

BROADENING THE

PATH



Design Principles for Middle Grades CTE

ADVANCE  CTE
State Leaders Connecting Learning to Work

Association for Career
and Technical Education
ACTE 

MARCH 2020

Theory of Action for Designing Middle Grades CTE

IF

states design middle grades CTE to:

- 1 Be equitable and inclusive of each student
- 2 Be anchored in careers
- 3 Be standards based
- 4 Be grounded in experiential and hands-on learning
- 5 Balance breadth and depth across the curriculum
- 6 Be integrated into the broader K-12 — or P-20 — career development system
- 7 Include intentional and meaningful employer engagement
- 8 Involve dedicated instructional time
- 9 Be communicated effectively to students and their families
- 10 Focus on student growth

AND

they apply these principles through the core programmatic elements of middle grades CTE:



THEN

middle grades CTE students will:

- ✓ Gain awareness of and exposure to a wide array of careers
- ✓ Increase self-awareness and begin to form their potential occupational identity
- ✓ Develop employability skills
- ✓ Develop foundational technical skills as appropriate
- ✓ Be positioned to make more informed educational choices
- ✓ Transition to high school with an actionable plan for next steps

Introduction



There is widespread agreement that high school is simply too late to begin to expose learners to the variety of high-skill, high-wage and in-demand careers available to them and the foundational skills they will need to be able to access and succeed in those careers.¹ The

Strengthening Career and Technical Education for the 21st Century Act (Perkins V) echoes this sentiment by emphasizing career exploration and career development activities in the middle grades and allowing funds to be spent on students as early as fifth grade.²

Yet there remains a lack of consensus — or even basic understanding — about what Career Technical Education (CTE) and career readiness more broadly should entail at the middle grades level. Middle grades CTE currently takes many forms across the country based on state policies; graduation requirements; the funding and resources available; school structures; and all too often, what traditionally has been done. This situation leads to a hodgepodge of programs and policies that may be limiting students' future career options rather than opening their eyes to what is possible.

With more states looking to expand CTE in the middle grades and the new opportunity to invest Perkins V resources in earlier grade levels, Advance CTE, with support from the Association for Career and Technical Education, convened a Shared Solutions Workgroup of national, state and local leaders to identify the core components of a meaningful middle grades CTE experience. This paper can serve as a roadmap for state and local leaders looking to design a new middle grades CTE program or policy or to reflect and improve on what is already in place.

The paper has three sections:

- The **outcomes for student learning** that identify what students should gain through participation in high-quality middle grades CTE;
- **Design principles** that must undergird any middle grades CTE program or policy; and
- The **core programmatic elements** of a middle grades CTE program or policy through which the design principles are applied.

The appendix includes a **rubric** for state and local leaders to assess their current policies and programs.

The Importance of CTE in the Middle Grades

The middle grades represent a critical time for students because they are making decisions that may have a lasting impact on their careers and livelihoods. A growing body of research demonstrates that the middle grades represent “a critical window for decision making for occupational pathways, and for introducing youth to career-relevant experiences and opportunities. ... [A]dolescence is a sweet spot where children are still open to identity experimentation, but in ways that are tied to realistic planning and skill development.”³ Simply put, students have not yet settled on an occupational identity — or what they believe they are capable of doing or being — but are beginning to consider key decisions about their high school course-taking and post-high school plans, making the middle grades an ideal time to invest in CTE and career development activities and experiences.

How to Use This Resource

This paper aims to support state and local leaders as they work to develop or strengthen middle grades CTE policies, programs and practices. While all of the content is relevant, leaders seeking to develop new policies or programs may want to start by reviewing the **outcomes for student learning** and **design principles** to identify their priorities going forward and orient themselves to a broader vision for what middle grades CTE is (and is not). The principles, in particular, should serve as a resource in the design of a policy or program to ensure that middle grades CTE is comprehensive and fully meets each learner's needs. The **rubric** in the appendix provides specific examples of how middle grades CTE can meet the expectations of those principles. Finally, the section on the **core programmatic elements**, with its questions for consideration, may serve as a resource for those responsible for ensuring that the policy or program is truly addressing the design principles holistically.

For states and districts that already have middle grades CTE policies and programs in place, this resource can help them take stock of what is and is not working and identify areas where they need to direct more attention or supports. While the entire document is critical, the rubric may be the place for states or districts with more established programs and policies to start. The questions for consideration in the **core programmatic elements** section can also help to identify strategies or steps for addressing gaps in implementation of the principles.



