MAKING GOOD *on the* PROMISE

Improving Equity and Access to Quality CTE Programs for Students with Disabilities

State Career Technical Education (CTE) leaders have a critical responsibility to ensure that each learner has opportunities to achieve educational and career success and is supported in identifying and realizing their goals. To do so, state leaders must identify and dismantle historical barriers and construct systems that support each learner in accessing, fully participating in and successfully completing a high-quality CTE program of study. This resource, developed by Advance CTE and the National Center for Learning Disabilities (NCLD), outlines some actions state CTE leaders can take to ensure that secondary and postsecondary students with disabilities have access to and the supports needed to thrive in high-quality CTE programs.

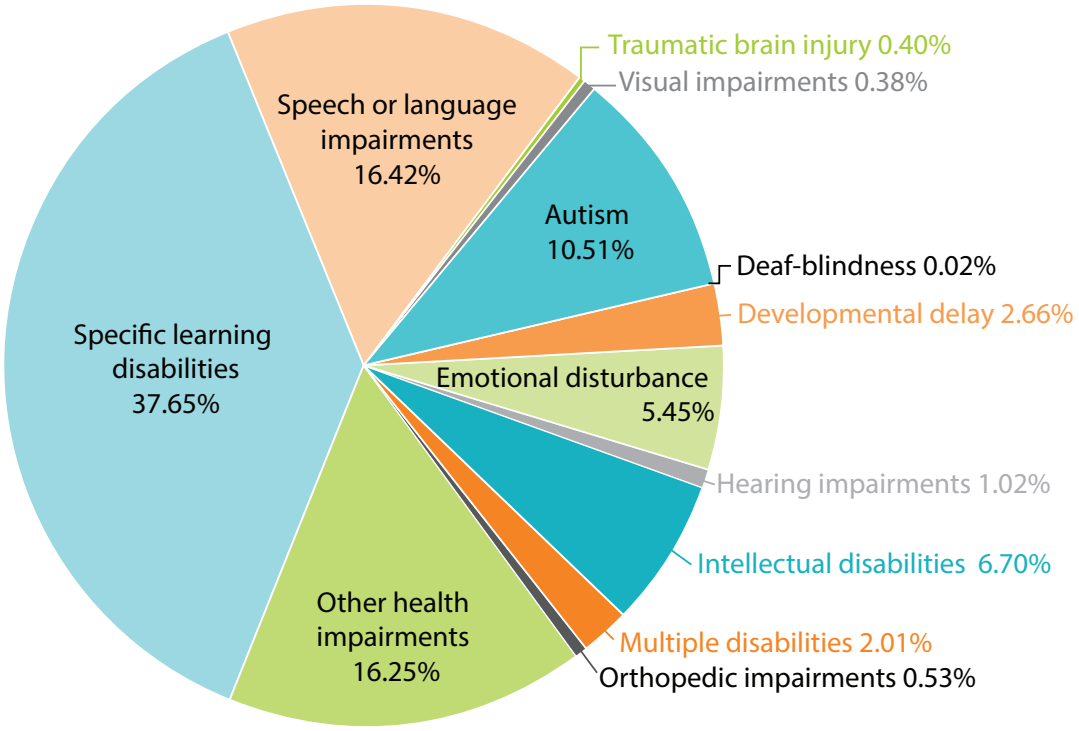
The Promise of CTE

In 2017-18, nearly 11.8 million students in the United States participated in CTE — 8.8 million in secondary and 2.9 million in postsecondary.[1] Of those students, 877,938 were secondary learners with disabilities, and 126,110 were postsecondary learners with disabilities.[2]

When students with disabilities have access to and the supports needed to thrive in high-quality CTE programs, the outcomes are promising. In general, participation in CTE courses has been tied to "a positive impact on wages, with an increase of 2 percent for every high-level class" in which a student participates.[3] This effect is reinforced for students with disabilities. Recent research links "concentrated CTE participation to improved graduation and employment for students with [physical and learning] disabilities."[4]

Other research indicates that students with learning disabilities "who took applied [science, technology, engineering and mathematics (STEM)] courses significantly increased their educational outcomes in the following ways: lowered chances of dropout, increased math test scores, and increased enrollment in postsecondary education. While the general student population also benefited by taking applied

