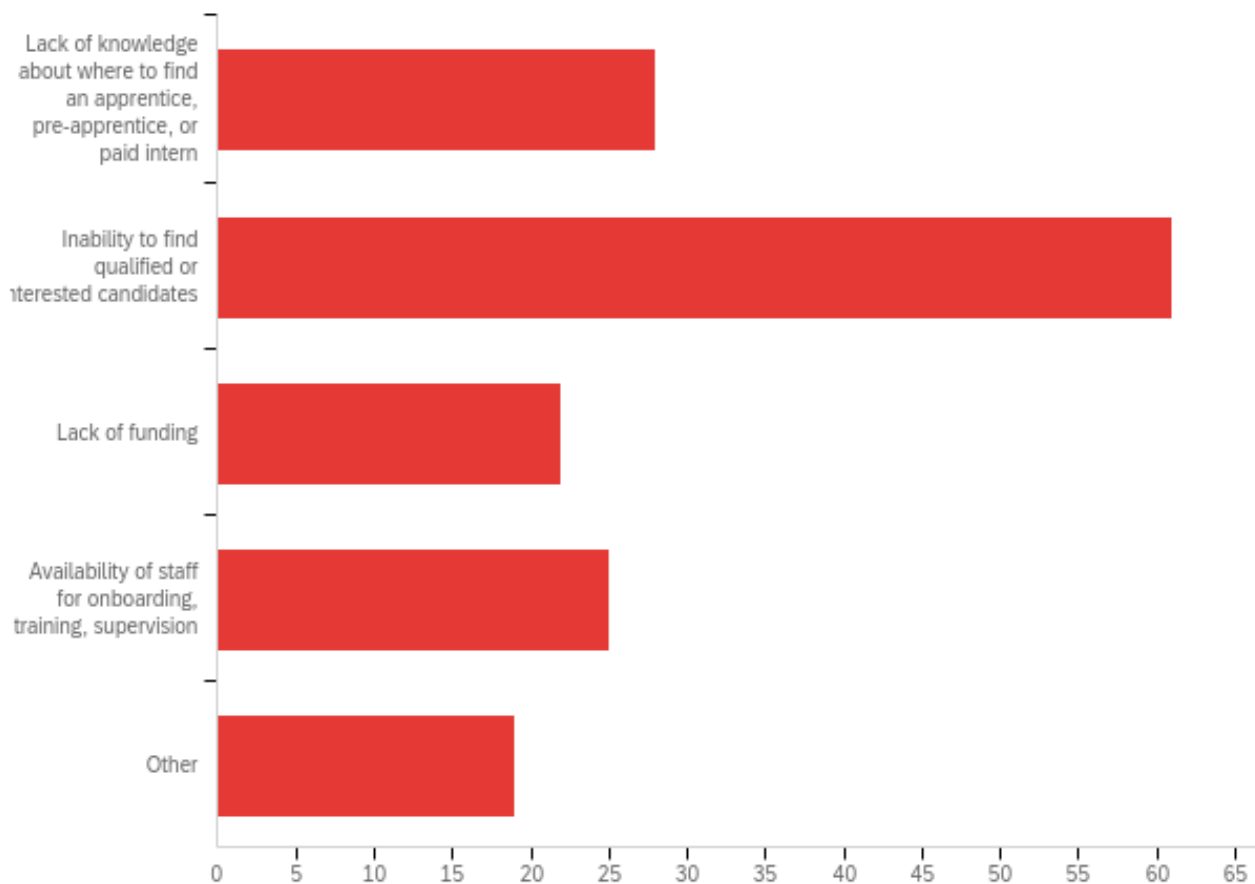
In the next three years, how likely will your institution implement an apprenticeship, a pre-apprenticeship, or a paid internship program?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	In the next three years, how likely will your institution implement an apprenticeship, a pre-apprenticeship, or a paid internship program?	1.00	7.00	1.87	1.40	1.95	102

#	Answer	%	Count
1	Extremely likely	60.78%	62
2	Moderately likely	15.69%	16
3	Slightly likely	9.80%	10
4	Neither likely nor unlikely	8.82%	9
5	Slightly unlikely	1.96%	2
6	Moderately unlikely	0.00%	0
7	Extremely unlikely	2.94%	3
	Total	100%	102

What challenges have you experienced, or might you anticipate when hiring an apprenticeship, a pre-apprenticeship, or a paid intern? Select all that apply.