Outcomes for Student Learning



Starting with the end in mind, clearly establishing the goals of middle grades CTE is critical to the success of the programs. CTE in the middle grades has a distinct role and purpose within the career development continuum. At this level of education students begin to develop their occupational identity and the foundational skills that will prepare them for success in further education and careers.

To help put students on a path to success, middle grades activities must be designed and delivered with clear goals for student learning in mind — and with standards and curriculum built around these goals. If middle grades CTE programs are implemented effectively, students in these programs should:

✓ Gain awareness of and exposure to a wide array of careers.

One of the primary purposes of middle grades CTE should be to expose students to careers across the 16 Career Clusters®, including careers students may not be familiar with or may not have ever considered, as well as the skills required for different careers. While some students have opportunities to interact with individuals across various industries, others are limited by geography, employment trends or family circumstances. Middle grades CTE programs can help to level the playing field and ensure that all students understand the vast career possibilities available to them.

✓ Increase self-awareness and begin to form their potential occupational identity.

Students in the middle grades are in the midst of rapid psychological development, characterized by “identity formation and the quest for independence.”⁴ Middle grades CTE should play a critical role in this development, particularly in the context of careers. Students should be engaged in experiences and activities that help them to understand their aptitudes, interests and preferences and how those might relate to their future in the workforce.

✓ Develop employability skills.

Middle grades CTE should play a significant role in beginning to develop students’ employability or professional skills, including skills such as decisionmaking, teamwork, critical thinking, problem solving, creativity, time management, persistence, self-advocacy, interpersonal communications, professionalism, safety, project management and more. These skills are applicable across all career areas and are essential building blocks to success in further education and work.

✔ Develop foundational technical skills as appropriate.

Middle grades CTE may also help students develop foundational technical skills in specific career areas, depending on the structure and delivery models used. In many cases, the development of introductory technical skills in a particular career field, such as understanding terminology, demonstrating the safe and appropriate use of industry-specific tools and equipment, or learning to use industry-specific software, can and should occur as part of career exploration or planning activities in the middle grades.

✔ Be positioned to make more informed educational choices.

In addition to being exposed to many different careers, students should gain concrete knowledge about the educational and workforce opportunities that are available to them, both immediately and into the future, and how these educational opportunities can lead to specific careers. For example, middle grades CTE programs should provide information on the various postsecondary options that might be available in their community, region or state, or even across the country, as well as the high school career pathways that could lead to those options. States and districts should also incorporate into instruction, in an age-appropriate way, exposure to labor market information and introductory information on the admissions requirements, costs, financial aid options and projected benefits of these opportunities.

✔ Transition to high school with an actionable plan for next steps.

The final outcome of a middle grades CTE program should be some type of plan for next steps, ideally an initial plan for high school course-taking that could lead to a desired objective but is flexible enough to be modified as students continue to learn, grow and develop their future goals. Many states already have a requirement for this type of plan, sometimes called an “individual graduation plan” or an “individual career and academic plan.” This plan should be completed by students starting in the middle grades, with input from educators and their families, and be designed to help students see the relevance of their education and how it connects to their future goals.



Courtesy of Allison Shelley/The Verbatim Agency for American Education: Images of Teachers and Students in Action.

Middle Grades CTE Design Principles

To achieve the learning outcomes discussed in the previous section, state and local leaders should use the following 10 principles when designing middle grades CTE policies and programs. By integrating these principles into comprehensive CTE policies and programs, leaders can ensure that they are providing robust and intentional career development to middle grades students that is inclusive of, but not limited to, stand-alone career advising that may already be occurring in isolation.



Due to the vast array of structures for offering education at this level and differences in capacity from one local district or even school to another, these design principles are not intended to be prescriptive or to lock states or districts into one specific model. Rather they are designed to identify the features that should be present in any quality middle grades CTE policy or program. Using these 10 principles should provide flexibility around how middle grades programs are delivered — and many different delivery models can work to accomplish the goals of middle grades CTE. Middle grades CTE programs should:

1. Be equitable and inclusive of each student.

Middle grades CTE programs should be inclusive and accessible, reaching each and every student. The benefits of middle grades CTE programs should not be limited to a few students who choose to enroll in a single elective with limited availability or who are part of a specific population group. Program designers should also take care to ensure that middle grades CTE does not become segregated by student performance. It should not be a “dumping ground” for certain students, such as students with disabilities. On the other hand, careful attention must also be paid to ensure that students who need additional academic supports are not eliminated from the possibility of experiencing CTE due to scheduling constraints. And students should not be tracked into certain courses based on characteristics such as gender or race/ethnicity. While some students inevitably may choose more in-depth CTE experiences, all students need opportunities to develop the student learning outcomes described in the previous section to help them plan for their futures.

