Redesigning Middle School CTE Pathways

National best practices and student advisement supports for Middle School Career and Technical Education Standards Implementation

September 2022

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Policies and Structures for Implementation

States and districts approach MS CTE standards differently, with varied scope and detail, depending on the context. Some states, like North Carolina, outline specific MS CTE standards, other states like Utah, outline requirements for a general MS CTE course. According to a 2020 report from the Center for American Progress, sixteen states outline college and career exploration standards or expectations in middle school: Arkansas, Florida, Hawaii, Iowa, Kentucky, Maine, Maryland, Montana, New Hampshire, New Jersey, New York, Pennsylvania, Utah, Virginia, West Virginia, Wyoming.[1] Two of which—Virginia and Utah—require students to complete a college and career exploration course that has specific competencies in middle school.

Spotlight Examples- MS CTE standards

Below are examples of states with MS CTE standards and a summary of their approach, policies and/or practices to implement the standards:

- **Maine**: Maine's MS CTE standards were developed by the Maine Department of Education (MDOE) and with input from key stakeholders. In 2017, Maine enacted a law to expand CTE opportunities for middle school students (grades 6-8). Along with this legislation, there was an opportunity for CTE schools to apply for grant funding to pilot a MS CTE program. MDOE distributed grants for three funding cycles, through June 2022, to pilot various delivery models for MS CTE programming.[2] CTE centers and regions were responsible for partnering with a middle school in their catchment area and designing and overseeing MS CTE programming.
- **New York**: New York State Department of Education (NYSED) middle-level CTE regulation outlines the CTE program requirements for grades 5-8. [3] In collaboration with CTE teachers statewide, NYSED developed curricular guidance framework to help schools implement the updated CTE regulation. Schools can use the framework to personalize MS CTE curriculum and instruction, including the sample project-based learning templates created by NY CTE teachers.[4] Additionally, NYSED developed comprehensive guidelines[i] for Career And Technical Education Administrators and School Counselors that include CTE definition and requirements, student learning standards, CTE instruction grades P-12, HS delivery options for CTE, graduation requirements, work based learning options, considerations for serving special populations, technical assessments and credentialing, federal and state funding information, program improvement and needs assessments processes, reporting CTE student data, CTE teacher certification, continued CTE teacher learning, community connections, CTE student organizations and professional organization resources. NYSED also contracted the Career and Technical Education Technical Assistance Center to improve the quality, access, and delivery of CTE resources for professional development, planning, instruction, and assessment that educators can customize depending on their local needs.

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[i] Included in the Appendix Resources

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- **North Carolina**: The North Carolina Department of Public Instruction (NCDPI) developed the CTE essential standards for MS and HS students. NCDPI offers a variety of introductory industry specific CTE courses designed for middle school students. Each MS CTE course outlines learning priorities and outcomes aligned to labor market and industry needs and LEAs can select the sub courses that best fit their local needs. All CTE courses align to the NC CTE Essential Standards, which also align to the 16 Career Clusters. NCDPI focuses on providing a work-based learning continuum that increases career awareness in Grades 6-7 and increases career exploration in Grades 8-11.[5] NCDPI developed a Toolkit & Guide to Work-Based Learning[ii] and partnered with the North Carolina Business Committee for Educations for businesses to help spread career awareness among middle school students and provide opportunities for job shadowing, classroom visits, field trips and parent/child school days. NCDPI also funded a career development coordinator position to assist with service delivery and coordination across stakeholder groups.[6] Lastly, NCDPI tracks student outcomes to measure the impact of MS CTE on students' participation in HS CTE, work-based learning opportunities, and postsecondary credit and credential attainment.

Spotlight Examples- MS CTE courses

Below are examples of states and/or districts with MS CTE courses and a summary of their approach, policies and/or practices to implement the courses:

- **Tennessee**: Tennessee offers introductory MS CTE courses intended to prepare students for high school CTE. The CTE courses available to students in Grades 6-8 are mapped to high school career clusters.[7] The state also offers a comprehensive work-based learning continuum, including industry and career awareness experiences in elementary and middle school through Grade 9 and ongoing and career exploration experiences in Middle school through Grade 11 and ongoing.
- **Ohio:** Ohio requires school districts to offer general CTE courses to middle school students, however, districts are allowed to opt out. MS students have access to general CTE exploratory courses and have the option to take the equivalent of HS CTE introductory courses in 8th grade.[8] To emphasize vertical alignment between CTE programs, Ohio implemented aligned the program level standards, rather than course level standards, for MS and HS. Ohio also describes each course allowed at the MS level and allows teachers to hold any teacher licensure, with the requirement that they complete online modules as part of the MS CTE validation process.
- **Arizona**: The Peoria Unified School District in Arizona offers the Technology, Life & Careers course[iii] for 7th and 8th graders that includes classroom and lab-based instruction across CTE subjects, career assessments and interest inventories, work-based learning experiences and career and technical student organizations. The course curriculum focuses on technology literacy, employability skills and career exploration opportunities and transitions to high school. The course ends with students beginning their state-mandated Education and Career Action Plans**.**

[ii] Included in the Appendix Resources

[iii] Ibid.