Disability Categories for Students Ages 6-21 Receiving Special Education in 2018-19



Source: U.S. Department of Education EDFacts Data Warehouse. (2019). IDEA Part B Child Count and Educational Environments Collection, 2018-19. *Data extracted as of July 10, 2019, from file specifications 002 and 089.*

STEM courses, the advantages were greater for those students with learning disabilities."[5]

Furthermore, there is an increase in the need for job candidates to have skills they can gain through CTE coursework. Occupations in skilled trades such as business and financial operations, computers and mathematics, architecture and engineering, welding and electrical work, driving and logistics, construction and health care are some of the top jobs employers are having trouble filling in the United States.[6, 7] Students with disabilities bring significant talent to the workforce and can play a critical role in supporting our nation's economic recovery.

Current Challenges

At least three major challenges face CTE programs attempting to equitably serve students with disabilities. First, data and research on students with disabilities and their participation in CTE, their outcomes in those programs, and any trends relating to the type or quality of programs they are enrolled in is limited. Ensuring that students with disabilities have access to career counseling, are making informed choices about program enrollment, and are empowered to pursue a path that helps them achieve their own goals is essential. Comprehensive and accurate data are needed to ensure that students with disabilities are not over- or under-represented within specific Career Clusters® or programs of study, a fact that could indicate

explicit or implicit biases about student potential that states would need to remedy. In addition, gathering and publicly sharing data on program quality is essential to determine the type and quality of programs that are serving students with disabilities and whether representation is a challenge.

In addition, the preparedness of CTE instructors to serve students with disabilities can be a barrier. Even outside of CTE programs, most educators feel inadequately prepared to meet the needs of students with disabilities. In a survey, just 17 percent of general K-12 educators felt very well prepared to educate students with mild to moderate learning disabilities.[8] This finding applies to educators who teach in traditional public schools, many of whom have completed traditional educator preparation programs. CTE educators, especially those who went through alternative certification rather than a more traditional preparation program, may face additional barriers. They may not enter the classroom with the full set of knowledge and skills needed to provide accommodations, differentiate instruction, or supply the supports that students with disabilities will need. Further, employers and work sites may not be prepared or flexible enough to provide the necessary accommodations to enable students' access to work-based learning opportunities.

Finally, there is confusion about whether funding from the Individuals with Disabilities Education Act (IDEA) can be used for the education of students with disabilities if they are participating in a CTE program. Often, funding for CTE programs and programs that provide special education are kept separate, even though students participate in both. However, the Strengthening Career and Technical Education for the 21st Century Act (Perkins V) specifically stipulates that states, districts and colleges can use Perkins funds to provide accommodations to students with disabilities, especially within the context of any specific accommodations needed for CTE instruction. And while IDEA funding is typically used to provide specialized instruction and related services for a student with a disability, it can also be used to support that student's participation in work-based learning opportunities.[9] Ultimately, there are increased opportunities for Perkins and IDEA funds to be braided to support learners.

Five Actions State CTE Leaders Can Take

1. Leverage Perkins V to ensure that secondary and postsecondary learners with disabilities have access to high-quality CTE programs and instruction.

Perkins V offers states and districts the flexibility to support students with disabilities in the following ways:

- Increase access and completion for special populations, which include students with disabilities;[10]
- Prepare and support teachers, specialized instructional support personnel and paraprofessionals so they can provide appropriate accommodations for students who are members of special populations (including through the use of Universal Design for Learning);[11]
- Develop strategies for the recruitment of special needs populations into programs that lead to high-wage, high-skill, in-demand careers;[12] and
- Coordinate the Perkins state plan with IDEA.[13]

2. Ensure that systems are in place to provide high-quality career guidance and advisement to secondary and postsecondary learners with disabilities.

