

# STANDARDS-ALIGNED & INTEGRATED CURRICULUM



High-quality CTE programs of study use a dynamic curriculum that is based on industry-validated technical standards and competencies, aligned with relevant content and standards for core subjects, and incorporates employability skill standards. CTE curriculum also allows for students to apply integrated knowledge and skills across these domains.

Key Issues to Address
<ul style="list-style-type: none"> <li>• Prioritizing standards and content</li> <li>• Recovering standards and content that were missed in the spring</li> <li>• Adapting curriculum for social distancing or virtual platforms</li> <li>• Evaluating the efficacy of remote curriculum tools</li> <li>• Blending and sequencing in-person and remote curriculum</li> </ul>

While CTE programs should strive to maintain alignment with standards for academic, technical and employability skills that were in place before the pandemic, it is clear from experiences this spring that curriculum is likely to need modification for a COVID-19-impacted school year.

Regardless of the instructional model chosen, CTE educators will need to prioritize content and standards in cases where instructional time is shortened, or to prepare for the event of future campus closures. Having less time available for instruction was common in the spring; in one [survey](#) from Education Week, 69% of educators reported spending less time than usual presenting new, standards-aligned material. The schedule is likely to be adjusted in many fall scenarios as well. For instance, some postsecondary institutions are considering starting the semester early and ending it at Thanksgiving, as flu season starts again.

In the event of additional campus closures or other limitations on instructional time, CTE educators will need to identify which standards need the most attention and which standards are less critical to learner progress, and eliminate or trim extra content. Some states are looking at evaluating all of their CTE standards to ensure they can be implemented in various

instructional models. On the local level, one ACTE survey respondent shared that they are “looking at broad competencies and paring back requirements; i.e., if a student would previously need to complete eight different welds for a class, maybe four to six can demonstrate the competency needed without the repetition.”

At the same time, significantly reducing the standards taught within courses is not a sustainable approach to preparing CTE students for success and may conflict with requirements by accreditors, industry credentialing bodies, state licensing boards or state CTE program approval processes — and could even impact funding. Significant care must be taken to ensure that prioritizing standards does not reduce overall student outcomes. Consulting with advisory boards before modifying curriculum will be critical.

Educators will also need to consider adjusting curriculum to account for potential learning loss from spring or to cover skills that weren’t possible to address during emergency remote instruction. One option for standards recovery is spiraling new content with older content, which may support student learning better than beginning with a review of old materials before introducing new topics.





## Access and Equity Implications

When you are considering how to modify curriculum while maintaining quality and relevance, remember that learners with disabilities, English learners and other special populations may need extra help navigating new course designs and adjusting to remote or blended courses. In addition, access to high-speed internet and functional devices for both students and instructors will be critical for the success of remote curriculum. Last but not least, remember that curriculum modifications that eliminate standards necessary to attain industry credentials can negatively impact learner access to valuable career pathways.

## In-person Considerations

If a district or institution is returning to all or mostly in-person learning, CTE curriculum should largely unfold as normal. To maintain social distancing, instructors may need to reduce time spent on certain standards and modify curriculum to de-emphasize technical and employability skills that require students to demonstrate collaboration through close contact. This could include in-person teamwork more generally, as well as discipline-specific examples such as health care students acting as a rapid response team in an emergency simulation.

In addition, instructors may choose to frontload hands-on practice at the start of the school year, even if most learners return in person, in case campuses close again. Instructors may also need to spend more time early in the year on concept review or making up missed lab hours from the spring, requiring adjustments to the curriculum sequence used in the past.

## Remote Considerations

If some or all of CTE learning will remain remote, instructors will need to substantially revisit curriculum to modify it to the remote space, including course objectives, activities and assessments. Within CTE, there are some programs where it is not possible for students to achieve all of the standards through a remote environment. Consultation with business partners can help identify standards that must be practiced in person, such as those required by an accreditor, an industry credentialing body or a licensing agency, which can then be prioritized for any limited in-person lab access that is available.