Scaling Resources and Efforts

While there is great variability in how states and districts approach MS CTE standards implementation, literature on best practices for standards implementation provide a roadmap for DDOE to consider structuring and scaling their resources. According to ACTE's CTE Learning in Middle School: A National Scan of Best Practices report, **critical MS CTE programmatic elements include Standards, curriculum, and assessment; Course/activity structure and scheduling; Career advisement; Experiential learning; Teacher and leaders' professional development; Data and measurement**.[9]

Similarly, the Center on Standards and Assessment Implementation Framework[iv] outlines the categories of work associated with implementation including Alignment Transition: From Old to New Standard; Curriculum, Instructional Materials and Resources; Assessment; Professional Development; Leveraging Cross-Content Connections; Communications.[10] The Center on Standards and Assessment Implementation framework provides a general model to implement standards based on best practices, research and lessons learned in the field.

Spotlight Example - Scaling Resources and Efforts

- **Washington** Strategic Plan for Career and Technical Education provides one example of scaling CTE programming and resources to middle grades. In 2011, the State Legislature enacted a law that directed the Office of Superintendent of Public Instruction (OSPI) to convene a working group to create the strategic plan.[11] One of the strategic plan's objectives includes expanding MS level CTE and identifying strategies to improve access to high quality CTE courses and work experiences and begin career exploration beginning in 6th grade.
    - The working group recommended the OSPI: Design a model framework that begin career discussions in 6th and identify emerging career and/or industry-focused program models at the elementary and/or middle school levels (such as elementary STEM Academies) to inform and bridge to middle school programs into core student learning, career guidance programs, and as offerings outside of the school day.
    - The working group recommended the Legislature: 1) Provide additional funding to expand middle school level CTE course opportunities where all middle schools offer students access to multiple programs of study within career pathways that meet defined POS standards and build into students' High school and beyond plan (HSBP). 2) Reduce barriers for external partners to provide career exploration opportunities for middle school students outside of the regular school day or year. 3) Expand middle school level CTE comprehensive planning and guidance offerings to support student progression in their education and plan for their future; encourage an ongoing and personal relationship between each student and an adult in the school; and involve parents or guardians in students' educational decisions and plans.

[iv] Ibid.

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Policy Levers and Structures for Implementation

Based on the state and district examples as well as research on best practices, the following are key considerations for successfully and equitably implementing MS CTE standards and programming:

- Develop an articulated strategy to prepare students for college and career
- Determine a CTE delivery structure that balances meeting students' needs with considerations of district and school resources
- Decide on a competency-based or seat-time approach (or a combination) to students earning credit for middle school CTE programs
- Consider whether CTE standards should be incorporated across all content areas, whether the standards should be for all MS students or just those who elect to enroll, and how standards will be consistently implemented and assessed
- Consider MS CTE program alignment with and preparation for high school CTE programs
- Make individualized academic and career plans a living document
- Identify and communicate federal, state, and local funding sources that expand or sustain CTE programming in the middle grades and remove restrictions that prevent accessing Perkins V funds (i.e., updating state definition of CTE)
- Consider how MS student work-based learning opportunities (i.e., guest speakers, career fairs, job shadowing, CTSOs) fit into the broader career exploration continuum and how to engage employers to provide work-based learning opportunities to students
- Determine the required CTE licenses and experiences and the PD opportunities to help teachers meet these requirements and consider what other staff support (i.e., career development coordinators) will need to sustain these programs
- Consider how to share and communicate the new offering to students and families, including strategic outreach, messaging, and recruitment efforts in a language and delivery method that reaches all students, including marginalized groups
- Invest resources to track CTE program student outcomes and leverage state data systems and data collection practices to identify equity gaps in CTE access and outcomes
- Review equitable access to CTE programming, including geography and availability of high-quality CTE programs, funding and resources (particularly for capital intensive programs such as advanced manufacturing or health science), at-home factors (i.e., family involvement, income, trauma, childcare needs, health needs), academic preparation, access to qualified instructors, cultural awareness and physical and learning disabilities
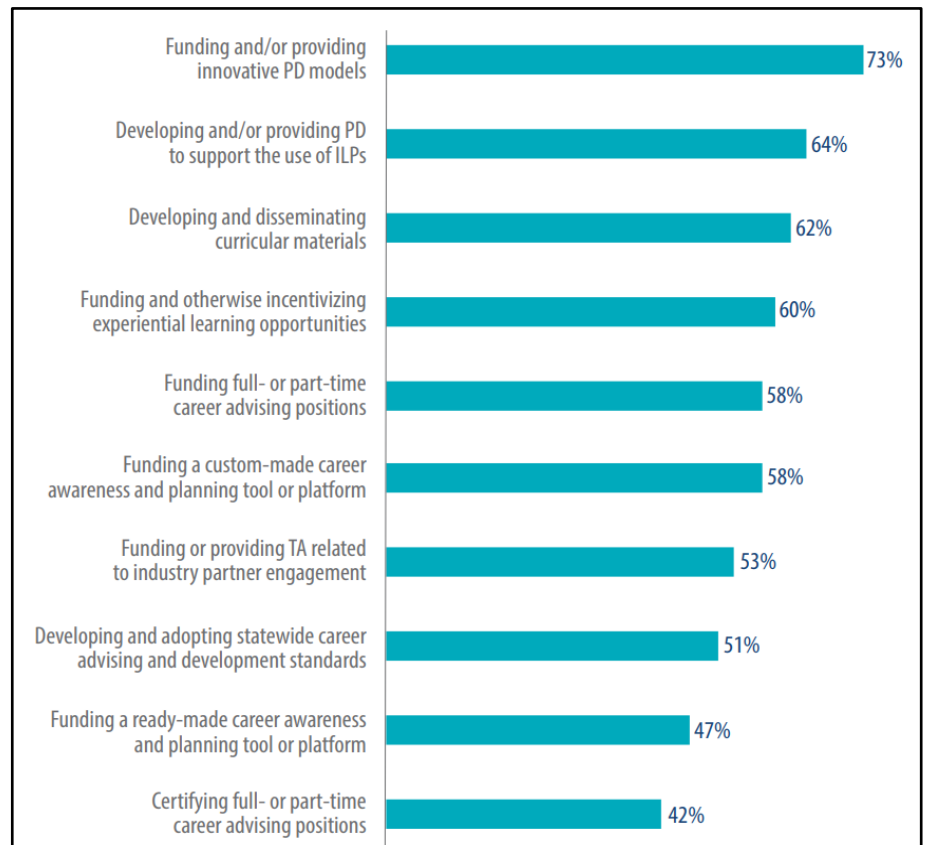
CTE Advisement Models and Student Supports