Students with disabilities should have access to a full range of CTE activities including career awareness, exploration, internships and preparation. As part of the transition planning process for students with disabilities, school teams should offer secondary and postsecondary CTE programs to students but must not push students into specific CTE programs or make the decision on behalf of any student.[14] Secondary and postsecondary learners with disabilities should have access to high-quality career advising that does not "track" students into any particular program. High-quality career advising should be a school- and community-wide effort, with effective coordination between school counselors and school administration and active participation from classroom instructors and community organizations.[15] In particular, for students with disabilities, career advising should include a focus on self-determination, self-advocacy, and understanding the accommodations and supports that can lead to a student's success in postsecondary programs and the workforce.[16]

3. Leverage data to identify and close equity gaps.

More research is needed to understand how — and how well — CTE is serving secondary and postsecondary learners with disabilities. To achieve this understanding, state and district leaders can collect data on enrollment in CTE programs, completion of CTE programs, graduation outcomes and post-graduation placement rates of students with disabilities. States can disaggregate these data by disability type and program type to determine whether students with disabilities are over-represented in CTE programs and whether that over-representation might have an impact on their graduation rates or the rates at which they are obtaining alternative certificates rather than regular high school diplomas. It is critical that students with disabilities are provided with high-quality CTE experiences at a rate that is comparable to students without disabilities. To ensure access to CTE programs and provide appropriate support to students with disabilities, state CTE leaders should work with special education partners and those administering IDEA to gather and analyze data to ensure equity in participation in, access to and completion of CTE programs of study; align and leverage student supports; and establish a more comprehensive body of research around the intersection of CTE and students with disabilities.

Delaware's Approach to Identifying and Closing Equity Gaps

Delaware identifies gaps by sub-group through an analysis of CTE enrollment, completion and post-program outcomes data. The Delaware Department of Education (DDOE) looks at school-level, program-level and state-level data for different student populations, disaggregating data by socioeconomic status, race/ethnicity, disability, gender and more. Sub-group data are compared to the general student population to ascertain whether enrollment and performance for certain students deviate significantly from the expectation. This process is completed annually as part of DDOE's performance management.

When inequities are identified, a structured protocol is set into action. DDOE uses a partnership approach to performance management, opting for a collaborative conversation with school-based staff. DDOE staff provide district leaders with data reports that illuminate specific gaps in enrollment and performance. They then co-construct a series of questions for study and conduct interviews with teachers, students and parents to identify gaps and models of support.

Once the interviews are completed, DDOE and district staff debrief about the conversation and collectively develop a report summarizing the findings of the study. The report includes commendations, recommendations, compliance issues, and next steps for closing equity gaps. The report also highlights opportunities for local leaders to co-invest with the state in trainings, tool development and other interventions to support under-enrolled and under-performing students.

4. Provide professional development to staff, instructors and support personnel.

States should examine which programs of study and Career Clusters students with disabilities are over- or under-represented in and dedicate the necessary professional development and technical assistance to educators and programs to ensure that the programs are accessible and inviting for a range of learners and learner needs. Ideally, professional development opportunities should be inter-disciplinary and include CTE instructors, special education teachers, general education teachers and specialized instructional support personnel to equip CTE instructors with the necessary knowledge and skills to serve students with disabilities effectively. This professional development may include training in applying the principles of Universal Design for Learning and providing accommodations for students with disabilities.[17] Similarly, CTE instructors and staff should be included in professional development opportunities offered to special education and specialized instructional support personnel. States may consider using the Teacher Quality Partnership Grants under the Higher Education Act to support the preparation of general educators to instruct students with disabilities and English language learners in CTE programs.

5. Ensure that learners with disabilities have access to high-quality work-based learning opportunities.

Meaningful work-based learning experiences are a key element of a high-quality program of study, and these opportunities should not be denied to students with disabilities. As such, CTE programs should ensure that students with disabilities have access to and can participate in, as appropriate, simulations, internships and apprenticeships that lead to meaningful postsecondary outcomes. State CTE leaders can leverage intermediaries (organizations whose sole or primary function is to support work-based learning or other career development activities for learners) to intentionally expand CTE programming and work-based learning opportunities for learners with disabilities.

Resources for State CTE Leaders to Support Students with Disabilities

NCLD

- Forward Together: Helping Educators Unlock the Power of Students Who Learn Differently
- Inclusive Technology in a 21st Century Learning System
- Why Now? Why Us? Inclusive 21st Century Learning

CAST

- Leveraging Universal Design for Learning to Support Special Populations in CTE Programs

Alliance for Excellent Education, Center for American Progress, JFF, Learning Policy Institute, Linked Learning Alliance, NAF, and National Center for the Improvement of Educational Assessment, Inc.

