CAPE - Youth

CENTER FOR ADVANCING POLICY ON EMPLOYMENT FOR YOUTH

Promoting and Maintaining Career and Technical Education for Students with Disabilities:

State Strategies Developed During the COVID-19 Pandemic

By Colleen E. McKay, M.A., CAGS, Marsha Langer Ellison, Ph.D., and Emma L. Narkewicz, M.P.A. | October 2021

Summary

The COVID-19 pandemic posed challenges for the provision of Career and Technical Education (CTE) for Students with Disabilities (SWDs). Many schools were forced to rapidly pivot to providing remote or virtual learning rather than the hands-on learning common to CTE. Despite challenges, state policymakers, educators, workforce administrators and CTE personnel responded to pandemic exigencies, leveraged funding and developed strategies to promote and maintain CTE for SWDs. This brief describes adaptations used by states to respond to challenges with CTE for SWDs during the COVID-19 pandemic. The lessons learned provide policymakers with opportunities to incorporate these promising approaches beyond the pandemic to support the aims of the Strengthening Career and Technical Education for the 21st Century Act (Perkins V) and the Workforce Innovation and Opportunity Act, to address barriers to CTE and to meet the needs of youth with disabilities to prepare them for the workforce.

States implemented strategies to mitigate the impact of COVID-19 on CTE service provision for SWDs and to expand CTE access for SWDs. As the U.S. recovers from the pandemic, states have an opportunity to:

1. **Strengthen interagency collaboration to maximize resources, address inequities and streamline CTE service provision.**
2. **Utilize federal funding to leverage and provide technology to expand access to CTE for SWDs.**
3. **Offer stackable credentials to facilitate employment opportunities.**
4. **Increase CTE instructors' capacity to serve students with disabilities through professional development opportunities.**
5. **Improve data collection efforts to identify and address CTE access challenges for students with disabilities.**

What is CTE?

Educational institutions, schools and programs that offer a sequence of academic and career-oriented courses, opportunities to gain work experience and that specialize in skilled trades, applied sciences, modern technologies and career preparation are referred to as Career and Technical Education programs. Some secondary schools have access to CTE through area CTE centers that provide a co-located site for students from one or more school districts. CTE provides opportunities for students to gain technical knowledge and academic and employability skills. These opportunities offer real-world work experience in high-skill, high-wage, in-demand careers. CTE is organized by career clusters, within which are career pathways. These pathways correspond to a collection of courses and training opportunities to prepare students for careers in in-demand industries.[1]

Introduction

CTE programs are available in over 98% of public high school districts,[2] providing a pathway for students, including SWDs, to prepare for college or careers.[3] There is evidence to suggest that participation in CTE is associated with promising outcomes for SWDs.[4, 5, 6] SWDs who participate in CTE have improved graduation rates[7, 8] and employment outcomes.[9, 10, 11, 12]

Despite federal legislation and funding, many SWDs still face challenges accessing this education. CTE facilities may not be equipped to accommodate students with physical disabilities, and CTE programs may not offer settings and supports required by students' Individualized Education Programs. Students with disabilities may also have difficulty with completing the assessment requirements needed to participate in or graduate from CTE programs.[13] Additional challenges include inadequate training of CTE instructors on supporting SWDs and inflexible attendance policies.[14]

Moreover, the COVID-19 pandemic made it difficult for all students, especially those with disabilities, to access educational resources like CTE.[15] The pandemic forced schools to rapidly pivot to providing remote or virtual learning to provide safe learning environments. This was especially challenging for CTE programs that: 1) typically provide learning in an on-site and in-person setting; 2) use special equipment or models to deliver instruction; and 3) rely on a required minimum of in-person hours to help students meet credentialing standards for certain industries.

