



SYSTEM SUPPORTS

High-quality CTE programs exist within broader education and workforce development systems that have a significant impact on their operations. In order for CTE programs to reach their full potential, key supports must be in place at this broader systems level, such as policies, funding, research, cross-system collaboration, education and labor market alignment, and CTE marketing and recruitment efforts across programs. These supports are usually not specific to individual programs, but provide the foundation on which all high-quality programs in a local area can flourish.

Key Issues to Address
<ul style="list-style-type: none"> • Providing input into broader, systems-level conversations about reopening to ensure CTE is represented • Communicating with all stakeholders about changes to instruction and their implications • Addressing funding issues and potential budget cuts • Monitoring health and safety in any in-person instruction • Ensuring all students have internet access and devices • Establishing options for students to practice hands-on skills • Coordinating schedules across educational institutions

In the context of the COVID-19 pandemic, many of the systems in which CTE programs operate are facing unprecedented stress, and policymakers are dealing with difficult decisions that have ripple effects on institutions, programs, learners and teachers, as well as families, communities, and local and regional economies.

It is vital that CTE stakeholders have a seat at the table as these systems-level decisions are made. Advocacy for policies that support CTE students and prepare a competitive workforce, including the funding necessary to implement these policies, will be critical. CTE programs provide learners with unique opportunities to explore and prepare for careers, including hands-on and lab-based learning using specialized facilities and equipment, industry credentials, and work-based

learning and industry engagement, and subsequently have many instructional needs that differ from the needs of academic classrooms. Those needs risk being overlooked by policymakers if CTE stakeholders are not included in discussions, which could negatively impact the success of CTE learners and reverberate onto employers and the economy. Many systems are forming working groups to develop reentry plans and surveying guardians, educators and/or students. It is imperative that CTE leaders stay attuned to these efforts and contribute to discussions. For CTE leaders tasked with making some of these bigger decisions, involving a diverse set of stakeholders — administrators, instructors, faculty, staff, students and families, and partners across credit and non-credit programs — to facilitate input from a diversity of voices will be critical.

The biggest decisions that education leaders are facing are around whether, when and how to open campuses. A brief overview is provided below of the considerations around this topic that have emerged as most relevant to CTE programs, and links to reentry guidance and planning resources are included in the [Resources, Tools and Examples](#) section. Whatever instructional model is chosen, frequent and transparent communication with learners, their guardians (as appropriate), instructors and staff, and partners will be important to keep everyone apprised of changes and aware of where they can direct their questions and concerns. And while recruiting new learners into CTE programs might not be top of mind at this time, new methods of communication and new instructional models will impact the messaging of recruitment and promotional materials and the choice of media and venues; for instance, continued remote learning might lend itself to more virtual modes of recruitment through social media. Other systems-level aspects of CTE, including policies related to staffing, cross-system collaboration and labor market alignment, are addressed in other sections of this guide.

In-person Learning

Social distancing to comply with state and local rules, as well as to prioritize the health and safety of learners and staff, will be the most critical element of developing fully in-person instructional models. The [CDC](#) encourages smaller learning cohorts in their guidance for educational institutions, but does not define this numerically. Many states have limited gatherings to

groups of 10 as part of stay-at-home and early reopening guidelines, and even in places with larger caps (such as 50, 100 or 250), often there are more students than that in the hallways, cafeterias or other common spaces on campus. A number of CTE leaders report that they intend to keep a teacher-to-student ratio of 10:1 or less. However, this will vary based on a number of considerations, including state and local guidance, space in the classroom or lab, budget constraints and preexisting ratio requirements. Ensuring space between students is also an issue within classrooms, as well as in common spaces, such as cafeterias, libraries and school or public transportation.

Health screenings are recommended by the CDC for in-person learning. It is suggested that K–12 schools, if feasible, conduct daily health checks such as temperature screening, symptom checking and/or health screenings in addition to asking guardians to take temperatures daily and keep symptomatic learners at home. The [CDC](#) considers a person to have a fever when they have a measured temperature of 100.4° F (38° C). As of writing this publication, states are setting their own temperature thresholds, most in line with the CDC guidance.