2. Be anchored in careers.

Learning about and exploring careers should be the foundation of middle grades CTE programs; the programs should not be merely life skills classes or an unconnected series of discrete tasks or projects. CTE program standards, curriculum and experiences should be built around students exploring an array of careers and the education and skills necessary to pursue those careers. Hands-on projects and lab activities should be clearly linked to specific career tasks while maintaining developmental appropriateness. Students should also be exposed to labor market information and taught how to understand and interpret information about careers

in that context. Undoubtedly, students can gain life skills as a byproduct of exploring careers in some areas, but these skills should not be the focus of the program.

3. Be standards based.

To ensure that students gain the full range of desired technical, academic and employability knowledge and skills, middle grades CTE programs should be standards based with clear expectations. However, programs should not be high stakes, which could be a disincentive for schools or teachers to participate, and standards should be broad enough to be met through a variety of flexible delivery models.

4. Be grounded in experiential and hands-on learning.

To reach middle grades students at their developmental level, middle grades CTE must be based in authentic, applied learning that involves hands-on activities to engage students and get them excited about learning. While online career exploration or planning platforms can be useful aids, these resources should not be the sole method of instruction. Rather, middle grades CTE will require a range of instructional strategies and experiences, including personalized instruction, project-based learning, work-based learning, and participation in career and technical student organizations (CTSOs).

5. Balance breadth and depth across the curriculum.

Middle grades CTE should include enough breadth to ensure that students are exposed to careers across all 16 Career Clusters. It should not limit students to exploring a narrow set of careers or one specific career pathway, such as those programs that are offered at the local high school or area technical center, and should not simply serve as a CTE recruitment strategy. However, opportunities should be provided for students to dig deeper into career areas of interest after an initial period of exploration so they have true opportunities to understand whether those careers — and CTE pathways — are right for them.

6. Be integrated into the broader K-12 — or P-20 — career development system.

Middle grades CTE programs should not operate in a silo. They should be aligned with other career development-related activities occurring at that level, such as student services, counseling and social-emotional supports. In addition, middle grades CTE should be aligned with career development activities and experiences occurring before and after middle school, including high school-level college and career advising, through individual career and academic plans or other methods. If and when more career-specific instruction is offered to middle grades students, it should prepare them to enter related high school courses and experiences through aligned standards and a scaffolding of experiences.

7. Include intentional and meaningful employer engagement.

As with high school and postsecondary CTE programs, involving employers in program design and delivery is critical to ensure that students are receiving accurate information about career opportunities and begin to see adults in different roles. Business and industry engagement in middle grades programs may look different than at the high school level, with a larger focus on building career awareness and employability skills than on direct instruction aligned to a specific job or in-depth work-based learning such as apprenticeships or internships, but it is still key to ensuring that programs meet student and community needs.

8. Involve dedicated instructional time.

Whether CTE is integrated across the curriculum or offered through individual courses, specific and regular time should be dedicated to it in the middle grades. The delivery of CTE-related content should not be a one-time event or a single unit or activity if it is to have an impact on students' education and career choices. This requirement may affect master schedules, the availability and qualifications of educators, and even graduation requirements.

9. Be communicated effectively to students and their families.

Comprehensive information on CTE programs in the middle grades should be provided early to students and their families in ways that begin to break down stereotypes and address misperceptions of CTE, as well as highlight opportunities available to students as they progress through their education. This is especially important for engaging students around careers and educational experiences that are non-traditional for their gender, race/ethnicity or income level. Family engagement is also critical so that students have support as they make future education and career decisions.

10. Focus on student growth.

While some form of measurement should be employed to ensure that middle grades CTE programs are meeting their goals and student learning outcomes, the focus should be on student growth rather than on student performance only. Therefore, students must have opportunities to demonstrate their learning — through coursework, CTSO competitions, work-based learning experiences or otherwise — with both educators and employer partners that are playing a role in validating skill development.



Courtesy of Allison Shelley/The Verbatim Agency for American Education: Images of Teachers and Students in Action.