As a result, the pandemic led to:

- Postponed and/or cancelled work-based learning opportunities.[16, 17, 18]
- Reduced opportunities to obtain the required in-person hours for credentialing that is necessary to enter the workforce or some career paths.[19]
- Waived requirements for completing school during the pandemic, which allowed students to graduate without obtaining credentials needed to obtain jobs.
- Inability to provide the hands-on instruction needed by many SWDs.
- A lack of resources for educators and administrators to translate hands-on learning into a virtual environment.[20]
- Difficulty modifying accommodations, Section 504 plans and specially designed instruction or supports for virtual learning environments.[21]

Despite these challenges, educators, schools and policymakers have developed creative solutions to support SWDs during the COVID-19 pandemic. Policymakers can use the following strategies beyond the pandemic to enhance access and equity for CTE for SWDs.

Policy Considerations

1. Strengthen interagency collaboration to maximize resources, address inequities and streamline CTE service provision.

States participating in Special Education-CTE-Vocational Rehabilitation Network meetings held by the National Technical Assistance Center on Transition: The Collaborative, reported that networking and partnerships among state agencies has improved during the COVID-19 pandemic. Due to the demands brought on by the pandemic, agencies have gained a better understanding of how they can connect, partner and share resources to improve outcomes for SWDs in CTE. For example, local education agencies and Vocational Rehabilitation can leverage their partnerships to provide more Pre-Employment Transition Services (Pre-ETS).[22] These agencies also realized that partnerships can be enhanced with other entities. Likewise, Vocational Rehabilitation agencies have realized that involving CTE can improve connections to employers.[23]

State Examples

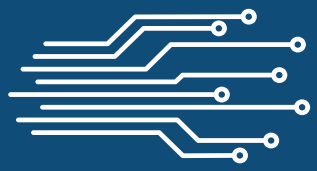
- **Wisconsin** has a Community of Practice on Transition that includes representatives of Vocational Rehabilitation, education and agencies serving individuals with disabilities. Members share information and problem solve around issues associated with transition for students with disabilities. During COVID-19, they held sessions focused on increasing the enrollment of students with disabilities in CTE.
- **Washington** provides training and resources for educators of students with disabilities through the Center for Change and Transition Services. The center offered virtual coursework and resources during the pandemic. Content includes topics such as effective collaboration, fostering partnerships between CTE and Special Education and inclusion and remote learning to increase equity and access.

2. Utilize funding opportunities to leverage and provide technology to expand access to CTE for SWDs.

The pandemic resulted in an immediate need to use technology to provide SWDs with access to remote learning opportunities. Educators, schools and states met this need by both transferring CTE curricula to remote platforms and by providing technology needed to access the newly created resources.

Innovative solutions for supporting students and delivering curricula remotely were developed that could be utilized beyond COVID-19 such as:

- Utilizing video tutorials or virtual meeting platforms for group tasks or projects.
- Making available apps and simulations to help SWDs in CTE develop life skills and critical thinking.
- Increasing the use of immersive technology such as educational applications, augmented and virtual reality[24] and other simulations.
- Using commercial services to deliver job exploration and job shadowing services remotely.
- Providing virtual field trips for career exploration.
- Supplying students with laptops and tablets to increase access to digital and online resources.
- Opening school parking lots for Wi-Fi accessibility.
- Using school buses to provide students with a hotspot for Wi-Fi access in combination with providing free school lunches.[25]



Funding for Technology

States have funded these initiatives through a variety of emergency and ongoing funds that provide opportunities to leverage technologies used during the pandemic to continue virtual access to services to innovate and improve delivery and engagement of SWDs in CTE beyond COVID-19. For example:

- **Funding from the American Rescue Plan Act of 2021**[26] provides support for remote learning and an opportunity for schools to expand access by purchasing equipment (e.g., broadband, Wi-Fi hot spots, modems and devices that connect to them) used by students, educators and library staff through the Emergency Connectivity Fund until September 2030. For example, ARP funding can be used to provide students with simulation kits consisting of interactive tools and materials that can be used to complete projects at home to replicate hands on learning.
- **The Elementary and Secondary School Emergency Relief Fund** can be used to purchase educational technology including connectivity, software, hardware and adaptive equipment. ESSER funds also can be used to purchase assistive technology or support special populations including SWDs in new learning environments. The Higher Education Emergency Relief Fund (HEERF) also provides funding for technology needed for distance learning.

