Middle School CTE Career Development

The integration of Advance CTE's Career Ready Practices with targeted durable skills provides a comprehensive framework for middle school career development. This approach strengthens the foundation for student success across all three stages of the career development model. The twelve Career Ready Practices span from foundational professional behaviors such as leading as a contributing employee and communicating effectively, to advanced competencies including critical thinking, digital literacy, and ethical decision-making. When aligned with specific durable skills, these practices create measurable learning targets that can be authentically embedded within career awareness, career exploration, and initial career planning activities. This alignment ensures that students not only discover career possibilities but simultaneously develop the essential workplace readiness skills that employers consistently identify as critical for success in any career pathway.

The durable skills matrix provides concrete, age-appropriate examples of how these workplace competencies can be meaningfully integrated into middle school CTE classroom and laboratory experiences. Skills such as active listening are demonstrated when students engage with guest speakers and follow multi-step technical procedures, while adaptability becomes evident when students adjust to new tools or modified project parameters. Complex competencies like analytical thinking are developed through authentic activities such as analyzing customer survey data or examining prototype failures, making abstract workplace concepts tangible and relevant for middle school learners. This hands-on, experiential approach to skill development aligns perfectly with the middle school career development model's emphasis on intentional, equitable, and age-appropriate learning experiences that bridge academic learning with real-world applications.

The strategic integration of Career Ready Practices and durable skills throughout the three-stage middle school career development model creates a seamless progression from broad career awareness to focused career preparation. During the career awareness stage, students develop foundational skills like teamwork, communication, and broaden their perspectives while exploring different career options across industry clusters. As students progress to career exploration, they engage in more sophisticated skill development including critical thinking, problem-solving, and self-assessment while identifying personal interests and potential pathways. The transition to initial career planning and preparation is strengthened by the students demonstrate proficiency in advanced competencies such as project management, leadership, and industry-specific technical skills. This comprehensive approach ensures that students enter high school not only with clarity about their career interests but with a robust foundation of durable skills that will enhance their success in advanced CTE coursework, work-based learning experiences, and eventual entry into post-secondary education or the workforce.

Middle School CTE Durable Skills Matrix

Skill	Description *(from Advance CTE)*	What It Looks Like in a Middle School CTE Classroom or Lab
Active Listening	Focusing attention on a speaker, asking clarifying questions, and responding appropriately.	Students listen to a guest entrepreneur and ask follow-up questions, follow multi-step oral directions for taking vital signs, listen to a peer explain a 3D printing process before attempting it, take detailed notes during a law enforcement career panel, or carefully follow instructions in a culinary demonstration.
Adaptability	Adjusting quickly to new tools, procedures, or roles.	Students switch from planting in soil to using a hydroponic system when the seasons change, update a table setting design when a menu changes, adapt to using a new coding platform after a software update, adjust camera settings when filming outdoors, or modify construction plans when materials are unavailable.
Analytical Thinking	Breaking down information to identify patterns and relationships.	Students analyze customer survey data to decide on a product change, examine why a prototype fails a quality test, compare fuel efficiency data for different vehicle types, review patient symptom logs to identify trends, or compare marketing engagement data from two different ad campaigns.