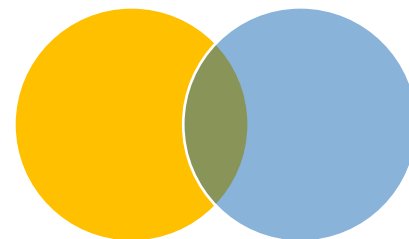
Choosing high-quality, relevant, accessible online curriculum tools and resources has been a significant

challenge for many educators this spring. It will be important to complete a thorough evaluation of what worked well and what didn't in the shift to remote learning, and to take the time afforded before classes resume to carefully examine alignment of curriculum and instructional materials with course standards and student outcome goals. This is particularly important with free resources, which many educators relied on this spring, and are likely to continue to need moving forward, due to limited funding available for new curriculum purchases.

Safety should also be part of the remote curriculum, even if students are not able to access authentic or simulated tools. Online safety training such as [OSHA 10-hour](#) is an option, and learners can also conduct a [job hazard analysis](#) as a remote project.

## Blended Considerations

Many CTE leaders are considering offering a blended or "flipped" classroom model, with theory emphasized through remote learning and hands-on practice delivered on campus. This typically involves chunking content into online and in-person segments, and thinking through the interconnection between the two. One tool that can facilitate this process is a [mix map](#), a Venn diagram that captures course elements that will be taught online, course elements that will be taught in person and course elements across both delivery methods, with arrows connecting activities that speak to the same standards or content. Several resources to support blended learning are listed in the [Resources, Tools and Examples section](#).



To help learners, especially those new to the blended environment, navigate the curriculum, CTE instructors will need to provide very clear syllabi and many signals and check-ins about how courses will progress and where information can be found. In addition, instructors will still need to modify curriculum delivered in person to accommodate social distancing, as noted above, and address issues related to remote curriculum as well. More specifics on instructional strategies for social distancing and remote learning can be found in the [Engaging Instruction](#) section.

## Resources, Tools and Examples

- This resource from the [National Institute for Excellence in Teaching](#) includes guiding questions and a template for the recovery of standards and content in the new school year.
- This [Education Week blog post](#) addresses prioritizing standards. While it's written from the perspective of core academics, the principles and process can be applied to CTE.
- The [BlendKit Course](#) is a set of subject-matter-neutral, open educational resources related to blended learning and available for self-study or for group use.
- The [Blended Learning Universe](#) contains information on different models of structuring blended learning and blog posts about blended learning implementation.
- The [Vanderbilt University Center for Teaching Blended and Online Learning Guide](#) presents research on the learning possibilities offered through online and blended learning, as well as effective practices for facilitating online courses.
- This [blog post from Oregon State University](#) describes using mix maps for blended learning.
- The Online Learning Consortium has a number of resources for online and blended learning, including a [course design review scorecard](#) and a [quality scorecard for blended learning programs](#).
- On the state level, Idaho Digital Learning Academy's [CTE Digital courses](#) are described in this profile from Advance CTE, while [CTE Online](#) is a free, California-based resource with thousands of lesson plans aligned to CTE, Common Core and Next Generation Science Standards.
- To teach safety, online [OSHA safety training](#) and conducting a [job hazard analysis](#) can be integrated into a remote curriculum.
- ACTE's [Distance Learning Resources](#) webpage includes a variety of curriculum resources that CTE educators turned to in the spring while making the switch to remote learning.

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.



## Standards-aligned & Integrated Curriculum: Key Questions to Consider

### Cross-cutting Questions

- How can you prioritize content and standards to help learners build the most relevant knowledge and skills, in the event of future closures? How can your advisory board contribute to these decisions?
- Are there particular standards that need additional review or reteaching? How can you integrate skills that would normally have been taught in the prior school year?

### In-person Questions

- How can you teach employability skills, particularly communication, collaboration and teamwork, in a socially distanced manner?
- How can you modify curriculum and standards when certain technical skills are meant to be executed as a group working together in close quarters? Can more socially distanced activities or simulations be substituted?
- Do you need to frontload hands-on practice or a particular set of knowledge and skills in the event of future closures?

### Remote Questions

- Which curriculum tools have been most effective this spring in the remote environment and should continue to be used? What are the gaps in standards where new, remote curriculum and instructional resources are needed? How can CTE leaders help instructors choose and vet these resources for quality and accessibility?
- How will standards that require in-person instruction or practice be met? How can your advisory board contribute to these decisions?
- How can safety training be integrated into remote curriculum?

### Blended Questions

- Which standards can most easily be taught through remote instructional methods and which require in-person practice?
- How might you better sequence curriculum in “chunks” of in-person and remote time?