Existing mechanisms such as Perkins V grants also can be used for equipment to provide SWDs access to CTE. For example, mobile labs can be purchased to provide students with additional opportunities for hands-on learning and remove transportation barriers.

State Examples

- **Colorado** created a website with COVID-19 resources and a statewide online loan library with resources for assistive technology devices for students with disabilities to access remote course and program delivery.
- **Iowa** created a website with resources for remote learning for CTE educators and students that includes interactive learning objects, virtual labs and simulations.
- **Kentucky** used federal Education Stabilization Funds (Education Stabilization Fund-Rethink K-12 Education Models) to move CTE courses onto the KYONLINE education network and was then also able to expand offerings of CTE certificates to more K-12 schools.
- **Idaho** used the Governor's Emergency Education Relief Program to provide grants to districts for remote learning, adaptive technologies, expanded internet connectivity and increased technological capacity to provide all students with access to virtual CTE. Funding also was used for teacher professional development for educators to deliver material remotely.
- **North Dakota** is offering competitive grants to districts to develop new or renovate and expand existing CTE facilities with funding through the American Rescue Plan Act to expand workforce development and training opportunities. These grants also can support traditional and remote learning methods of instruction.

3. Offer stackable credentials to facilitate employment opportunities.

Some states have developed badges, "stackable" credentials or certificates that are linked, build on one another and align with industry certifications. Stackable credentials allow students to develop competencies, obtain certificates and progress along career pathways.[27]

The U.S. Department of Labor's Employment and Training Administration defines a credential as "stackable" when, "a credential is part of a sequence of credentials that can be accumulated over time to build up an individual's qualifications and help them to move along a career pathway or up a career ladder to different and potentially higher-paying jobs."[28]

Each stackable credential may provide increased flexibility and multiple entry and exit points for students whose educational pathways are interrupted.[29, 30] These credentials can be especially useful for students with mental health or other conditions that result in multiple absences, which might otherwise require them to drop out of a full certificate or degree program.

Stackable credentialing has also helped students — both with and without disabilities — continue progressing along career pathways amid COVID-19. For example, a student may be able to obtain partial credentialing for employment despite being unable to demonstrate skills, access hands-on learning or sit for exams needed for full credentialing due to the constraints of the pandemic.[31] Stackable credentials and apprenticeships also provide individuals who lost jobs during the pandemic with expedited learning opportunities to re-enter the workforce. A toolkit for colleges considering a stackable credentials approach[32] is available from the Perkins Collaborative Resource Network.

State Example

- **Idaho** educators use an industry relevant badging/micro-certification platform called "SkillStack®" to validate student skills utilizing industry and disciplinary defined standards.

4. Increase CTE instructors' capacity to generally serve students with disabilities through professional development opportunities.

Even prior to the pandemic, some CTE instructors may have had limited experience working with SWDs[33, 34, 35, 36, 37] or providing supports. The pandemic posed further challenges for CTE instructors serving SWDs. Many teachers did not have experience with digital learning tools or with providing online instruction prior to the pandemic.[38, 39] In addition, many districts struggled to comply with Individuals with Disabilities Education Act requirements and to provide instructional accommodations and services.[40] In response, states provided guidance and professional development to support teachers to address these challenges in the context of a virtual learning environment. Several states received technical assistance to develop inclusionary practices to recruit and retain SWDs in CTE.

State Examples

- **Delaware** is partnering with several organizations including the National Alliance for Partnership in Equity on a multi-year professional development and technical assistance model, PIPEline to Career Success for Students with Disabilities. This model brings teams of education, Vocational Rehabilitation and other stakeholders together to identify participation and performance gaps for students with disabilities and develop solutions. These solutions may include implementing tools used for instructional and curriculum modification such as apps or other technologies to offer accommodations, providing hybrid and hands-on learning or incorporating Universal Design for Learning to support SWDs.
- **Tennessee** offered educators a standard certificate program for participating in training on special education and work-based learning in CTE. As a result, state administrators reported CTE teachers were more proactive in accommodating SWDs.[41] These activities led to an increase in SWDs participating in work-based learning.
- The **Washington** Office of Superintendent of Public Instruction has a wide range of resources available to educators (including CTE educators), a resource list of professional development opportunities to support SWDs and a newly developed Handbook on Inclusionary Practices.[42]