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Brainstorming	Generating many creative ideas without judgment.	Students brainstorm business ideas for a school enterprise, generate concepts for a public service announcement video, propose solutions to improve playground safety, list ideas for a new mobile app design, or suggest multiple layouts for a floral arrangement project.
Budgeting	Planning and tracking how money is used to meet goals.	Students budget for ingredients for a catering event, calculate material costs for a woodworking project, plan expenses for a community garden, manage funds for a school robotics competition, or allocate marketing funds for a product launch simulation.
Collaboration	Working productively with others toward a shared goal.	Students work in pairs to perform a patient assessment, share tasks in maintaining a greenhouse, prepare different components of a group meal, co-write a podcast script, or jointly design a set for a stage production.
Community Awareness	Understanding local needs and resources.	Students plan a coat drive for a local shelter, meet with firefighters to learn about emergency response, design a garden for a food pantry, develop a tourism brochure highlighting local attractions, or research the impact of a new business on the local economy.
Conflict Resolution	Addressing disagreements constructively.	Students decide between two competing designs for a project, resolve differences on banquet table decoration, mediate disagreements in a marketing plan, negotiate roles in a group project, or agree on camera angles for a media project.
Continuous Improvement	Seeking ways to improve work based on feedback.	Students refine a bridge model to support more weight, edit a podcast episode after peer review, adjust a recipe after a taste test, improve a sales pitch based on audience feedback, or enhance a computer game design after user testing.
Creativity	Using imagination to create new ideas or products.	Students create a custom logo for a fictional company, design an innovative recycling bin, develop a themed menu for an event, design clothing from repurposed materials, or build a digital display for a trade show booth.
Critical Thinking	Evaluating evidence to make decisions.	Students choose the best crops based on soil test results, select the best first-aid response for scenarios, choose the most effective ad campaign from data, evaluate architectural designs for efficiency, or assess which materials are best for a structural project.
Data Analysis	Interpreting information to make decisions.	Students review sales reports to find best-selling items, analyze temperature readings in a greenhouse, compare delivery routes for travel time, interpret patient health data to recommend follow-up, or evaluate social media engagement statistics.
Decision Making	Choosing the best course of action from options.	Students decide on cost-effective construction materials, select the best design for a solar-powered car, choose the most effective advertising medium, pick the safest tool for a job, or determine which crops to plant for maximum yield.
Delegation	Assigning tasks based on strengths.	Students assign baking tasks to the most skilled members, divide greenhouse duties among team members, assign coding, building, and testing roles for robotics, assign research tasks in a business plan project, or split duties in a media production team.

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Design Thinking	Problem-solving through empathy, ideation, prototyping, and testing.	Students design an accessible playground, develop a product to meet teen needs, create a school nutritional wellness program, redesign a space's layout for better access, or develop a sustainable water filtration system.
Digital Safety	Using technology responsibly and securely.	Students follow secure login protocols, check copyright rules before using images, securely store and back up video files, use appropriate online etiquette in a virtual CTSO meeting, or ensure customer data is encrypted in a simulated sales system.
Emotional Intelligence	Recognizing and managing emotions to work effectively with others.	Students manage stress during a timed sales pitch, respond empathetically in patient role-play, address guest complaints calmly, encourage a struggling teammate in a group robot build, or remain composed while troubleshooting equipment failures.
Empathy	Understanding and sharing others' feelings or perspectives.	Students role-play counseling scenarios, listen to and address a patient's concerns, adjust a product pitch to meet customer needs, adapt design elements for accessibility, or film and edit a story from the perspective of a historical figure.
Ethical Decision Making	Choosing actions that are fair, honest, and responsible.	Students choose eco-friendly pest control, reject misleading ads, select safe materials for building project, report safety hazards in a lab, or follow fair trade guidelines in a business simulation.
Flexibility	Willingness and ability to change plans when needed.	Students adapt recipes for dietary restrictions, change planting schedules due to weather, adjust project plans when a tool is unavailable, modify a film script to fit time limits, or redesign a product when new materials arrive.
Goal Setting	Creating clear and achievable objectives.	Students set milestones for a robotics competition, set sales goals for a school store, set growth targets for greenhouse crops, create a savings plan to purchase a desired item within a set timeframe, or aim to finish a presentation by a set date.
Inclusivity	Ensuring all members feel valued.	Students rotate tasks so everyone cooks and preps, ensures all voices are heard in design meetings, includes different perspectives in a CTSO community service project, provide translation for group members, or adapt activities to include students with different abilities.
Industry-Specific Skills	Technical skills needed for a career field.	Students use measuring tools to cut wood, take vital signs, operate greenhouse controls, edit digital photos for print, or maintain small engines in a marine mechanics unit.
Initiative	Acting without being prompted.	Students restock utensils without being asked, update sales data independently, troubleshoot equipment on their own, clean up a workspace before being prompted, or start preparing materials for the next project step.
Integrity	Acting according to strong moral principles.	Students report measurement errors, admit when designs fail, credit all sources, decline to copy someone's work without permission, or return found items to their owner.
Interpersonal Communication	Interacting effectively through verbal and nonverbal means.	Students greet guests professionally, give clear instructions during an assembly process, use positive tone in customer service role-play, provide constructive peer feedback, or negotiate shared space in a lab.
Lifelong Learning	Continuously seeking new skills and knowledge.	Students explore new coding languages, learn sustainable farming methods, research global food trends, practice new welding techniques, or learn how to perform routine maintenance on a small engine.