Several area CTE center administrators have shared that they are looking at large-scale temperature-taking solutions, such as kiosks, cameras and thermal scanners that register individuals' temperatures as they enter a building and notify operators of high temperatures. Other campuses are considering having instructors play this role in each classroom. Data privacy will be a concern with all of these activities, and if instructors are assisting in this effort, they will need to be trained and equipped with protective equipment, and time will need to be set aside before or during classes to accomplish



this task. Regardless of the exact method of screening selected, all staff should be educated on signs and symptoms they should informally be on the lookout for, and processes should be in place to refer students for additional medical attention.

Preventative measures are also key considerations in this model, such as making opportunities for hand washing or sanitizing more readily available and requiring or encouraging staff and learners to wear masks. It is also extremely important to supplement these on-campus preventative measures with education for students and families about precautions and possible symptoms, and to encourage self-monitoring.

Institutions will also need to decide whether to provide, or partner with health care facilities to provide, COVID-19 testing for staff and/or students. If implemented, testing must be affordable and accessible, and linked to rigorous tracing efforts for those who test positive. The conversation around testing and tracing has been particularly salient at the postsecondary level, where students come to campus from multiple communities. Another option institutions are exploring is using wastewater testing as an early indicator of significant transmission in the community.

Campuses are crafting policies to give instructors and staff the authority to send students home who display symptoms such as coughing or wheezing, to help them decide when this is necessary and to combat possible pushback from the learner or a guardian. Some postsecondary institutions are adding safety measures like mask wearing into student codes of conduct and employee policies.

Access and Equity Implications



The access and equity implications across these models are tremendous and multifaceted. Access to computers and high-speed internet is one of the most obvious and immediate on-the-ground challenges. Less time on campus may result in fewer opportunities for industry credentials, accelerated credit and other opportunities, which can be particularly troubling for students who do not have the resources to pursue these opportunities on their own. The needs of medically vulnerable learners and staff, accessibility in remote instruction, cyberbullying, learning loss, growing equity gaps for underserved populations and a number of other issues are addressed in the [Access and Equity](#) section and in other content throughout this document.

Even in a scenario where most students return to campus, medically vulnerable populations are likely to need continued options for remote learning or other accommodations, which are described in detail in other sections of this guide. In addition, if this scenario is chosen, it is still important to have contingency plans in place to move quickly to remote learning for all students, if health conditions in the local area warrant more extreme social distancing for a period of time. This has implications for the way activities in many of the other elements are structured and delivered.

Remote Learning

In this scenario, all students would continue to learn remotely, with a few isolated exceptions. If a district or institution will be completely remote in the 2020–21 school year, with no in-person learning options, then the CTE curriculum will have to adjust significantly. The biggest challenge in this instance will be labs and hands-on learning; ideas and resources for continuing to build and practice skills through virtual, simulated and other methods are addressed in several of the other sections of this guide. The decision to shift to remote learning could also impact accreditation, industry certification and licensure requirements, and/or funding. CTE leaders will need to consult with appropriate institution or program governing bodies and program advisory boards about the ramifications of the fully remote instructional model.

The most critical systems-level issue for remote instruction is connectivity. This arose repeatedly throughout the spring as a significant barrier for learning for students of all ages. The Federal Communications Commission reports that more than 21 million Americans lack broadband access, while

[BroadbandNow](#) estimates this number is actually 42 million. Even in higher-income areas, learners can lack access to high-speed internet and a computer for the several hours a day needed for remote instruction. Many students only have a cell phone that may not work well with online platforms, and learners at home may have other responsibilities and distractions that can impede learning and add stress, or may even be facing homelessness.

Several CTE educators have reported that their districts and institutions have been or will be providing computers and internet hotspots to learners who need them through distribution programs, or staging mobile or stationary hotspots using school buses or campus parking lots. Community organizations and agencies, such as libraries, can also be a source of connectivity for students who lack reliable high-speed internet and/or access to technology. CTE leaders should strongly encourage these approaches to help CTE learners connect remotely, while bearing in mind that some of the devices being provided by schools, such as Chromebooks, may not be capable of running the software necessary for all CTE programs.