5. Improve data collection efforts to identify and address CTE access challenges for students with disabilities.

Several several states supported SWDs during the COVID-19 pandemic by using and reviewing data disaggregated by disability subgroups to increase SWDs' access to and participation in CTE.[43] Data reviews across CTE, special education and VR identified disparities among disability subgroups in CTE enrollment and concentration among SWDs. In addition, interagency committees reviewed data to monitor and verify that referral processes were intact during remote learning and to implement a system to increase access and equity.

States and districts must set performance indicators in secondary and postsecondary CTE in their Perkins V state plans. States are held accountable through a new provision in Perkins V that requires states to make continued progress in performance of all students in CTE, including special populations and SWDs. Data reviews and disaggregated data provide an opportunity to monitor enrollment, identify gaps in access or equity, implement improvement plans as needed and operationalize goals for SWDs in CTE even beyond the pandemic. By improving collection of enrollment and performance data disaggregated by special populations and specific disability populations, states can better identify which SWDs benefit most from CTE and which CTE programs are most effective for these youth.

State Examples

- **Delaware** has several initiatives to use data to identify and address gaps for SWDs in educational performance and outcomes, including CTE career pathways. Delaware analyzes enrollment, performance and participation data to examine gaps in equity, understand how gaps may have occurred and hold local education agen-cies accountable through collaboration and monitoring as part of a continuous improvement process. Data reviews of

Understanding CTE Requirements within Perkins V and WIOA

The Strengthening Career and Technical Education for the 21st Century Act (Perkins V; P.L. 115-224),[44] is designed to align secondary and postsecondary education systems and workforce development systems through coordination and collaboration. Perkins V emphasizes that special populations, including SWDs, need to be prepared for employment in high-skill, high-wage, in-demand occupations, or for postsecondary education that leads to a recognized credential. Perkins V requires states to develop plans for recruiting special populations into CTE programs and measuring their progress. States were allocated $1.3 billion in federal funding to support secondary and postsecondary CTE in Fiscal Year 2021.[45] New to Perkins V is a special set-aside where states must allocate 0.1% or $50,000 (whichever is the lesser amount) of State Leadership funds in Perkins V for recruiting special populations into CTE programs.[46] States also are required to identify and address inequities in access and participation through the Perkins V Comprehensive Local Needs Assessment.

The Workforce Innovation and Opportunity Act (WIOA; P.L. 113-128)[47] supports CTE for SWDs by requiring greater coordination and collaboration between workforce development and CTE through aligned definitions and other provisions. WIOA is designed to help individuals seeking employment — including those with barriers to employment, such as youth with disabilities — access education, training and supports needed to obtain high-quality jobs and careers.

Perkins V and WIOA have encouraged states to leverage CTE for youth with disabilities. Both pieces of legislation share similar goals related to SWDs, such as expanding workforce preparation activities and improving student attainment of recognized postsecondary credentials.[48]

different student populations in Delaware have helped identify gaps in enrollment and student participation and outcomes for SWDs. After gaps in equity have been identified, the causes are examined and educators, students and parents are engaged to gather information and develop plans to address these gaps.

- **Wisconsin** has a statewide data collection system, WISEData, that is used to streamline data collection processes for state and federal reporting. Districts can access a data dashboard to inform quality improvement and decision making at the local level.

Conclusion

States developed a range of solutions and strategies during the pandemic that can help policymakers accomplish the aims of Perkins V and WIOA and enhance opportunities for SWDs to access CTE. Strengthened interagency collaboration between VR, CTE and Special Education can maximize resources and streamline service provision. States can leverage technology to facilitate virtual learning and improve access to and utilization of CTE among SWDs. States can utilize new and existing funding streams to leverage technology, provide professional development and implement policy considerations described in this brief.