#	Answer	%	Count
1	Lack of knowledge about where to find an apprentice, pre-apprentice, or paid intern	18.06%	28
2	Inability to find qualified or interested candidates	39.35%	61
3	Lack of funding	14.19%	22
4	Availability of staff for onboarding, training, supervision	16.13%	25
5	Other	12.26%	19
	Total	100%	155

TEXT - Other

Other - Text

Hiring Ratio

limit to 6 lifetime

Restrictions imposed on licensed trade apprentices

Need help doing it!! Can you help

expensive very detailed product line

Often times we train them and then they leave to work at another dealership

lack of commitment with the apprentice

lack of parenting, in reference to work ethic.

state is closing programs like auto body repair

Hiring Ratio

we have to have apprentices, we may not fit this survey

Bad State ratio policies

Ratio kills our ability to hire more apprentices in our dying trade. we need reform regarding ratios and allow us to bring on more apprentices to fill our manpower needs in the trade.

no enough appt registration spots, apprentice hiring ratio restrictions

Lack of applicants in 40 mile radius

ratio

Apprenticeships cost companies lots of money to train, which is necessary.

none

Need more work

What supports would motivate your organization to engage in or expand upon apprenticeship, pre-apprenticeship, and/or paid internship programs?

What supports would motivate your organization to engage in or expand upon apprenticeship, pre-apprenticeship, and/or paid internship programs?

Eliminating the Hiring Ratio

mentor grants, tax credits, apprenticeship grants

more funding

Additional funding for OJT and related instruction beyond the limit of 5 apprentices

Better internal trainers and post covid revenue growth

training is high cost endeavor - need to be VERY sure about candidate's ethics, values, ability to learn/retain information

no lifetime limit

Adjustments to ratio restrictions. more discretion on hire/fire during first 90 days

lower wage cost

ability to continue technical training

we need people to run CNC machines with some basic knowledge. We need people willing to work in the trade.

More training at the school level in skills appropriate for our industry

off set in training costs

None at present

Tuition reimbursement

We do it now with Bristol tech

a better pipeline of candidates with basic skill and work ethic

CONTACTS TO COMMUNICATE WITH TO FIND HIRES

Facilitator assistance

PROVIDING GENUINELY INTERESTED CANDIDATES

An easy way to do all of it. The easier it is the more likely it is we do it.

More interest in entering automotive repair

There is a vast dearth of talented automotive technicians roles that need to be filled with qualified

candidates. The number of unqualified candidates we go through is horrific - both in stress on the qualified individuals and added expense to the store to manage their mistakes. There needs to be a concerted effort to develop programs to attract and keep qualified individuals in this profession. Driving, post-Covid19 is only getting stronger as people may be less apt to use ride sharing or public transport for fear of infection.

more comprehensive insurance coverage for students under 18yo

better pre training, more hands on

Payment assistance and minimum commitment agreement

more apprentices within the colleges/tech high schools to choose from: more advertising for these programs

work ethic training.

Available applicants

local tech school not shutting down the autobody program

1:1 Journeyman/ Apprentice Ratio

any and all

Company goals

Schedules, qualification and follow up

Job Fairs

A formal program that offers appropriate incentives to pursue a apprentice vs a journeyman

Better State Ratios

more ratio relief benefits

do not count a pre- Apprentice as a full time apprentice on the ratio of Journeyman to Apprentice

reduced hiring ratios to 1:1 to match the field working ratio of 1:1

Better ratio

Adjusting the ratios to be able to hire more apprntrices.

Local High school to bring back shop classes

More candidates

payment help

Employment opportunities

unknown

If the state included welders

funding

More workload, we can only take in people that we have enough work for.

Larger marketshare for Union construction

Lots of current legislation on tax credits, more training, etc.

keeping smart ratios

Already active in apprenticeship

Industry needs

Grant Money

More funding

n/a

PLA's, jobs

contact with high school career councilors

Please provide any additional feedback, comments, or thoughts you would like to share with the Committee.

State needs to expand tech schools and place them under Economic Develop Dept if it is active or state employees will work to expand this future. I wish I could not get fired till 2027.

The Hiring Ratio is limiting the number of skilled workers in the future

Have manufacturers on your committees

The expansion of the apprentice program to the manufacturing industry has been very effective and efficient. There is a strong partnership between industry, education, the Dept of Labor and WDB. It would be a model to scale to other industries.