When it is not possible to get all learners connected, CTE instructors will likely need to develop packets of readings, worksheets, quizzes and potentially kits of activities that can be safely completed at home. However, this should be a last resort, as educators in CTE and other subject areas have acknowledged that online and paper-based experiences are widely divergent, and CTE students in particular will need access to technology to participate in virtual and simulated experiences. Throughout the rest of this guide, the underlying assumption is that student connectivity issues have already been largely addressed. That should be the first priority of institutions and districts pursuing remote learning options, as delivering a high-quality CTE program experience remotely will be nearly impossible without at least some internet and computer or mobile device access.

In many places, allowances within this remote learning model are being made for small groups of students to return to campus or other facilities for lab work or extra supports. In this case, the instruction may not look that different from CTE delivery in the blended learning scenario described below. However, there are key differences because the CTE learners in the lab will be one of the few groups on campus, and would likely only attend in person for short periods at a time, not on the traditional instructional schedule or even the modified blended schedules many are considering. For example,



students might be able to sign up for lab time a few times during the semester or receive hands-on practice through worksite placements, even if educational institutions continue to use remote instruction.

Blended Learning

Findings from both the ACTE survey and an [ExcelinEd survey](#) of K–12 state education leaders point to this instructional model as the most likely for many districts and institutions, with campuses welcoming students back on a staggered or rotating schedule. In this scenario, all of the considerations that are discussed above, such as health screenings and technology access, will still apply for the times students are learning in person and remotely. In addition, there are decisions that must be made about the blend of instruction and how it will be operationalized.



One option that campus leaders are exploring is A/B scheduling or the 2-2-1 model. In this model, learners are split into two groups. Each group is on campus one day, then learns remotely the next day while the other group is on campus. The fifth day is a distance learning day for everyone. A number of CTE administrators, both secondary and postsecondary, have reported to ACTE that their institutions are considering this model or similar variations.

Other options include rotating between one week on campus and one week of remote learning, or even larger blocks of time on and off campus for different students. The cohort scheduling model is another possibility, with the same small group of students staying together throughout the day. This may be an option for career academies that are already designed on a cohort learning model, but could be challenging for CTE in comprehensive high schools: [ExcelinEd](#) has

suggested that this option may reduce student elective choice. In addition to changes in schedules and student groupings, some school systems and postsecondary institutions are considering modified calendars that bring learners to campus in the summer and close campuses at Thanksgiving, at which point learners would either take an extended winter break or transition to remote learning. Whatever scheduling option is chosen, there will be many moving pieces across a campus and within programs to coordinate, including transportation, course schedules and issues of instructor capacity and workload.

Federal Funding

Many of the instructional reforms discussed in this guide require financial resources — at a time when state and local budgets are under significant pressures. However, federal funding may be available to address some of these reforms. The primary source of funding that has already been allocated to educational institutions to address coronavirus-related costs is the Coronavirus Preparedness and Response Supplemental Appropriations (CARES) Act. Most notably, the law provided \$30.9 billion for an education stabilization fund that was split between states, postsecondary institutions and local school districts. Money through this Act can be used for a variety of costs, such as improving educational technology and supporting distance education, retrofitting facilities, or providing professional development to educators — any cost that resulted from the shifts in instruction caused by the pandemic. A portion of the postsecondary funds was also set aside for direct aid to students to help address equity issues.

Additional funding under the CARES Act went to related programs that might benefit CTE programs and learners, such as [Project SERV](#), which helps institutions recover from traumatic events; the dislocated worker national reserve fund for states to respond to workforce issues related to the coronavirus; and several competitive grants being offered through the U.S. Department of Education. With all of these funds, as mentioned earlier, it will be important for CTE stakeholders to be at the table as distribution and allocation decisions are made. There is also a chance that additional funding will be made available later in summer 2020, as several proposals for more education support have been introduced in Congress.