Context/Landscape

Like the implementation of MS CTE standards, states and/or districts approach CTE advice models and student support with varied scope and detail. According to the 2020 report from the Center for American Progress, thirty-six states with policies that prioritize or support college and career counseling in middle school: Alabama, Alaska, Arizona, Arkansas, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Mississippi, Missouri, New Mexico, New York, North Dakota, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin. [12]

Iowa, Kansas, Kentucky, Oklahoma, and Virginia require students in middle school to develop individualized career and academic plans. Washington, Utah, and Colorado provide middle schools counselors with guidance to help students prepare for career and college pathways. Tennessee, Indiana, Pennsylvania, and Alabama developed tools or tests for middle school students to explore career opportunities and discuss the results with a school counselor.

According to the State of Career Technical Education: Career Advising and Development report, there are ten common K-12 state-level strategies and/or initiatives to support career advisement and development. [13] **States employ an average of five strategies at the K–12 level though they report mixed levels of effectiveness for the individual and collective use of the strategies.** (See image to the right).[v]

This suggests there are areas for growth when combining strategies, including increasing the level of investment in the more effective strategies and/or increased fidelity of implementation at the district and school levels.

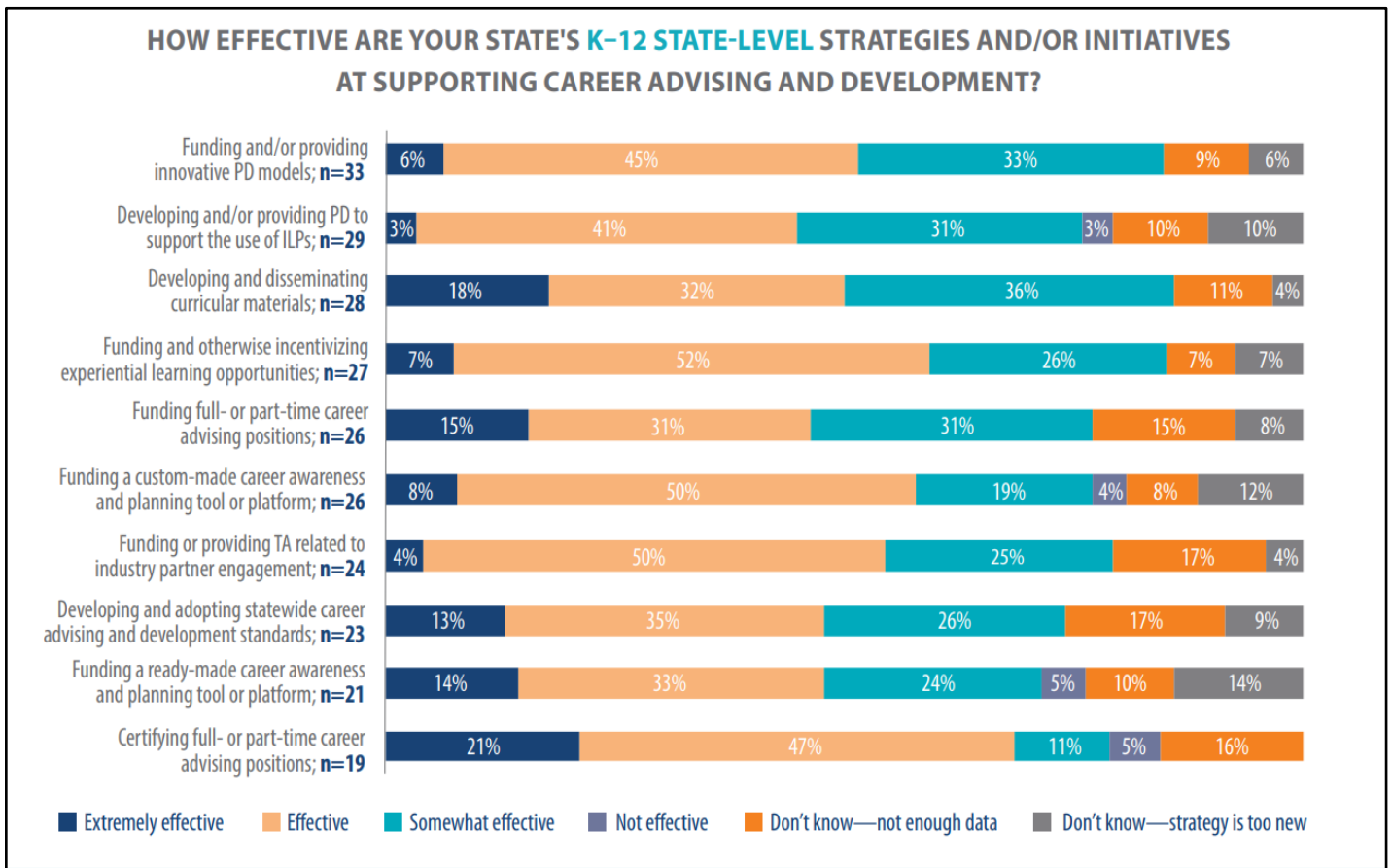|	
Funding and/or providing innovative PD models	73%
Developing and/or providing PD to support the use of ILPs	64%
Developing and disseminating curricular materials	62%
Funding and otherwise incentivizing experiential learning opportunities	60%
Funding full- or part-time career advising positions	58%
Funding a custom-made career awareness and planning tool or platform	58%
Funding or providing TA related to industry partner engagement	53%
Developing and adopting statewide career advising and development standards	51%
Funding a ready-made career awareness and planning tool or platform	47%
Certifying full- or part-time career advising positions	42%