Core Programmatic Elements of Middle Grades CTE

States and districts should apply the design principles through the core programmatic elements of middle grades CTE programs to ensure that the programs lead to desired student outcomes. Following are considerations related to six key structural elements of middle grades CTE programs. Any middle grades CTE program is likely to have these six elements in some form, but how each element is implemented using the design principles will determine the overall quality of the middle grades CTE programs and the ability of the programs to effectively lead to desired student outcomes.



Standards, Curriculum and Assessment

Standards, curriculum and assessment form the backbone of any comprehensive middle grades CTE program. Clear standards will lead to more consistent programs and can be more purposefully aligned to other academic or CTE standards. However, narrowing the scope of potential standards and curriculum and determining how to balance broad career exploration with the specific inclusion of technical skills can be challenging. Questions often arise about whether standards related to some outcomes, such as employability skills, should be incorporated across all content areas; whether “CTE” standards should be for all students in the middle grades or just those who elect to enroll; and how standards can be consistently implemented and assessed.

Key reflection questions for state and local leaders as they build or evaluate this element of middle grades CTE programs include:

- Are there middle grades CTE standards that apply to all students or only to students who choose to enroll in specific courses? (Principle 1)
- If there are standards, are they designed to support learners at different academic levels, and are they free from bias? (Principle 1)
- Are the standards clearly linked to specific career-related content? (Principle 2)
- Are the standards flexible enough to enable a mix of instructional strategies, including experiential or hands-on projects? (Principle 4)
- Do the standards and related curriculum balance breadth of career exploration with depth of knowledge? (Principle 5)

- How are the standards aligned with or integrated into other middle grades standards, such as those for academic courses? (Principle 6)
- How are the middle grades CTE standards aligned with standards for career development across the K-12 system? (Principle 6)
- What role do employers play in developing or validating middle grades standards and providing input on specific curriculum or assessments? (Principle 7)
- Are the standards and curriculum options publicly available and communicated to students and their families? (Principle 9)
- How are the standards assessed, both formally and informally? (Principle 10)



Course/Activity Structure and Scheduling

Even with clear standards in place, structuring the delivery of courses or activities to meet the 10 principles can be a challenge, particularly as the demand on schools' time grows. Political priorities and state or local requirements that are already in place around instructional time and teacher qualifications may provide real constraints. As state and local leaders navigate this aspect of program delivery, more intentionality around communications and best practices can help schools think about delivering content in new and different ways that address these challenges. States can also consider creating or adjusting regulations around class size, instructional time, physical requirements, or other operational elements of middle grades programs to emphasize quality and equity and ensure that standards can be met.

Key reflection questions for state and local leaders as they build or evaluate this element of middle grades CTE programs include:

- Are CTE courses or experiences structured in such a way that all students have access — or do students have to make choices between CTE and other experiences? (Principle 1)
- Are there efforts to identify and eliminate barriers to participation and success in CTE courses or experiences for marginalized or special populations of students? (Principle 1)
- Are related standards incorporated across the curriculum, or are they delivered only in isolation? (Principle 3)
- Is enough time and space dedicated to middle grades CTE experiences to enable experiential or hands-on learning both within and outside the school day? (Principle 4)
- Is enough time dedicated to middle grades CTE experiences to provide the necessary depth and breadth of content and deliver on student outcomes? (Principle 5)
- How are experiences/courses sequenced from early education into the middle grades and then into high school as part of a broader continuum? (Principle 6)
- Does the way CTE content is delivered allow for dedicated instructional time, or does it primarily occur outside of the school day (e.g., through after-school activities)? (Principle 8)
- Is information about course options and scheduling choices communicated clearly to students and their families? (Principle 9)



Career Advisement

Career advisement is an integral part of any middle grades CTE program, just as CTE should be a critical component of a state's or district's broader career development system. However, many schools lack the capacity to provide comprehensive career advice to students. Both time and knowledge must be maximized to ensure that students have access to robust career planning information. Teachers across the educational spectrum should be involved in this work, and efforts should be made to better equip school counselors with extensive career knowledge in this space.