- Innovating for Equity and Excellence: Recommendations to States for Implementing the Strengthening Career and Technical Education for the 21st Century Act (Perkins V)

MAKING GOOD on the PROMISE

This resource is part of the Making Good on the Promise series, which confronts the negative aspects of CTE's legacy and defines the key challenges learners face today.[18] The series provides promising solutions to help state leaders close equity gaps in CTE to ensure that each learner is able to attain the promise of CTE — a high-skill, high-wage, in-demand career.

This resource was developed with support from the Bill & Melinda Gates Foundation.

The National Center for Learning Disabilities (NCLD) is a Washington, DC-based national policy, advocacy, and research organization that works to improve the lives of the 1 in 5 children and adults nationwide with learning and attention issues — by empowering parents and young adults, transforming schools, and advocating for equal rights and opportunities. For more information about NCLD, visit ncld.org.

Advance CTE: State Leaders Connecting Learning to Work, first established in 1920, is the longest-standing national nonprofit that represents State CTE Directors and state leaders responsible for secondary, postsecondary and adult Career Technical Education (CTE) across all 50 states, the District of Columbia and U.S. territories. For more information about Advance CTE, visit careertech.org.

Endnotes

1. Perkins Collaborative Resource Network. (n.d.). Perkins data explorer. https://cte.ed.gov
2. *Ibid.*
3. Kreisman, D., & Stange, K. (2019). Depth over breadth: The value of vocational education in U.S. high schools. *Education Next, 19*(4), 76-84.
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5. Plasman, J. S., & Gottfried, M. A. (2018). Applied STEM coursework, high school dropout rates, and students with learning disabilities. *Educational Policy, 32*(5), 664-696.
6. ManpowerGroup. (2020). The talent shortage 2020: U.S. data edition. https://web.manpowergroup.us/talent-shortage
7. U.S. Chamber of Commerce Foundation & Burning Glass Technologies. (2018). *Different skills, different gaps: Measuring and closing the skills gaps.* https://www.uschamberfoundation.org/sites/default/files/Skills_Gap_Different_Skills_Different_Gaps_FINAL.pdf
8. Galiatsos, S., Kruse, L., & Whittaker, M. C. (2019). *Forward together: Helping educators unlock the power of students who learn differently.* National Center for Learning Disabilities & Understood. http://www.ncld.org/forward-together
9. Cushing, E., Therriault, S., English, D., & Lavinson, R. (2017). *Developing a college- and career-ready workforce: An analysis of ESSA, Perkins, and WIOA*. Washington, DC: American Institutes for Research. https://ccrscenter.org/sites/default/files/Career-ReadyWorkforce_Brief_Workbook.pdf
10. Perkins V (section 2(8)).
11. Perkins V (section 114(e)(7)(G)).
12. Perkins V (section 112(a)(1)(2)(C)).
13. Perkins V (section 135(a)(5)(H)).
14. IDEA mandates that transition planning must begin for secondary students with disabilities who are 16 years or older (and sometimes for younger students where appropriate). Transition plans are incorporated in students' individualized education program (IEP) and specify postsecondary goals that are relevant to education and training; employment; and if appropriate, independent living skills. Postsecondary goals delineated in the IEP are based on the student's individual

needs accounting for their strengths, interests and preferences. Strength-based IEPs with effective transition planning can prepare students for success after high school in high-wage and fulfilling jobs.

15. Advance CTE. (2018). *The state of Career Technical Education: Career advising and development.* Silver Spring, MD: Author. https://careertech.org/resource/state-cte-career-advising-development

16. Parsi, A., Whittaker, M., & Jones, L. (2018). *Agents of their own success: Self-advocacy skills and self-determination for students with disabilities in the era of personalized learning.* National Center for Learning Disabilities. https://www.ncld.org/wp-content/uploads/2018/03/Agents-of-Their-Own-Success_Final.pdf

17. Universal Design for Learning is defined as a scientifically valid framework for guiding educational practice that — (A) provides flexibility in the ways information is presented, in the ways students respond or demonstrate knowledge and skills, and in the ways students are engaged; and (B) reduces barriers in instruction, provides appropriate accommodations, supports, and challenges, and maintains high achievement expectations for all students, including students with disabilities and students who are limited English proficient. (Higher Education Opportunity Act of 2008)

18. Advance CTE. (2018). *Making good on the promise.* Silver Spring, MD: Author. https://careertech.org/resource/series/making-good-promise