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[v] Percentage of State CTE directors (n=45) and State School Counseling Directors (n=10) that report employing these strategies in their state. (New Skills for Youth et al., 2018).

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While states define their "advising and development system" in diverse ways, **only 4% of states believe career advising and development align across the elementary, middle, and high school levels** (see image to the right).[vi]
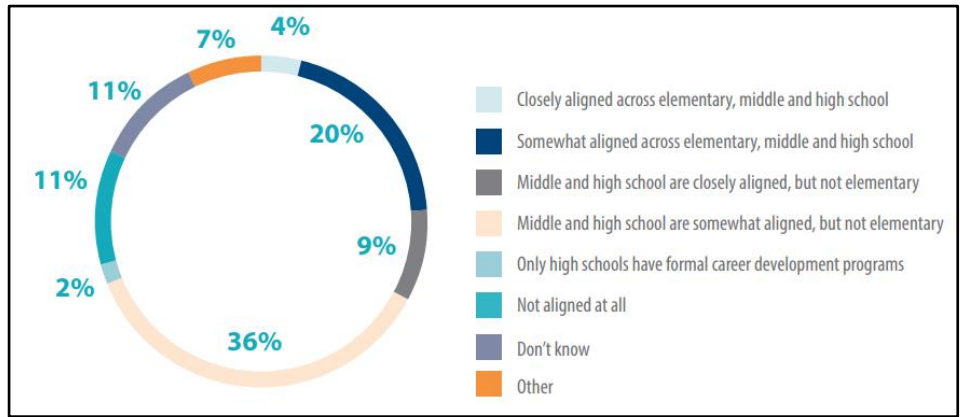
The least used strategy among, certifying positions for individuals with the primary responsibility for career advising and development, is reported as the most effective among 69% of states employing the strategy (see image to below). [vii] On the other hand, the most used strategy, funding innovative PD models, is rated less effective, with only 50% of states reporting it is effective or extremely effective.
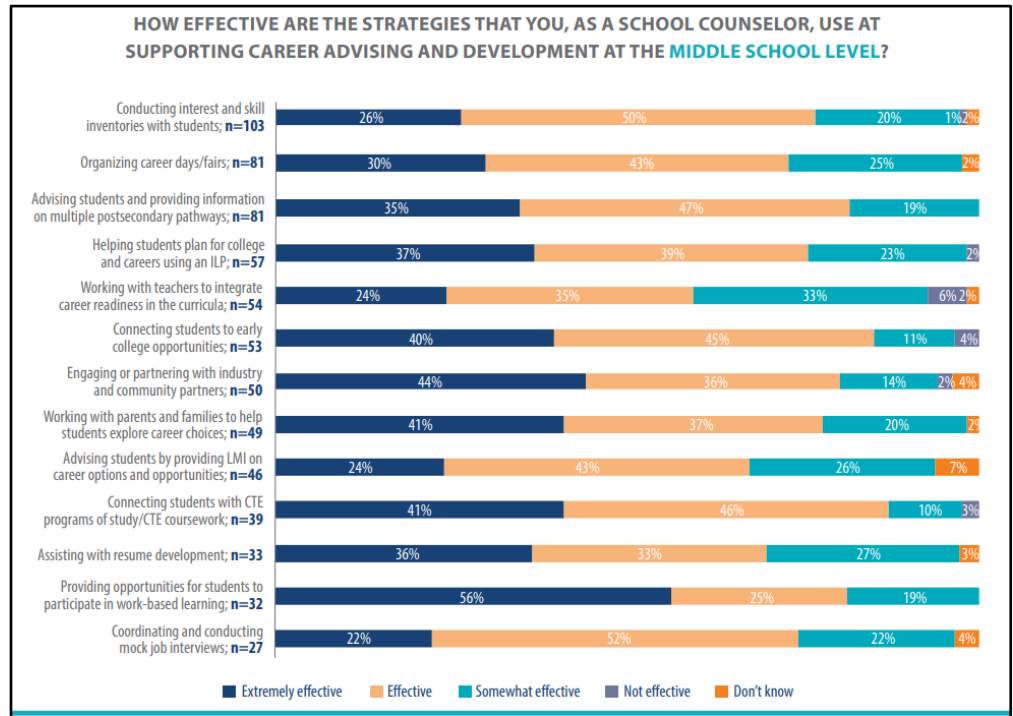
HOW EFFECTIVE ARE YOUR STATE'S K–12 STATE-LEVEL STRATEGIES AND/OR INITIATIVES AT SUPPORTING CAREER ADVISING AND DEVELOPMENT?