CTE educators should keep in mind that other federal funding streams, such as Perkins, the Individuals with Disabilities Education Act (IDEA), the Every Student

Succeeds Act (ESSA) and competitive grants offered in the higher education space, may be able to help with new costs as well — each can be a piece of solving the funding puzzle. For example, “equipment, technology and instructional materials” are already an allowable use of funds under Perkins, as is “expanding opportunities for students to participate in distance career and technical education and blended-learning programs,” and ESSA includes funds for professional development. The “supplement-not-supplant” provision in many federal laws that prevents federal funds from being spent on some existing expenses may no longer be applicable if state or local budgets are cut; this is another important consideration.

In the case of Perkins in particular, it is required under Perkins V that all spending be linked to the comprehensive local needs assessment (CLNA), so depending on the timing of when that evaluation was completed, local areas may need to amend their CLNAs to reflect new COVID-19-related needs in order to align spending. Any equipment purchased with federal dollars will also be subject to the same rules related to inventory and tracking as in the past; however, the federal government and some states have issued waivers for [equipment use in unrelated programs](#) and [equipment/supply donations](#). There is nothing within Perkins that prevents equipment or technology from being provided to individual students for instructional purposes, but there may be other state or local rules related to this practice.

In all cases, and with any federal funding source, check with state authorities before allocating resources as there may be additional parameters in place.



Area Career and Technology Centers

For CTE offered through shared-time centers that serve high school students, one of the toughest challenges will be figuring out how to match schedules and transportation decisions among sending schools. Area center leaders have told ACTE that they are considering having some schools send students two days a week, and other schools on two different days, but this scenario may not allow them to maintain social distancing if one particular school makes up the largest portion of students in one CTE program. Another option suggested by ACTE survey respondents is having students sign up for lab time when it works with their home school or district schedule. This would also allow the area center to put a cap on the number of people in the lab at each time.

However, in any modified schedule, transportation to the area center will be a challenge for students who are dependent on school-provided transport, as it is usually not cost effective for schools to send a bus for only a few students, and morning and afternoon bus routes will take longer in most districts to accommodate social distancing — which could impact those traveling to the area centers as well. One option is to provide funds for students to use ridesharing services. In another approach, guidance from the state of [Maryland](#) suggests that area centers could increase their core academic offerings so that students would not have to navigate between multiple campuses, although this would be a difficult undertaking to launch in time for the new school year and would require buy-in from all partner schools.

Technology interoperability is another concern. Schools generally have firewalls and other protections loaded onto student devices. Centers that serve multiple schools or districts will need to be sure that the platforms used are accessible to all participating students. This may require conversations with the chief technology officers of each school or district.

Resources, Tools and Examples

- The CDC has published [reopening guidelines](#), [disinfecting protocols](#) and considerations for [K–12 schools](#) and [higher education institutions](#).
- [Advance CTE](#) has released a brief on COVID-19’s impact on CTE and the coming school year.
- ExcelinEd has developed a [detailed breakdown](#) of different scheduling, grouping and calendar options for 2020–21, and shared results from a [state leader survey](#) on reopening.

- This [webcast from EdSource](#) takes a deep dive into three school districts identified by the Center on Reinventing Public Education as having success in their transition to remote learning.
- This article from [Education Dive](#) discusses the challenges of socially distanced educational spaces. Education Week has produced several articles and resources on adapting educational facilities to social distancing, including a [measurement guide](#) and other [articles](#). This [Spaces4Learning](#) article also describes how to rethink school spaces in light of social distancing.
- Inside Higher Ed has published a number of articles on reopening, including [15 scenarios](#) for 2020–21 planning and others found in this [compilation](#).
- This article from the [Hechinger Report](#) discusses the potential for growing community college enrollments as this year’s graduates delay attending four-year universities.
- This [COVID-19 Crisis Communications Triage Kit](#) includes tips for leaders in education and other sectors.
- To help you connect with other CTE administrators considering these issues, ACTE has an active [Administration Division](#).
- A sample of reentry guides from federal sources as well as national organizations, states and counties is included in the [Appendix](#).