Introducing stackable credentials or flexibilities into occupational credentialing regulations may help remove barriers that SWDs face as they prepare for the workforce. Finally, by collecting and analyzing disaggregated performance and outcome data, including through data sharing agreements and collaboration, states can better understand and address participation and outcome gaps for SWDs in CTE. These strategies can strengthen approaches used by policymakers beyond the pandemic to accomplish the aims of Perkins V and WIOA and meet the needs of SWDs.

Acknowledgments

Authors gratefully acknowledge the input of various state agency representatives and members of the "Special Education, Career & Technical Education, and Vocational Rehabilitation State Peer Network" hosted by the National Technical Assistance Center on Transition: the Collaborative (NTACT:C). NTACT:C is funded through a grant (H326E200003) from the U.S. Department of Education. We also acknowledge the assistance of Austin Estes, data & research manager, Advance CTE, in acquiring information for this brief.

ODEP Key Content Contributors:

Robert Trombley and Kirk Lew

ODEP Expert Reviewers:

John Tambornino and Nadia Mossburg

Preparation of this item was fully funded by the United States Department of Labor, Office of Disability Employment Policy under Cooperative Agreement No. OD-33982-19-75-4-21. The cooperative agreement was funded for $5 million. This item does not necessarily reflect the views or policies of the U.S. Department of Labor, nor does mention of tradenames, commercial products or organizations imply endorsement by the U.S. Government.

Endnotes

1 Washington Office of Superintendent of Public Instruction. (2021). Program of Study, Career Clusters, and Career Pathways. Accessed September 25, 2021. Retrieved from https://www.k12.wa.us/student-success/career-technical-education-cte/program-study-career-clusters-and-career-pathways

2 Gray, L., & Lewis, L. (2018). Career and Technical Education Programs in Public School Districts: 2016–17: First Look (NCES 2018-028). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

3 Dieterich, C. A., & Smith, K. J. (2015). The Impact of Special Education Law on Career and Technical Education. American Secondary Education, 43(3), 60-72.

4 CALDER Center. (2017). Career and Technical Education, Inclusion, and Postsecondary Outcomes for Students with Disabilities. (Infographic). https://ccrscenter.org/sites/default/files/CTE_SWD_Infographic.pdf

5 Mazzotti V. L., Rowe, D. A., Kwiatek, S., Voggt, A., Chang, W., Fowler, C.H., et al. (2021). Secondary Transition Predictors of Postschool Success: An Update to the Research Base. Career Development and Transition for Exceptional Individuals, 44(1), 47-64. doi: 10.1177/2165143420959793.

6 Theobald, R. (2018). Career and technical education for students with disabilities. Retrieved from Washington, DC: http://caldercouncil.org/wp-content/uploads/2020/03/CALDER-Policy-Brief-No.-6-0918-1.pdf

7 Hehir, T., Dougherty, S., & Grindall, T. (2013). Students with disabilities in Massachusetts Career and Technical Education programs. Commonwealth of Massachusetts, Department of Elementary and Secondary Education. https://www.doe.mass.edu/sped/hehir/2013-07cte.docx

8 Theobald, R., Goldhaber, D., Gratz, T., Holden, K. (2019). Career and technical education, inclusion, and postsecondary outcomes for students with learning disabilities. Journal of Learning Disabilities, 52(2), 109–119.

9 Harvey, M. W. (2002). Comparison of Postsecondary Transitional Outcomes Between Students With and Without Disabilities by Secondary Vocational Education Participation: Findings from the National Education Longitudinal Study. Career Development for Exceptional Individuals, 25(2), 99-122.

10 Lee, J., Rojewski, J. & Gregg, N. (2016). Causal effects of career-technical education on postsecondary work outcomes of individuals with high-incidence disabilities. Exceptionality, 24(2), 79-92: DOI:10.1080/09362835.2014.986608

11 Theobald, R., Goldhaber, D., Gratz, T., Holden, K. (2019). Career and technical education, inclusion, and postsecondary outcomes for students with learning disabilities. Journal of Learning Disabilities, 52(2), 109–119.