Strategy	Extremely effective	Effective	Somewhat effective	Not effective	Don't know—not enough data	Don't know—strategy is too new
Funding and/or providing innovative PD models; n=33	6%	45%	33%		9%	6%
Developing and/or providing PD to support the use of ILPs; n=29	3%	41%	31%	3%	10%	10%
Developing and disseminating curricular materials; n=28	18%	32%	36%		11%	4%
Funding and otherwise incentivizing experiential learning opportunities; n=27	7%	52%	26%		7%	7%
Funding full- or part-time career advising positions; n=26	15%	31%	31%		15%	8%
Funding a custom-made career awareness and planning tool or platform; n=26	8%	50%	19%	4%	8%	12%
Funding or providing TA related to industry partner engagement; n=24	4%	50%	25%		17%	4%
Developing and adopting statewide career advising and development standards; n=23	13%	35%	26%		17%	9%
Funding a ready-made career awareness and planning tool or platform; n=21	14%	33%	24%	5%	10%	14%
Certifying full- or part-time career advising positions; n=19	21%	47%	11%	5%		16%

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School counselor-level data (n=647) from the State of Career Technical Education: Career Advising and Development report supplies a distinct perspective that states should also consider. While the average number of strategies counselors employ is on par with the average number of state-level activities, counselors are, on average, more positive about the effectiveness of their strategies than State CTE Directors. Across all levels of education, the most used strategy by counselors is conducting inventories with students to find interests, skills and abilities and aligning them with Career Clusters and postsecondary career pathways. The least used strategy is conducting mock job interviews.

In middle grades (6-8) specifically, counselors primarily conduct inventories with students and provide students with experiential opportunities. Of the strategies employed at the middle school level, **only 27% of counselors report connecting students with CTE coursework or career pathways despite rated as one of the more effective strategies among those who use it,** 87% of MS school counselors reporting it is effective or extremely effective (see image to the right).[viii]

HOW EFFECTIVE ARE THE STRATEGIES THAT YOU, AS A SCHOOL COUNSELOR, USE AT SUPPORTING CAREER ADVISING AND DEVELOPMENT AT THE MIDDLE SCHOOL LEVEL?

Strategy	Extremely effective	Effective	Somewhat effective	Not effective	Don't know
Conducting interest and skill inventories with students; n=103	26%	50%	20%	1%	2%
Organizing career days/fairs; n=81	30%	43%	25%		2%
Advising students and providing information on multiple postsecondary pathways; n=81	35%	47%	19%		
Helping students plan for college and careers using an ILP; n=57	37%	39%	23%		2%
Working with teachers to integrate career readiness in the curricula; n=54	24%	35%	33%	6%	2%
Connecting students to early college opportunities; n=53	40%	45%	11%		4%
Engaging or partnering with industry and community partners; n=50	44%	36%	14%	2%	4%
Working with parents and families to help students explore career choices; n=49	41%	37%	20%		2%
Advising students by providing LMI on career options and opportunities; n=46	24%	43%	26%		7%
Connecting students with CTE programs of study/CTE coursework; n=39	41%	46%	10%		3%
Assisting with resume development; n=33	36%	33%	27%		3%
Providing opportunities for students to participate in work-based learning; n=32	56%	25%	19%		
Coordinating and conducting mock job interviews; n=27	22%	52%	22%		4%

Overall, school counselors report struggling with balancing heavy workloads and other counseling responsibilities and request more professional development and community conversations around career readiness to support their students more effectively. Given the level of effectiveness that counselors report when using CTE coursework and work-based learning in their career advising and development strategies, there is an opportunity to use these strategies more fully to increase counselor effectiveness in providing students with career advising and development support.

Additionally, only one-fourth of counselor's report using labor market data on job demand and career salaries for career advisement, while 60% of state CTE Directors believe that counselors in their state use labor market data at least part of the time. This signals a disconnect between the state belief and what is happening on the ground and provides another opportunity to bridge the gap between state level and local level efforts.

[viii] Ibid.

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Spotlight Examples - MS CTE Advisement Models

Below are examples of states and districts with MS CTE advisement policies or models and a summary of their approach to implementation:

- **Massachusetts:** My Career and Academic Plan (MyCAP), while not mandated by state law, is embedded in the state's definition of college and career readiness and the High-Quality College and Career Pathways initiative.[14] MyCAP begins in sixth grade with a range of delivery models (i.e., in-class instruction, advising and affinity spaces). Every student has at least one school mentor. MyCAP includes a curriculum with lessons and activities for classroom instruction and outside resources that are designed to be culturally responsive. The state provides grants to pay stipends for school teams to attend state My CAP trainings that are co-developed with MA School Counselors Association. School-based partners can access MyCAP (within regulation) and support staff in executing activities.