Key reflection questions for state and local leaders as they build or evaluate this element of middle grades CTE programs include:

- Is career advisement provided to all students? Is it designed to provide individualized supports to students? (Principle 1)
- Do middle grades CTE programs attend to students' aptitudes, interests and preferences, or do they overly focus on just one of those dimensions? (Principle 1)
- Are career advisement activities aligned to age-appropriate standards? (Principle 3)
- Are career advisement activities sequenced from early education into the middle grades and then into high school as part of a broader continuum? (Principle 6)
- Do counseling professionals get the supports, training and tools necessary to deliver effective career advisement at the middle grades level? (Principle 6)
- Are all students guided in the development of an individualized career/academic plan for the future by knowledgeable adults? (Principle 6)
- What role do employers play in supporting career development and advisement activities? (Principle 7)
- Are career advisement activities prioritized within instructional time? (Principle 8)
- How are families appropriately involved in student career planning activities? (Principle 9)

Experiential Learning

Two common approaches to offering experiential learning in middle grades CTE are early experiences on the work-based learning continuum (e.g., career fairs, guest speakers and job shadowing) and participation in CTSOs. These critical components of high-quality CTE programs provide students with opportunities to engage in real-world, hands-on experiences and gain vital skills and knowledge about careers, as well as themselves, as they seek to develop an occupational identity. Experiential learning activities such as these can be challenging to integrate into middle grades CTE experiences, however, as time and resource constraints can affect schools' and educators' abilities to successfully implement them.

Key reflection questions for state and local leaders as they build or evaluate this element of middle grades CTE programs include:

- Are experiential learning activities, such as work-based learning and CTSOs, available to all middle grades students? (Principle 1)
- Are there efforts to identify and eliminate barriers to access, participation and success in experiential learning for marginalized or special populations of students? (Principle 1)
- Are there clear standards for experiential learning opportunities that are available both during and outside of school? (Principle 3)
- Are educators provided with the time, resources and supports necessary to implement quality work-based learning and CTSO experiences? (Principle 4)
- Is there a clear continuum of work-based learning experiences that begins in the middle grades (or earlier) and builds in intensity as students progress through their education? (Principle 6)
- How are middle grades CTSO experiences connected to high school CTSO opportunities? (Principle 6)
- Is there clear guidance around the role of employers in the design and delivery of experiential learning at the middle grades level? (Principle 7)
- How are employers involved in offering these experiences to students or supporting their work? (Principle 7)
- How are students and their families provided adequate information on opportunities for experiential learning both during and after school? (Principle 9)
- How are experiential learning opportunities evaluated or monitored to ensure student growth? (Principle 10)

Teachers and Leaders

Delivery of quality CTE experiences in the middle grades is contingent upon having a cadre of educators with the necessary content knowledge and pedagogical skills. While there are often shortages of CTE teachers at all levels of education, creativity and flexibility related to licensing and scheduling can help address this need as long as quality is maintained. Educators working with middle grades students need specific, relevant content knowledge about career pathways but also particular skills for working with middle grades students. Professional development and support for educators are critical to the success of middle grades CTE programs.

Key reflection questions for state and local leaders as they build or evaluate this element of middle grades CTE programs include:

- Are there currently enough qualified and certified educators to deliver quality CTE content to all middle grades students? (Principle 1)
- Do teachers and administrators have access to meaningful professional development tailored to the individualized needs of students? (Principle 1)
- Do teachers and administrators have access to meaningful professional development around experiential and hands-on learning? (Principle 4)
- How can all teachers and staff in the school be involved in delivering quality middle grades career development experiences? (Principle 6)
- How can new educators be recruited or resources used creatively to build capacity? (Principle 8)
- Do teachers and administrators have a full understanding of the principles and goals of middle grades CTE? (Principle 10)





Data and Measurement

Measuring the effectiveness of middle grades CTE is an important component of a continuous program improvement process and of ensuring that resources invested in middle grades CTE have the desired impact on student achievement. However, there has been very little work in this area, and most data collected on CTE programs and students are at the high school or postsecondary level. As more attention and resources are focused on middle grades CTE, state and local leaders should dedicate time and attention to identifying effective strategies for measuring whether students have achieved established standards, growth in skills and other key outcomes as a result of middle grades CTE courses and activities.