12 Wagner, M. (1991). The Benefits of Secondary Vocational Education for Young People with Disabilities. Findings from the National Longitudinal Transition Study of Special Education Students. https://files.eric.ed.gov/fulltext/ED334739.pdf

13 Advocates for Children of New York, Inc. (December 2016). Obstacles and Opportunities: Creating Career and Technical Education Pathways for Students with Disabilities, 24. https://www.advocatesforchildren.org/sites/default/files/library/cte_obstacles_opportunities.pdf?pt=1

14 Ellison, M. L., Golden, L., & Biebel, K. (2020). Incorporating Career and Technical Education for Students with Emotional Behavioral Disturbance: Translating Evidence to Support Transitions (TEST). University of Massachusetts Medical School. Translating Evidence to Support Transitions (TEST) | Transitions ACR (umassmed.edu).

15 Association for Career and Technical Education (ACTE). (2020). High Quality CTE: Planning for a COVID-19-impacted School Year. https://www.acteonline.org/wp-content/uploads/2020/06/Planning_for_COVID-19-impacted_Year_FINAL.pdf

[16] Advance CTE. (2020). COVID-19's Impact on CTE: Defining the Challenge and the Opportunity. https://cte.careertech.org/sites/default/files/AdvanceCTE_COVID19_Impact_June_2020.pdf

[17] Bill and Melinda Gates Foundation. (2020). Nationwide Youth Online Tracking Survey – Phase 1. https://www.equitablefutures.org/wp-content/uploads/2020/09/Equitable-Futures-COVID-19-Youth-Tracking-Poll-P1-Results.pdf

[18] Robinson, T. (2020). Navigating CTE During COVID-19: Principles for Supporting Work-Based Learning in COVID-19. http://blog.careertech.org/?p=16653

[19] Ohio Department of Education. (2021). Reset and Restart for Career-Technical Education. http://education.ohio.gov/Topics/Reset-and-Restart/Reset-Restart-for-Career-Technical-Education

[20] Association for Career and Technical Education (ACTE). (2020). High Quality CTE: Planning for a COVID-19-impacted School Year. https://www.acteonline.org/wp-content/uploads/2020/06/Planning_for_COVID-19-impacted_Year_FINAL.pdf

[21] American Insitutes for Research (AIR). (2020). National Survey for Public Education's Response to COVID-19. https://www.air.org/project/national-survey-public-education-s-response-covid-19

[22] The National Technical Assistance Center on Transition: The Collaborative. (April 16, 2021). Special Education-CTE-VR Network Meeting, Portland, OR.

[23] The National Technical Assistance Center on Transition: The Collaborative. (January 22, 2021). Special Education-CTE-VR Network Meeting, Portland, OR.

[24] Castelo, M. (2020, April 10). How Immersive Technology Can Expand CTE Options for Students with Disabilities. EdTech: Focus on K-12.

[25] Association for Career and Technical Education (ACTE). (2020). High Quality CTE: Planning for a COVID-19-impacted School Year. https://www.acteonline.org/wp-content/uploads/2020/06/Planning_for_COVID-19-impacted_Year_FINAL.pdf

[26] Congress.gov. HR 1319—American Rescue Plan Act of 2021. Accessed May 9, 2021. Retrieved from https://www.congress.gov/bill/117th-congress/house-bill/1319

[27] U.S. Department of Education. Office of Career Technical, and Adult Education. Stackable Credentials Tool Kit Washington D.C. 2018. https://s3.amazonaws.com/PCRN/docs/Stackable_Credentials_Tool_Kit.pdf

[28] U.S. Department of Labor Employment and Training Administration. (2010). Training and Employment Guidance Letter. No 15-10. Attachment 2. Credential Resource Guide, (2010).

[29] Duke-Benfield, A. E., Wilson, B., Kaleba, K., & Leventoff, J. (September 2019). Expanding Opportunities: Defining Quality Non-Degree Credentials for States, 30. https://files.eric.ed.gov/fulltext/ED603280.pdf

[30] U.S. Department of Education. Office of Career, Technical, and Adult Education. Stackable Credentials Tool Kit. Washington D.C. (2018). https://s3.amazonaws.com/PCRN/docs/Stackable_Credentials_Tool_Kit.pdf.