Somehow expand apprenticeship program to include training internal trainers/mentors on critical skills needed to properly develop an apprentice/intern

The AMC's at the CC's were a good idea but in the case of HCC, bad leadership, changing presidents, not listening to or involving advisory board and loss of funding have diluted the effectiveness of the programs and caused industry to look elsewhere for qualified candidates.

no lifetime limit

apprentices are expensive to train. They take time away from your skilled help when training them, they are prone to break expensive tools & equipment, and they are free to leave, and often do, for higher wages.

we visually train however we lack tech manuals for additional training

Need to know what programs are available and how to get involved

CT has started doing a good job in this area, need to keep up the pace.

Can you help us

additional ~~reachout~~ **outreach** is needed

Where do we get information?

The car business is always looking for technicians, I **think** the trade schools should partner more with dealerships to get students into the work force.

While we have utilized the high school/trade school & ASEP programs for years now, there is still a lack of interest from candidates. We need to attract more apprentices & those of higher intelligence & aptitude

These students come out very unprepared for the real world

this industry needs to be talked about and supported with students as a career path

Most young people have been brainwashed into believing that a 4 year college is the only choice. this has set many young people up for failure in life.

cars are more technical and auto body repair is very **important** but state of ct is shutting down auto body for **vinal** tech school in Middletown ????

Impossible to hire due to current hiring ratio.

there are not enough of **licensed electrician** ratio to apprentices in the state to meet the state's ratio, this needs to be changed to make easier to register apprentice's

By law electricians have to have apprenticeship programs, we may not fit this survey.

Again I feel that we need to reform the ration of journeyman electricians to apprentices so we can regain a foothold in our industry since the decline in interest in the trade has put us behind.

If the pre-apprentice is still in trade school remove them from counting as an apprentice on the ratio of Journeyman to Apprentice regulations, they are tying up a full time position where we can continue to train the apprentices in the field after their schooling gets done, i use to hire a lot of young adults from Trade schools when they were in school but will not do that now because of the ratio requirements

construction apprenticeship program ratio changes

Public education about skilled trades

educate the CT **apprenticeship** coordinator

I tried to apply and got nothing back - welders aren't included

We need more infrastructure spending. And the cost of health insurance for employees is hurting us greatly.

The biggest concern for companies is the high cost and length of time for an apprenticeship. The biggest fear is to spend 4 years training and then they leave.

i think Ratios are important, to many apprentices will make it hard to Properly teach and learn.

Promote Registered Apprenticeship in all occupations. It is the Gold Standard of Training!

We had a program for many years. The construction industry's model works.

If you are interested in learning more about apprenticeship and/or pre-apprenticeship programs in Connecticut, provide your name, company, and email address.

If you are interested in learning more about apprenticeship and/or pre-apprenticeship programs in Connecticut, provide your name, company, and email address.

Modern Tire and Auto Service. shawn@moderntirect.com

wsm_fran@yahoo.com

Larry Becker, Reidville Hydraulics & Mfg., Inc. larry@reidvillehydraulics.com

kcrowley@crowleyauto.com

Mike Gallagher, Gallagher Buick GMC, mikeg@gallagherautos.com

gperez@countylineauto.com

Jeff Aiosa Mercedes Benz Of New London jeffa@mercedesct.com

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Appendix B: Connecticut Pre-Apprenticeship Programs

Finance Sector Pre-Apprenticeship programs and affiliated High School (Youth)

- Northwest Region Workforce Investment Board Future Banker Pre-apprenticeship Program, Crosby High School, Waterbury

Construction Sector Pre-Apprenticeship Programs and affiliated High Schools (Youth)

- Connecticut Technical Education and Career System (CTECS) comprising 17 high schools and the Bristol Technical Education Center
- Comprehensive High Schools with approved Career and Technical Education (CTE) electives for Pre-Apprenticeship
 - Cromwell High School
 - Hillhouse High School - New Haven

Manufacturing Sector Pre-Apprenticeship Programs and affiliated High Schools (Youth)

- Connecticut Technical Education and Career System (CTECS) comprising 17 high schools and the Bristol Technical Education Center and two aviation pre-apprenticeship standalone schools focusing on aviation sector training for the Airframe and Powerplant occupations inclusive of manufacturing employer needs.
- Comprehensive High Schools with approved Career Technical Education electives for Pre-Apprenticeship
 - Valley Regional High School - Deep River
 - Sheehan High School - Wallingford
 - Waterbury Career Academy
 - Derby High School
 - Amity High School - Woodbridge
 - New Britain High School
 - Connecticut River Academy - East Hartford
 - Manchester High School
 - Synergy High School - East Hartford
 - Job Corp - Hartford

Northwest Region Workforce Investment Board Youth Manufacturing Program (facilitated by MASC)