This is an excerpt from [High-quality CTE: Planning for a COVID-19-impacted School Year](#). Access the complete guide for additional content about providing high-quality CTE programs in a COVID-19-impacted school year. **Last Update:** June 22, 2020

This document is not legal advice, nor is it an exhaustive list of every consideration or action that CTE educators may need to take for the 2020–21 school year. Readers should defer to federal, state, local and/or institution requirements and guidance. The instructional models, ideas, resources, tools and examples shared do not constitute endorsements of any products, services or strategies, as different products, services and strategies will work in different contexts. As knowledge is gained, this guide may be updated to incorporate new ideas and resources and emerging issues.



System Supports: Key Questions to Consider

Cross-cutting Questions

- As summer begins, have you reopened facilities to serve any students? If yes, what are the early lessons learned?
- Have decisions been made about offering in-person, remote or blended learning for the fall semester? If not, who will make those decisions and when will they be made?
- Have learners and their guardians, where appropriate, been surveyed about their needs and preferences for technology, support services and more? Do these surveys address CTE instructional needs specifically?
- How can CTE leaders be involved in discussions around reopening in your area?
- Have CTE programs been specifically included within your campus, district or state's reopening plans? If not, how can these guidelines be updated to include CTE needs and challenges?
- What challenges do you foresee that may be overlooked by leaders without expertise in CTE, and how can you share relevant information with those leaders?
- What funding sources are available to help with the costs associated with whichever instructional model is chosen?
- What, if any, budget cuts are anticipated to CTE programs due to economic challenges in your area?
- How do you plan to recruit students to CTE in light of new instructional models? Will your messaging and choice of media need to change?
- How will you communicate with learners, guardians and partners about changes to instructional delivery, schedules, curriculum, work-based learning and other CTE course elements? How will you keep all stakeholders updated throughout the year on the impact of these changes and any new developments?
- What are your district's or institution's plans for future closures or other delivery changes that may be necessary during the year?

In-person Questions

- How will classes or other events on campus comply with group size limitations in your local area through creative scheduling, use of space or other strategies? How will you promote appropriate social distancing among students and staff?
- How will learner health screenings be implemented on a regular basis? Who will be responsible? How will student health data be protected?
- How can you provide enough personal protective equipment for students and staff, particularly if you have donated supplies you may have previously stocked?
- Will staff and/or students be encouraged or required to wear masks on campus? If so, how will you supply those masks? How will they be cleaned and/or replaced and how will you enforce the policy?
- What sanitation procedures will be encouraged or required, including handwashing as well as cleaning of facilities, equipment and supplies? How will you implement and enforce these procedures?
- How will transportation options and schedules be modified for social distancing?
- How will you provide continued remote learning for medically vulnerable students and staff?
- If you are a shared-time center administrator, how can you effectively schedule student time on campus in coordination with partner schools while maintaining social distancing? How will students be transported to the center?



System Supports: Key Questions to Consider (Continued)

Remote Questions

- What plans will provide internet connectivity and access to computers or mobile devices for all students?
- How will a shift to remote learning impact accreditation and/or funding?
- How will the need for hands-on practice and requirements for industry certifications and licensure be accommodated? Will these experiences be all remote, or can learners return to campus in isolated instances? (More questions on these topics can be found in other sections of this guide.)
- If you are a shared-time center administrator, how will you coordinate with local schools on technology interoperability?

Blended Questions

- Which student groupings, calendar adjustments and other scheduling factors will impact how students transition between remote and in-person instruction?
- How will transportation options, broader instructional schedules and course schedules be modified to maintain student access to a full range of high-quality CTE programs?
- How will instructor schedules be modified to accommodate the workload inherent in delivering remote and in-person teaching?
- Does the blend chosen provide enough hands-on learning for CTE students? If not, how can it be adapted?
- If you are a shared-time center administrator, how can you effectively schedule student time on-campus in coordination with partner schools while maintaining social distancing? How will students be transported to the center? How will you coordinate with local schools on technology interoperability?