- **Wisconsin**: The Academic and Career Planning (ACP) is state mandated for grades 6-12.[15] Wisconsin Department of Public Instruction (DPI) provides and maintains the technology for ACP, including training and technical assistance on how to implement ACP. DPI also provides state funding for the online platform which includes employer profiles, career-based learning opportunities and access to volunteer online career coaches. Districts have flexibility in how they implement the ACP and DPI provides regular guidance and training, including support materials, communication resources and developed a detailed implementation guide[ix] outlining the vision, ACP model components, state priorities, implementation timeline, resources and connections for counselors, SPED educators, CTE programs, Educational Opportunity Programs, Higher Education and Dual Credit and work-based learning.

- **South Carolina:** South Carolina's Education and Economic Development Act (EEDA), passed in 2005, establishes the state's Personal Pathways to Success program.[16] The EEDA articulates a framework for career advising and development that spans the entire education continuum. The Individual Graduation Plan (IGP) is mandated by state law and begins in eighth grade. IGP requires districts to include experience-based, career-oriented learning experiences, and be flexible to allow changes during study. IGP must also be approved by a certified school guidance counselor and the student's guardians.

- **Arkansas**: As part of a statewide career education initiative, Arkansas expanded its Career Development program by adding staff at the state level to provide professional development on career pathways at the secondary and postsecondary levels. The College and Career coaches provide intensive career advisement and transition support for 7-12 graders, specifically with college and career plans, helping parents understand the planning process and providing information on CTE opportunities and financial aid.[17] Coaches are stationed at partnering sites (i.e. IHE, education service cooperative, or non-profits) and each site hosts between 1-5 coaches who, as a team, are responsible for coaching students in nearby districts. To fund this initiative, Arkansas uses braided funding streams – federal funding (e.g., TANF, College Challenge Access, and the Workforce Opportunity & Innovation Act), districts' federal dollars (e.g., National School Lunch Act and Perkins), and philanthropic support.

[ix] Included in the Appendix Resources

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- **Kentucky:** Developed a Planning and Implementation Toolkit[x] on MS career studies to help schools and districts determine student access to career studies instruction and experiences. The toolkit provides guidance and resources to support effective implementation of the Kentucky Academic Standards for Career Studies, including tools for school reviews, planning considerations and tools, professional learning needs and sample exploration models.
- **Boston Public Schools District (BPS).** As part of the New Skills ready initiative[18], the Boston team started centralizing student CTE data collection, developing employer engagement menu[xi] for school-employer partnerships, mapping career exploration activities in grades 7-16 and setting district-wide goals and expectations for the implementation of high-quality career advising aligned to MyCAP. BPS hosted full-day MyCAP training for school staff, launched an educator community of practice for implementation and encouraged learner engagement through the Generation Success campaign. Additionally, BPS partnered with the UMASS Office of Pre-collegiate Programs to continue building supports for MyCAP implementation and career pathways development.
- **Dallas Independent School District (Dallas ISD):** As part of the New skills ready initiative,[19] the Dallas team created buy-in and alignment on data sources for labor market information and student college and career readiness data, developed a virtual internship toolkit and related employer supports, reorganized its leadership structure and division to improve communication about options and pathways starting in elementary school and commissioned a landscape analysis on career exploration and advisement efforts for MS students across the district. The landscape scan revealed the district offered too many advisement options with little consistency across and within schools. In the next phase of work, Dallas ISD is focused on establishing a cross-sector staffing model to improve CTE pathways and piloting an 8th grade curriculum to help students map their interests to pathways and idenity potential long-term options.
- **Metro Nashville Public Schools (MNPS) District:** As part of the New skills ready initiative,[20] the Nashville team developed a pathways advisement system using their College Career Coach framework. The team is piloting the framework with four schools, each staffed with one college and career readiness (CCR) coach. CCR coaches collaborate with the school administration and counselors to identify and implement advising practices and solutions. The framework will scaffold college and career advising experiences in MS through innovative career discovery programs. By 2025, MNPS's goal is to have at least one CCR coach in each school within the district.

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[x] Ibid.
[xi] Ibid.

Spotlight Example - In and Out of School Advisement Model
- **Nebraska** Developing Youth Talent Initiative provides in- and out-of-school CTE experiences and work-based learning opportunities for 7 and 8th graders in manufacturing and IT industries based on its Career Education After School Curriculum.[21] Nebraska leveraged Perkins funding and partnered with the Nebraska Children and Families Foundation, a statewide foundation, to conduct outreach on after school programs that implement the curriculum. The Developing Youth Talent Initiative program introduces the state's six career fields across eighteen lessons. The curriculum includes three lessons per career field, one where students are introduced to the career field, one where the student explores different careers within the field, and one where the student demonstrates understanding of the career field. Each field has a unit project to solve a real-world problem leading up to the "showcase event" where they present to parents, community, and industry partners. Businesses in manufacturing and IT apply for grants and partner with local public schools to develop programs or projects. In the past, grant recipients have used two models at the local level: a mobile trailer or a career development rotational program. The mobile trailer model includes a trailer that travels to middle schools equipped with key supplies and tools and schools develop a curriculum that integrates use of the equipment in the trailer. This model is particularly beneficial for more rural districts. In the rotational program models, funds are used to purchase equipment for exploratory programs, mentoring, tours of facilities, training for MS teachers and more.