Key reflection questions for state and local leaders as they build or evaluate this element of middle grades CTE programs include:

- How can data on the full range of students participating in CTE-related activities be collected? (Principle 1)
- Are the assessments used in middle grades CTE aligned with educational standards, and are they age appropriate? (Principle 3)
- How might data already being collected within the broader educational system be used to evaluate middle grades CTE programs? (Principle 6)
- What is the role of employers in measuring outcomes of middle grades CTE programs? (Principle 7)
- What new data need to be collected, and how can burden of new data collection be reduced? (Principle 10)
- What are the priority indicators of success for middle grades programs? (Principle 10)

Appendix A: Design Principles Self-Assessment

INSTRUCTIONS: This self-assessment breaks down each design principle so that state and local leaders can fully analyze their policies and programs. To use this rubric, examine each design principle; assign it a rating of 1, 2, 3 or 4 based on how your current policy or program compares to the examples in the chart; and provide written evidence for that rating. Below is a general description of each rating, and more principle-specific descriptions are provided under “1 = Emerging” and “4 = Strong” in the charts in this document.

RATINGS DEFINITIONS:

- 1 (EMERGING)** This design principle is not yet represented in your current or proposed middle grades CTE policy or program.
- 2 (BUILDING)** This design principle is somewhat represented in your current or proposed middle grades CTE policy or program, but many improvements still need to be made.
- 3 (PROMISING)** This design principle is fairly well represented in your current or proposed middle grades CTE policy or program, although some improvements still need to be made. The program or policy is considered to be more developed than one that is rated a 2.
- 4 (STRONG)** This design principle is fully represented in your current or proposed middle grades CTE policy and program with clear evidence of its impact, even if minor adjustments still need to be made.

Importantly, the sample evidence provided in the self-assessment is simply that — samples. The samples are by no means exhaustive but are meant to serve as *illustrative* examples of how a less-developed or well-developed middle grades CTE policy or program would play out at the school or student level. In some cases, a program may need to meet all of the criteria to be considered “strong”; in others, the criteria are not cumulative but identify different ways that a program can demonstrate its effectiveness for learners.

To what degree is your state or local middle grades CTE program or policy:	Equitable and inclusive of each student?		RATING 1 2 3 4 <i>(circle one)</i>
Sample evidence	1 = Emerging <ul style="list-style-type: none"> ➔ Middle grades CTE is optional or an elective for students not taking arts, music or additional academic coursework. ➔ The middle grades CTE curriculum is narrowly designed and does not allow for much modification to account for different learning styles or regional economies. ➔ Certain populations of students make up the majority of middle grades CTE participation. 	4 = Strong <ul style="list-style-type: none"> ➔ Every student is required to engage in middle grades CTE regardless of achievement level. ➔ School schedules ensure that students do not have to choose between middle grades CTE exposure and pursuing other interests (such as fine arts) or receiving enhanced academic services. ➔ Instruction is scaffolded to account for different learning styles. ➔ Supports are provided to special populations to ensure their appropriate access, participation and success. ➔ Professional development and supports around middle grades CTE instruction are strong. 	
Evidence			
Areas for improvement and/or action steps			

To what degree is your state or local middle grades CTE program or policy:	Anchored in careers?		RATING 1 2 3 4 <i>(circle one)</i>
Sample evidence	1 = Emerging <ul style="list-style-type: none"> → Programming focuses on building only life or employability skills that can be applied across any/all careers. → Programming has some technical component (e.g., shop class, cooking) but does not draw explicit connections between the skills learned and career options. → Middle grades CTE does not take into account or provide any instruction or professional development around the use of labor market information. 	4 = Strong <ul style="list-style-type: none"> → Students explore a wide breadth of careers and engage in projects or activities that offer deep linkages to those careers. → Students make connections between the variety of potential careers and the skills and preparation necessary to access those careers. → Skills addressed through hands-on projects and lab activities are clearly connected to specific career tasks (while maintaining developmental appropriateness). → Teachers, students and counselors use labor market information to identify and research career options. 	
Evidence			
Areas for improvement and/or action steps			

To what degree is your state or local middle grades CTE program or policy:	Standards based?		RATING 1 2 3 4 <i>(circle one)</i>
Sample evidence	1 = Emerging <ul style="list-style-type: none"> ➔ There are no state-developed middle grades CTE standards or approval processes for locally developed standards. ➔ The state provides only sample projects and activities for middle grades CTE. ➔ The middle grades CTE standards focus solely on employability skills. ➔ The middle grades CTE standards are vague and provide limited guidance to local districts or educators. 	4 = Strong <ul style="list-style-type: none"> ➔ The state-developed/state-approved middle grades CTE standards are rigorous, relevant and learner centered. ➔ The standards integrate academic, technical and employability skills across multiple Career Clusters. ➔ The standards provide specific statements about what a learner should know and be able to do at the end of a course or program. ➔ The standards align with high school-level CTE standards and career development standards across the education continuum. 	
Evidence			
Areas for improvement and/or action steps			

