

Approaches to Remote Learning for Career-Technical Education



OFFICE OF CAREER-TECHNICAL EDUCATION

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Introduction

Each Child, Our Future, Ohio's strategic plan for education, emphasizes that each child is challenged, prepared and empowered for his or her future. The plan identifies 10 priority strategies designed to support the state-level vision and the needs of the whole child. Strategy 10 states that high school should inspire students to identify paths to future success and give students multiple ways to demonstrate the knowledge, skills and dispositions necessary for high school graduation and beyond. Ohio is proud of its accomplishments in preparing career-technical education students for lifelong learning and success. The Ohio Department of Education strives to provide leadership and support for the successful delivery of quality career-technical education. This includes current efforts to support the development and implementation of remote learning programs.

Remote learning expands access to quality education and instruction through the use of technology. It removes physical barriers while offering opportunities for innovative, flexible and personalized education experiences. Although remote learning cannot replace the face-to-face interactions of a traditional classroom and has the potential to intensify education inequities if left unaddressed, remote learning is a tool by which educators can provide high-quality instruction.

Characteristics of career-technical education in a traditional setting also hold true in a virtual setting. Remote learning must ensure access to rigorous, relevant and industry-aligned content while continuously engaging stakeholders. It may include hard copy packets, online materials, teacher tutorials, recorded class meetings, live class meetings and other student supports as deemed necessary and appropriate by local districts.

The primary focus of the *Approaches to Remote Learning for Career-Technical Education Guide* is to identify equitable practices and share resources using remote learning. Districts are encouraged to use the information in a manner that meets the health and safety of all students in career-technical education.

Designing Remote Learning Programs

Remote learning can enrich and enhance the education provided to students. Remote learning is designed with similar elements of a traditional classroom in that the content is aligned to approved standards and utilizes various methods of delivery and assessment while providing meaningful connections. Remote learning also can challenge educators to become more effective and better facilitators of teaching and learning.

The two common types of remote learning outlined in Ohio Administrative Code are “digital learning” and “blended learning.” This document defines **remote learning** as learning that occurs when the learner and educator, or source of information, are separated by time and distance and, therefore, cannot meet in a traditional classroom setting. Remote learning is used as a broader term that can include distance learning, online learning, virtual instruction or remote training. This document intentionally does not use the term distance learning, which often is strictly internet-based instruction.

For the purpose of this guide, the identified recommendations are focused on the preparation and implementation of a remote learning environment.

Instruction

Assessing the technical infrastructure available to students and teachers is priority one. Career-technical education courses can mimic the in-classroom and lab experiences and offer personalized instructional delivery, but the ability to do so is dependent upon available resources.

Consider the following questions:

- Will teachers have access to digital learning tools necessary to provide digital and blended learning instruction?
- Will students have access to digital learning tools necessary to receive and respond to digital and blended learning instruction?
- Will the school ensure teachers have the appropriate training in the pedagogy of the effective delivery of online and digital instruction?
- Will teachers provide instruction and assessment in lieu of access to reliable technology?
- Will technical assistance and support be provided for remote learning?
- Will online curriculum instruction delivered to students be evaluated and reviewed for rigor and relevance?

Content Resources and Assessments

Educators must develop differentiated instructional plans that are rigorous, relevant and represent real-work knowledge and skills. Digitally delivered instruction should promote academic and technical skill attainment, be aligned with the Ohio Career Field Technical Content Standards and meet the needs of all individuals in the classroom.

Consider the following questions:

- What types of digital resources can be used for remote learning? *Examples: digital textbook, learning management system, industry webinars, virtual tours, industry-driven demonstration videos, instructor-created “how to” videos, project management applications, etc.*
- What assessment process will be used for remote learning?
- What method(s) will teachers use to incorporate social-emotional learning strategies, ensuring support of the whole child?
- What ways can instructional activities provide equitable opportunities for each student to demonstrate critical higher-order thinking?
- What ways can instructional activities promote the transfer of technical knowledge and skill to different situations and applications?
- What ways can instructional activities incorporate culturally responsive materials and resources?
- How can approved industry-recognized credentials be incorporated into instruction?
- What ways can work-based learning support and enhance instruction?

Work-Based Learning

Work-based learning experiences are designed to provide authentic learning experiences to students that link academic, technical and professional skills. Business and education partners work together to evaluate and supervise the experiences, which must be documented with training or learning plans and evaluation forms. Click [here](#) to learn more.