Characteristics of Effective Models
Based on the state and district examples as well as research on best practices, successful models:
- **Implement system-wide approach to Implementing Individual Career and Academic Plans (ICAP) delivery**. This includes embedding ICAP in graduation requirements, standards, and course curriculum; taking a team approach to developing curriculum and materials; including wrap-around services and accelerated learning strategies; and making connections with local employers to ensure smooth transitions into the labor market.
- **Implement ICAPs across a continuum from elementary, MS, postsecondary to workforce**: This includes aligning technology, policies, and practice so that ICAP can follow learners from elementary, MS, HS to postsecondary and the workforce.
- **Build data-driven systems to ensure that ICAPs are implemented with fidelity:** This includes building incentives for districts to prioritize tracking and reporting student data; requiring data is disaggregated by special populations; and equipping districts with relevant PD to interpret the data and communicate data with key stakeholders
- **Ensure that ICAPs are being implemented equitably**: This includes ensuring alignment of ICAPs to IEPs (where necessary), translating ICAP materials, prioritizing additional funding, and prioritizing the provision of technical assistance or PD to high-need districts/schools.

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Advisement through a Multi-Tiered Systems of Support (MTSS) lens

According to the Comprehensive Center Network's recent review on literature, few resources exist for MTSS practices at the middle and high school levels compared to elementary level MTSS implementation.[22] Research, however, points to the following barriers to implementing MTSS at the MS and HS level: logistical challenges (i.e., scheduling, staffing and space) and instructional challenges (i.e., instructional knowledge and resources related to improving core instruction, identifying effective intervention, and building capacity for implementation). The following strategies help address barriers:

- Adjust the school schedule to make time for intervention in the school day
- Create an MTSS team and carefully select intervention teachers
- Strengthen core instruction to reduce the need for intervention
- Select evidence-based intervention strategies or programs
- Identify and group students who need intervention
- Provide ongoing professional development and supports for MTSS
- Develop or identify structures and resources to support MTSS (i.e., MTSS protocol documents, Literacy intervention protocols, Data decision guides, Schoolwide data spreadsheet, On-demand training resources, etc.)

The report also provides other considerations for implementing MTSS at the MS level: Defining the purpose and scope; Reviewing school culture, practices and beliefs; Identifying alignment to existing initiatives; Organizing instruction and scheduling; Determining staff roles and/or specialists; Gather student and stakeholder input in the design and implementation of interventions; Articulating grade promotion requirements (if any); and Identifying instructional and assessment supports to deliver tiered instruction.

Spotlight Example - MTSS and Advisement

- **Kansas** Department of Education (KSDE) offers MS level courses as introductory courses for various pathways and encourages K-12 schools to develop an Individual Plan of Study (IPS) for all students beginning in eighth grade that include academic and CTE course options aligned to a particular Career Cluster skill set. The personalized plan continues through the first year of postsecondary education to promote a seamless transition. Through a partnership with CASEL[23], KSDE integrated SEL with Career and Workforce Development for students and developed an IPS guide[xii] with examples of embedding career domains in K-12 curriculum as well as a comprehensive career advising guide[xiii] for counselors. Additionally, KSDE provided varied PD led by a range of specialists including KSDE personnel, regional service center and MTSS trainers, Kansas Technical Assistance System Network[xiv] and regional IPS trainers. Aligned to KSDE Special Education and Title Services priority areas, TASN includes modules for MS and HS pathways that districts can use in MS programs (as standalone or integrated) to fulfill district requirements to introduce CTE learning in MS.

[xii] Included in the Appendix Resources
[xiii] Ibid.
[xiv] Ibid.

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State Spotlight – Competency-based Advisement Model

- **Utah:** In 2018, Utah implemented a competency-based approach to MS CTE that allows for alternative career exploration activities to meet the requirements of the required MS Career and Career Awareness course.[24] The College and Career Awareness course standards outline the knowledge and skills students need to identify their interests, abilities and skills and develop a plan for college and career goals. Competency-based approaches allow students to explore interests in and outside of the classroom while also obtaining MS CTE credit, an approach that is different from traditional seat-time approaches where students receive a set number of hours of CTE-related instruction. The shift to a competency-based approach reflects the Utah State Board of Education's desire for students to have ample time and opportunities to explore their interests in middle school. Now, with parental consent, LEAs can substitute MS CTE course requirements with an extracurricular activity or similar experience that is consistent with a student's plan for college and career readiness. The flexible credit options allow middle school CTE to be more tailored to student needs and creates incentives for districts to offer more experiential learning opportunities and align extracurricular activities with career advisement.

Other Asset-based and/or Culturally Responsive Models

The following states and/or districts offer asset-based and/or culturally responsive approaches outside the context of MS CTE that are valuable and offer transferable practices for the CTE space:

- **Massachusetts**: Massachusetts Department of Education (DESE) provides Culturally Responsive Teaching resources that define cultural responsiveness, highlight PD tools and provide examples of schools engaged in efforts to advance this work.[25] The DESE 2021 OPTIC fellows, a group of MA educators and educator preparation faculty with strong expertise in subject matter content and culturally responsive teaching, developed the Culturally Responsive Look For[xv] resource that lists observable, culturally responsive teacher and student actions.