[31] Advance CTE. (2020). Prioritizing CTE Through and Beyond COVID-19. Prioritizing_CTE_During_COVID_July2020.pdf (careertech.org)

[32] U.S. Department of Education. Office of Career, Technical, and Adult Education. Stackable Credentials Tool Kit Washington D.C. (2018). https://s3.amazonaws.com/PCRN/docs/Stackable_Credentials_Tool_Kit.pdf.

[33] Casale-Giannola, D. (2012). Comparing Inclusion in the Secondary Vocational and Academic Classrooms: Strengths, Needs, and Recommendations. American Secondary Education, 40(2), 26-42.

[34] Advance CTE. (2020). Making Good on the Promise: Improving Equity and Access to Quality CTE Programs for Students with Disabilities. http://blog.careertech.org/?p=16809

[35] Haber, G. & Sutherland, L. (2008). The Four A's of Managing the Placement and Service of Students with Disabilities in the CTE Classroom. The Journal for Vocational Special Needs Education, 31, 4-8.

[36] Harvey, M. W., Cotton, S. E., & Koch, K. R. (2007). Indiana Secondary CTE Instructors' Perceptions of Program Expectations, Modifications, Accommodations, and Post-Secondary Outcomes for Students with Disabilities. The Journal for Vocational Special Needs Education, 29(2), 16-32.

[37] Schmalzried, J. E., & Harvey, M. W. (2013). Perceptions of Special Education and Career and Technical Education Collaboration and Communication. Career Development and Transition for Exceptional Individuals, 37(2), 84-96. doi:10.1177/2165143412467666

[38] Advance CTE. (2020). Making Good on the Promise: Improving Equity and Access to Quality CTE Programs for Students with Disabilities. https://careertech.org/resource/improving-equity-access-quality-cte-programs-students-disabilities

[39] Caglayan, K., Hodgman, S., Garet, M., & Rickles. J. (February 2021). AIR Research Brief. Barriers and Supports. Teacher Familiarity with Digital Learning Tools. Barriers and Supports: Teacher Familiarity With Digital Learning Tools (air.org)

[40] Jackson, D. & Bowden, J. (October 2020). AIR Research Brief. Spotlight on Students with Disabilities. COVID-Survey-Spotlight-on-Students-with-Disabilities-FINAL-Oct-2020.pdf (air.org)

[41] The National Technical Assistance Center on Transition: The Collaborative. (January 22, 2021). Special Education-CTE-VR Network Meeting, Portland, OR.

[42] Washington Office of Superintendent of Public Instruction. (2021). Inclusionary Practices (IP) Handbook. https://www.k12.wa.us/sites/default/files/public/specialed/inclusion/Inclusionary-Practices-Handbook-DRAFT.pdf.

[43] The National Technical Assistance Center on Transition: The Collaborative. (October 16, 2020). Special Education-CTE-VR Network Meeting, Portland, OR

[44] Strengthening Career and Technical Education for the 21st Century Act (Perkins V), Pub. L 115-224 C.F.R. (2018).

[45] Perkins Collaborative Resource Network. (2021). Estimated Fiscal Year (FY) 2021 State Allocations under the Carl D. Perkins Career and Technical Education Act of 2006, as amended by the Strengthening Career and Technical Education for the 21st Century Act (Perkins V). https://s3.amazonaws.com/PCRN/file/Program_Memo-Estimated_FY_2021_Perkins_State_Allocations.pdf

[46] Alliance for Education. (2019). Perkins Career and Technical Education Primer. Special Populations. https://all4ed.org/wp-content/uploads/2019/09/Perkins-CTE-Special-Populations_FINAL.pdf

[47] Workforce Innovation and Opportunity Act of 2014, 29 U.S.C. 3101. (2014).

[48] Strengthening Career and Technical Education for the 21st Century Act (Perkins V), Pub. L 115-224 C.F.R. (2018).