To what degree is your state or local middle grades CTE program or policy:	Grounded in experiential and hands-on learning?		RATING 1 2 3 4 <i>(circle one)</i>
Sample evidence	1 = Emerging → Middle grades CTE is delivered solely through online career assessments or experiences. → Middle grades CTE is a stand-alone, “sit and get” course with no opportunities for work-based learning, CTSO participation or engagement with employers. → Teachers receive no professional development or supports focused on experiential or project-based learning.	4 = Strong → All students engage in a mix of school-based and work-based experiences in middle grades CTE. → Middle grades CTE blends technology; classroom instruction; and authentic hands-on, real-world activities. → Middle grades teachers have ongoing professional development opportunities that focus on embedding experiential and project-based learning in their instruction.	
Evidence			
Areas for improvement and/or action steps			

To what degree is your state or local middle grades CTE program or policy:	Balanced in breadth and depth across the curriculum?		RATING 1 2 3 4 <i>(circle one)</i>
Sample evidence	1 = Emerging <ul style="list-style-type: none"> ➔ Middle grades CTE is solely a feeder for high school CTE pathways. ➔ Students are exposed to only a small subset of the 16 Career Clusters®. ➔ Students learn about the Career Clusters only at the highest level and do not have opportunities to learn about specific careers or career pathways within that framework (or its equivalent). 	4 = Strong <ul style="list-style-type: none"> ➔ Students are exposed to all 16 Career Clusters (or their equivalent). ➔ Students have opportunities to learn more deeply about a subset of Career Clusters through additional research, projects or engagement with employers. ➔ Students gain information about potential CTE pathways in their community, region or state, along with other options for pursuing a career field. ➔ All students have the opportunity to enroll in CTE programs of study starting in the middle grades. 	
Evidence			
Areas for improvement and/or action steps			

To what degree is your state or local middle grades CTE program or policy:	Integrated into the broader K-12 — or P-20 — career development system?		RATING 1 2 3 4 <i>(circle one)</i>
Sample evidence	1 = Emerging <ul style="list-style-type: none"> → Middle grades CTE is disconnected from both K-5 career development and 9-12 CTE/career development experiences and activities. → Middle schools have no supports or opportunities to partner with elementary or high schools around CTE and career development. → Individual career and academic plans begin in grade 9 with no input from middle grades teachers or counselors. → Middle grades counselors receive no explicit support or training around CTE or career development. 	4 = Strong <ul style="list-style-type: none"> → There is a K-12 or P-20 career development continuum or framework that clearly and comprehensively aligns CTE and career development across elementary, middle and high school (and potentially postsecondary). → The state or district provides supports and assistance to help elementary, middle and high schools collaborate around career development. → Individual career and academic plans start in grade 7 or earlier and include specific activities and expectations for middle grades students. → Middle grades counselors are fully trained and prepared to support CTE and career development. → Content standards related to middle grades CTE are clearly aligned with standards in related high school programs to ensure smooth transitions. 	
Evidence			
Areas for improvement and/or action steps			

To what degree is your state or local middle grades CTE program or policy:	Inclusive of intentional and meaningful employer engagement?		RATING 1 2 3 4 <i>(circle one)</i>
Sample evidence	1 = Emerging → Employers play no role in the development or validation of middle grades CTE standards, competencies or curricula. → No work-based learning activities are offered for middle school students. → Employers play no role in the development or assessment of project-based activities.	4 = Strong → Middle grades CTE program standards, competencies and/or curricula are informed or validated by employer partners. → All students have opportunities to engage directly with employers through middle grades CTE. → Employers play a role in the assessment of students' skills and growth.	
Evidence			
Areas for improvement and/or action steps			

To what degree is your state or local middle grades CTE program or policy:	Inclusive of dedicated instructional time?		RATING 1 2 3 4 <i>(circle one)</i>
Sample evidence	1 = Emerging <ul style="list-style-type: none"> → There are not enough middle grades teachers to provide instruction, or middle grades CTE is usually taught by whichever teachers are available. → Middle grades CTE is solely the responsibility of elective teachers with no connections to academics. → Middle grades CTE is delivered solely through after-school experiences. 	4 = Strong <ul style="list-style-type: none"> → There are clear requirements and qualifications in place for middle grades CTE teachers. → Middle grades CTE teachers receive specialized professional development on both content and age-appropriate pedagogy. → Schools and districts can calculate and report how much instructional time is dedicated to CTE. → All students take at least one year-long course during the middle grades focused on CTE/career development. → Career development activities are embedded meaningfully across academic and technical content areas. 	
Evidence			
Areas for improvement and/or action steps			