Equitable Practices in Remote Learning

Each Child, Our Future emphasizes the importance of providing equitable learning opportunities for all students. Consideration must be given to providing an equitable remote learning experience for students. Refer to pages 6 and 7 of the [Ohio Remote Learning Resource Guide](#) for updating learning plans for remote learning.

Student support is not limited to accessing the necessary equipment and supplies for school. Special populations often encounter challenges in receiving a quality and equitable education. Therefore, student support also may include communicating urgent and detailed information on available resources for nutrition, transportation, health care and instructional support/tutoring.

School and Community Relations

Quality career-technical education programs are those with actively involved stakeholders from both the school and community. Intentional and frequent engagement with students, caretakers and industry partners is critical.

Consider the following questions:

- What method(s) will schools and teachers use to communicate policies and procedures, expectations and instructions with the education community?
- What method(s) will teachers use to communicate with and engage students? Caregivers? Industry partners?
- What ways can business and industry partners support and supplement remote learning activities?

Lasting Considerations for High-Quality Remote Learning

Schools are an important destination where many factors come together to serve the students, including school leaders, teachers, curriculum, instruction, student supports and more. As educators, continuously look for new, innovative and creative ways to enrich student experiences, it is important not to overlook the key components of high-quality instruction.

Key Takeaways

Delivery

- Assess the available resources
- Provide access and alternatives

Content

- Align instruction to approved content standards
- Be creative, be flexible and have patience

Equity

- Commit to providing equitable education opportunities to all students

Engagement

- Communicate clearly and frequently with all stakeholders

Resources to Assist with Remote Learning for Career-Technical Education

<p>Curriculum Ideas for all pathways:</p> <p>iCEV Online Curriculum</p> <p>Digital Workforce Development Project Resources</p> <p>Standards by Design</p> <p>Reality Works</p> <p>OhioMeansJobs</p> <p>Skills to Succeed</p> <p>Lead for Change</p> <p>Work-Based Learning</p> <p>Virtual Job Shadow Resource</p> <p>CTE Online</p> <p>Next Gen</p>	<p>Curriculum Ideas for Agriculture:</p> <p>Smart Science Online Labs</p> <p>AgEdNet My Caert</p> <p>University of Florida Online Agricultural Education Resources</p> <p>Ohio Association for Agricultural Educators' list of resources</p> <p>National FFA Resources</p> <p>Curriculum Ideas for Business and Administrative Services:</p> <p>MBA Research and Curriculum Center</p> <p>Bowling Green State University HATCH curriculum</p> <p>AES Education</p>	<p>Curriculum Ideas for Family and Consumer Sciences:</p> <p>Teen Times</p> <p>B.A.S.I.C. Leadership</p> <p>Home Baking Association</p> <p>EVERFI</p> <p>Windowswear</p> <p>Skills for Success Academy</p> <p>Access codes: Advisers access code: 04ATfI Student access code: 04ATfI9999</p> <p>Curriculum Ideas for Arts and IT:</p> <p>Adobe Education Exchange</p> <p>Computer Science Resources</p> <p>Coding Resources</p>
<p>Curriculum Ideas for Construction, Transportation, Manufacturing, Auto Tech and Engineering:</p> <p>Equipment & Engine Training Council (Transportation)</p> <p>US Department of Labor - OSHA eTools</p> <p>ESCO Group – Resources for HVACR educators</p> <p>NCCER/Pearson Webinars for virtual training</p> <p>Lincoln Electric Online Covid-19 resources</p> <p>HAAS</p> <p>ASE Resources</p>	<p>Virtual Classroom Teacher Assistant Tools:</p> <p>Industry Recognized Credentials</p> <p>Plickers</p> <p>Quizlet</p> <p>Poll Everywhere</p> <p>Google Classroom</p> <p>Google Forms</p> <p>Discussion Boards in learning platforms such as Schoology</p> <p>Learning Management Systems</p>	<p>Other/Additional Resources:</p> <p>Virtual Dissections and Labs</p> <p>INFOhio provides a variety of resources</p> <p>PBS LearningMedia</p> <p>TEDEd</p> <p>Information and Resources for Schools and School Personnel from USDOE</p> <p>Click here for a list of additional resources.</p>