- Danbury High School
- Torrington High School
- Crosby High, Kennedy High, and Wilby High Schools - Waterbury

Eastern Workforce Investment Board - Youth Manufacturing Pipeline Initiative (YMPI)

- New London High School
- Windham High School
- Stonington High School
- Wheeler High School - North Stonington

- Norwich Free Academy
- Bacon Academy - Colchester
- RHAM High School - Hebron
- Plainfield High School
- E.O. Smith High School - Storrs
- Griswold High School
- Killingly High School
- Ledyard High School
- Lyman Memorial High School - Lebanon
- Montville High School
- Plainfield High School
- Fitch High School - Groton
- Waterford High School
- Woodstock Academy
- Tourtellotte Memorial High School - North Grosvenordale

Electric Boat S.H.I.P. Pre-apprenticeship Program (including students from)

- Waterford
- East Lyme
- Montville
- Ledyard
- Stonington
- Fitch Senior High School - Groton
- Norwich Free Academy
- Windham
- Bacon Academy
- Ella T. Grasso Technical High School
- Norwich Technical High School
- Science and Technology Magnet of Southeast Connecticut
- Westerly High School, Rhode Island

Sikorsky and Teamsters Program (including students from)

- Ansonia High School
- Shelton High School
- Bridgeport Regional Aquaculture
- Fairchild Wheeler, Bridgeport
- Platt Technical High School
- Emmett O'Brien Technical High School
- Bullard-Havens Technical High School
- W.F. Kaynor Technical High School

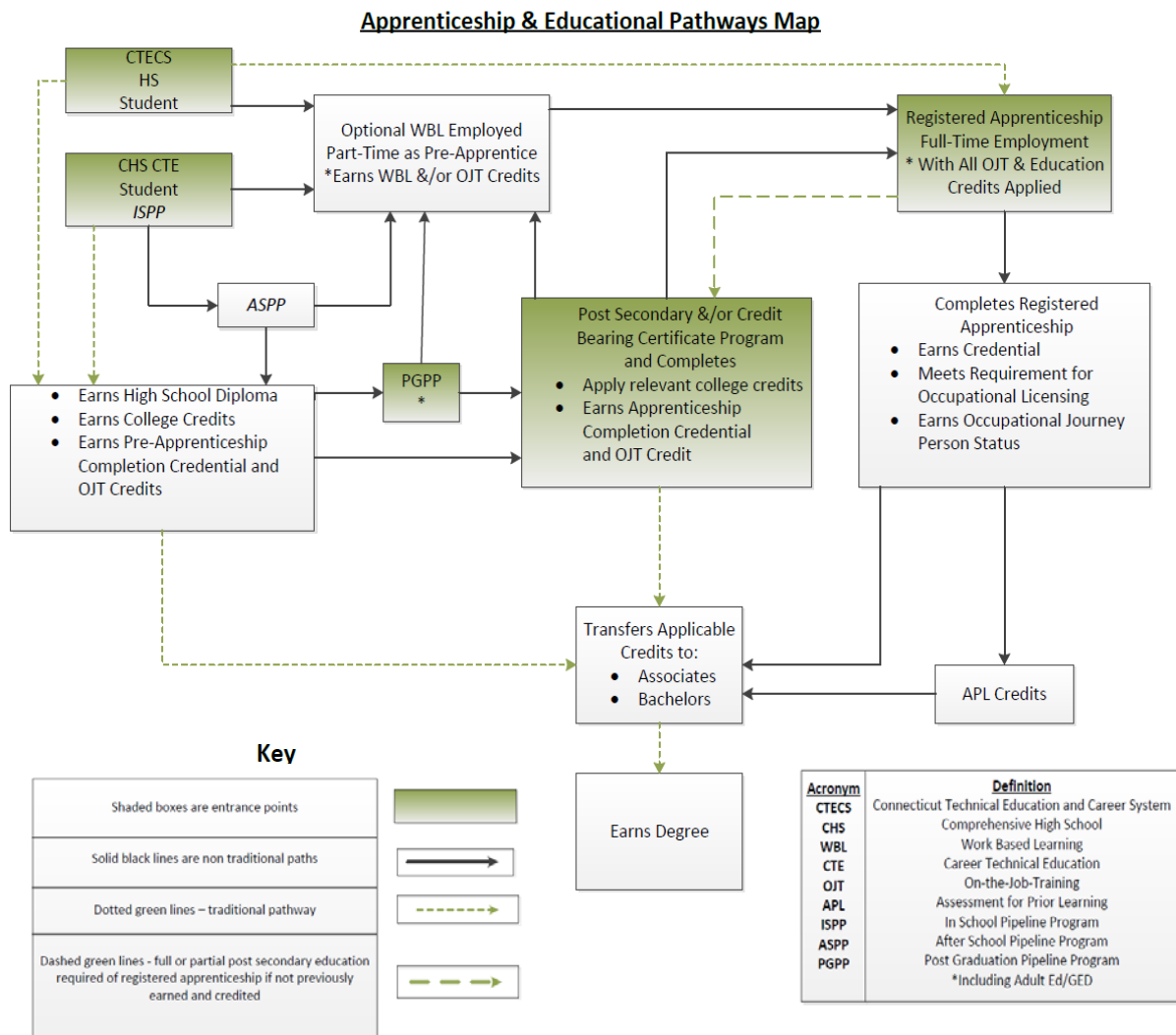
CTECS Automotive Technology Program for High School Students