- **Boston Public School District (BPS)**: BPS developed the Culturally and Linguistically Sustaining Practices (C.L.S.P.) Continuum[xvi] to provide district wide PD that delivers MyCAP in a culturally responsive way.[26] The CLSP continuum is informed by culturally relevant, responsive and culturally sustaining pedagogy models and highlights observable behaviors to move from cultural pre-competence (understanding one's lens and bias) to cultural proficiency. The BPS Office of Opportunity and Achievement Gaps (OAG) defined a set of competencies for students and outlined CLSP as part of staff's continual learning, both within the PD and instructional activities and within the CLSP curriculum, programs, and materials. The BPS Director of Cultural Proficiency created and coordinated PD content and support for the central office, partners, schools' leaders, parents, and the community. To address capacity challenges and support schools and leaders across the continuum, BPS held consultancies with individual school leaders and their teams to create their plans for continual CLSP learning, the district met regularly with instructional superintendents to get notes from the field. BPS also developed the BPS Equity and

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[xv] Included in the Appendix Resources
[xvi] Ibid.

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CLSP website[xvii] with equitable literacy instruction resources, PD resources, and more to continue building capacity for CLSP, policies and mindsets across the district. Lastly, BPS commissioned a study to examine where and in what populations race and culture might be a barrier to teachers building authentic relationships with students.

● **New York**: NYSED developed a Culturally Responsive-Sustaining Education Framework guide[xviii] that includes a non-exhaustive list of Culturally Responsive and Sustaining (CRS) practices and strategies for students, teachers, school leaders, district leaders, families, community members, higher education faculty and policymakers. The NY State Board of Regents charged the Office of P-12 Education and Higher Education to convene a panel of experts, engage with stakeholders, and develop a framework for culturally responsive-sustaining education in 2018. The New York University Metropolitan Center for Research on Equity and the Transformation of Schools drafted a robust guidance document that served as a springboard for this guide. NYSED then presented this guidance to students, teachers, parents, school and district leaders, higher education faculty, community advocates, and policymakers for three rounds of feedback. Aligned to other NYSED policies, including The New York State Board of Regents and the NYSED Every Student Succeeds Act (ESSA plan), the framework organized by the four principles of CRS education: Welcoming and Affirming Environment, High Expectations and Rigorous Instruction, Inclusive Curriculum and Assessment and Ongoing Professional Learning. The guide also includes resources under each principle and example strategies for each stakeholder group.

[xvii] Ibid.
[xviii] Ibid.

Policy Levers and Structures for Advisement Models

Based on the state/district examples as well as research on best practices, the following are key considerations for successfully and equitably implementing CTE advisement models:

- Examine current advising strategies and identify opportunities to develop a statewide, cohesive strategy designed to guide all learners
- Consider coherence between career pathways, work-based learning and career advising to support seamless connection for learners between CTE and their future goals
- Develop PD for staff with clear objectives, role definitions and strategies to support students and promote quality school-wide ICAP implementation
- Elevate local best practices and PLCs for districts/schools to learn from each other (i.e., host regional gatherings to bring practitioners together to share ideas and talk through challenges, provide technical assistance trainers)
- Identify and address the barriers that counselors face in advising and development systems, including but not limited to capacity challenges, competing priorities, lack of quality resources/materials and lack of understanding on career advising/development efforts
- Ensure career advising is a school wide and community wide effort with active participation from counselors, school administrators, classroom instructors and families and community organizations
- Involve parents in decision making process and identify communication strategies appropriate to the school community
- Develop a culturally responsive framework and strategy including a systematic approach to deploy resources for districts across the state
- Establish partnerships with local community and business leaders (i.e., shadowing, career fairs, Career, and technical student organizations) and encourage student participation
- Work with policymakers to ensure adequate funding of CTE programs at the local and state level, including funding for advising professionals and cross-system data collecting, sharing and reporting

Appendix

Resources

The following resources surfaced during our research and/or referenced above. These materials, guides and websites provide DDOE with examples and approaches to consider when developing the MS CTE pathways implementation guidance.

ACTE High-quality CTE: Standards-aligned and Integrated Curriculum
ACTE Quality CTE Program of Study Framework
Advance CTE Middle Grades CTE Repository
Arizona Peoria Unified School District Technology, Life & Careers (TLC) course
Boston Employer Engagement Menu Draft
Boston Public Schools Culturally and Linguistically Sustaining Practices (C.L.S.P.) Continuum
Boston Public Schools Equity and CLSP Toolkit
Center for Standards, Assessment, and Accountability (CSAA) Standards Implementation Framework
College and Career Competency Framework
Colorado PWR Playbook for Individual Career and Academic Planning
Colorado's Meaningful Career Conversations
Dallas Independent School District CTE Industry Partner Central
Equity Institute Culturally Responsive Walkthrough Tool
Evidence-Based PK-12 Programs for ESSA
Kansas Career Advising Model Guide
Kansas Career Cluster Guidance Handbook 2020-21
Kansas Individual Plan of Study Guide
Kansas Technical Assistance System Network (TASN)
Kentucky Middle School Career Resources
Los Angeles County office of Education Key Elements of High-Quality Career Technical Education Programs
Massachusetts Culturally Responsive Look For
National Center on Intensive Intervention
Nebraska Career Development Toolkit
Nebraska Middle School CTE Teaching Strategies
New York Culturally Responsive-Sustaining Education Framework Guide
New York Career and Technical Education Guidelines for Career and Technical Education Administrators and School Counselors
New York Technical Assistance Center for CTE Instruction
North Carolina Toolkit & Guide to Work-based Learning
Oklahoma Individual Career Academic Plan Implementation Guidance and Resources
Southern Regional Education Board (SREB) CTE Pathway Resources
Wisconsin Guide to Implementing Academic and Career Planning
Wisconsin Guide to Implementing Career-Based Learning Experiences

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