To what degree is your state or local middle grades CTE program or policy:	Communicated effectively to students and their families?		RATING 1 2 3 4 <i>(circle one)</i>
Sample evidence	1 = Emerging → Families of middle grades students receive no specific or targeted information about careers or CTE. → No state- or locally provided or supported materials communicate the value proposition of CTE for families or students. → Families of middle grades students are not brought into the career development process.	4 = Strong → The state or district provides CTE communications and marketing materials or supports for schools focused on middle grades students, with particular attention to special populations (e.g., materials feature non-traditional learners, materials are translated into commonly spoken languages, etc.). → All families of middle grades students receive information on career options and opportunities in their community and state or region. → All families receive information and tools to support their middle grades students' career development and choices. → Families are engaged directly in middle grades CTE through involvement in the career/academic plan.	
Evidence			
Areas for improvement and/or action steps			

To what degree is your state or local middle grades CTE program or policy:	Focused on student growth?		RATING 1 2 3 4 <i>(circle one)</i>
Sample evidence	1 = Emerging → No processes or requirements are in place around the collection of student-level middle grades CTE data beyond participation. → Teachers must make independent and subjective judgments about what students have learned.	4 = Strong → Schools and districts collect student-level data on learning that occurs inside and outside of the classroom. → Teachers have clear and easy systems for reporting on student growth and competencies. → There are multiple opportunities and ways for students to demonstrate what they have learned (e.g., CTSO competitions, projects, assessments, etc.). → Students contribute to the evidence of what they learned through middle grade CTE (e.g., through journals or self-assessments). → Employer partners (as appropriate) contribute to the evidence of what students learned through middle grades CTE (e.g., through feedback reports).	
Evidence			
Areas for improvement and/or action steps			

Additional Resources

For more information on the research base behind the need for more career exploration in the middle grades, see the Association for Career and Technical Education's Career Exploration in Middle School: Setting Students on the Path to Success at <https://www.acteonline.org/career-exploration-in-middle-school-setting-students-on-the-path-to-success/>.

For more information on state models of implementing middle grades CTE programs, see Advance CTE's Expanding Middle School CTE to Promote Lifelong Learner Success at <https://careertech.org/resource/expanding-middle-school-cte>.

Acknowledgments

This resource was created with the support of the Middle Grades CTE Shared Solutions Workgroup, convened by Advance CTE with support from the Association for Career and Technical Education and generously funded by the Bill & Melinda Gates Foundation.

Advance CTE thanks the workgroup members for their participation and input: Katy Blatnick-Gagne, Iowa Department of Education; Jenni Bradford, Idaho Department of Education; Cindy Erwin, Center for the Future of Arizona; Amanda Fitzgerald, American School Counselor Association; Judy Frank, Southern Regional Education Board; Meg Harvey, Maine Department of Education; Rita Hovermale, Delaware Department of Education; Laura Jimenez, Center for American Progress; Heather Jones, South County Middle School, Fairfax County Public Schools, Virginia; Steve Klein, Education Northwest; Thalea Longhurst, Utah Department of Education; Trey Michaels, North Carolina Department of Public Instruction; Steve Playl, Tennessee Department of Education; Laura Scheibe and Megan Tatum, South Dakota Department of Education; Ericka Uskali, National Forum to Accelerate Middle-Grades Reform; Kristin Vest, Nebraska Department of Education; and Matt Winkle, Ohio Department of Education.

Endnotes

- 1 https://www.acteonline.org/wp-content/uploads/2018/02/ACTE_CC_Paper_FINAL.pdf
- 2 <https://www.congress.gov/115/plaws/publ224/PLAW-115publ224.pdf>
- 3 <https://equitablefutures.org/influences-on-occupational-identity-a-review-of-research-and-program/>
- 4 <https://www.amle.org/BrowsebyTopic/WhatsNew/WNDet/TabId/270/ArtMID/888/ArticleID/455/Developmental-Characteristics-of-Young-Adolescents.aspx>



ADVANCE  **CTE**
State Leaders Connecting Learning to Work

careertech.org

Association for Career
and Technical Education
ACTE®

acteonline.org