CTECS currently has six nationally accredited Secondary Automotive Technology programs that participate in the European-based model Automotive Youth Educational Systems (AYES) program offered by the [ASE Education Foundation](#). The ASE Education Foundation provides students interested in Transportation, Distribution and Logistics occupations apprenticeship opportunities and acts as a conduit between education and automotive business employers. The model for education paths and industry alliances was started by Jack Smith then CEO of General Motors in 1995. CTECS has been following this apprenticeship and WBL model since 2001 in five of its secondary programs. This model, has been a success in the CTECS system for several decades.

Schools currently participating in ASE Education Foundation/AYES program:

- Bullard-Havens Technical High School
- Emmett O'Brien Technical High School
- Norwich Technical High School
- Platt Technical High School (since 2001)
- Wilcox Technical High School
- Windham Technical High School

Appendix C: Pre-Apprenticeship and Educational Pathways Map



Appendix D: Connecticut Technical Education and Career System (CTECS) Adult Apprenticeship Program



Connecticut Technical Education and Career System (CTECS) Adult Apprenticeship Program

Major Contributor to CT's Workforce and Apprenticeship Program:

The Connecticut Technical Education and Career System's grade 9-12 programming, Adult Apprenticeship Program, and Bristol Technical Education Center's post graduate program provide training to over 90% of all registered apprentices (licensed trades) in the State of Connecticut.

CTECS Adult Apprenticeship and Extension Program:

CTECS' Adult Apprenticeship Related Instruction program provides apprentices with a comprehensive knowledge of the technical and theoretical subjects of their selected career. Students learn on the job while working under the supervision of an experienced journey-person and are registered with an approved sponsor through the CT-Department of Labor (DOL). Students also take the coursework required for their license category and graduate with the related-instruction training needed for their specific trade area. Through CTECS' Apprenticeship Related Instruction Program, students acquire the knowledge and skills necessary for licensure with the CT-Department of Consumer Protection.

CTECS' Apprenticeship Related Instruction program is fully approved by the CT-Department of Labor Office of Apprenticeship Training in the Licensed Occupational Construction trades.

Adult Apprenticeship Program Locations and Offerings:

CTECS apprenticeship and extension courses are offered at seven (7) convenient locations:

- A.I. Prince Technical High School (Hartford)
- Bristol Technical Education Center (Bristol)

- Bullard-Havens Technical High School (Bridgeport)
- Eli Whitney Technical High School (Hamden)
- Henry Abbott Technical High School (Danbury)
- Norwich Technical High School (Norwich)
- W.F. Kaynor Technical High School (Waterbury)

Evening related-instruction programs are offered in the following licensed categories:

- Barbering
- Electrical
- Heating and cooling
- Sheet metal
- Plumbing

Related-instruction is offered in the following non-licensed category:

- Manufacturing

Some locations offer extension courses such as welding and computer applications. These courses are designed for individuals to learn new skills or information. Visit cttech.org/apprenticeship for a full course listing.

Manufacturing Trade Areas:

CTECS is fully approved to provide related-instruction training in all manufacturing related instruction areas. Manufacturing related-instruction programs are flexible, and both online and instructor-led, to offer the best possible approach to interactive learning.

New Offerings:

CTECS is excited to offer our newest program, Barbering. The Barbering program is available at A.I. Prince Technical High School, Bullard-Havens Technical High School and Norwich Technical High School. This one-year program provides all the necessary related instruction towards the State of Connecticut Barbering License.

Course Approval:

In conjunction with being fully approved by the CT-DOL, CTECS Apprentice Programming is also approved and on the Eligible Training Provider List, and approved to accept WIOA funding.