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Logical Reasoning	Using clear thinking to solve problems.	Students explain why one robot design works better, justify why a joint type is best, explain why a marketing strategy will succeed, choose the safest wiring method in an electrical project, or decide which medical test to run based on symptoms.
Networking	Building professional connections.	Students exchange contact info with a guest speaker, connect with local EMTs, join an online design competition, participate in a virtual career fair, or follow up with a mentor via email.
Organization	Structuring materials, time, and tasks.	Students store tools in labeled bins, keep financial records organized, set up a workstation with needed tools, label chemical containers in a lab, or maintain an updated task board.
Persistence	Continuing toward a goal despite setbacks.	Students redesign a bridge repeatedly, remake a recipe after failure, replant after frost, keep coding after repeated errors, or retry a lesson plan activity until it successfully engages the preschool children they are working with.
Presentation Skills	Delivering engaging, clear information to an audience.	Students pitch a product idea, demonstrate how a robot works, present a digital portfolio, lead a workshop for peers, or explain a plant growing system to visitors.
Prioritization	Deciding which tasks are most important.	Students cook food that needs the most time first, complete reports before optional tasks, water plants before less urgent lab related tasks, service critical machinery before routine cleaning, or address safety hazards before starting production.
Problem Solving	Finding and implementing solutions to challenges.	Students fix a broken circuit, find ingredient substitutes, design an irrigation system, reroute wiring in a lab, or identify the cause of equipment malfunctions.
Professionalism	Meeting workplace behavior standards.	Students arrive prepared for CTSO meetings, wear protective equipment and maintain hygiene, follow safety protocols, use respectful language in all settings, or respond promptly to communications.
Project Management	Planning and overseeing a project.	Students create a Gantt chart for a robotics build, plan a banquet, organize a plant sale, coordinate preparation for a preschool classroom activity, or manage media production deadlines.
Reliability	Consistently meeting expectations.	Students complete inventory on time, show up for event volunteer shifts, feed animals daily, log attendance accurately, or return borrowed equipment promptly.
Resource Management	Using materials and time efficiently.	Students cut materials with minimal waste, ration water in a greenhouse, reuse scraps for stock, repurpose stage props for multiple productions, or conserve electricity by shutting off idle equipment.
Resilience	Bouncing back from challenges.	Students keep working after failed tests, recover from burnt batches, adjust planting plans after pest damage, restart a video project after file loss, or return to competition after losing a round.
Research Skills	Gathering and analyzing information.	Students research nursing requirements, investigate target markets, study soil types, compare tourism trends, or look up building code standards.
Safety (Physical)	Following rules to prevent injury.	Students wear protective equipment while cutting wood, use knife safety techniques, follow lockout procedures, secure loose clothing when using machinery, or check tool condition before use.

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Self-Advocacy	Speaking up for personal needs and goals.	Students request assignment clarification, ask for extra lab practice, request to try advanced tasks, seek feedback from mentors, or suggest alternate roles better suited to their skills.
Self-Awareness	Recognizing strengths and weaknesses.	Students reflect on bedside manners, assess public speaking skills, identify coding strengths, reflect on their ability to manage a group of young children during a classroom activity, or recognize areas for technical skill improvement.
Self-Assessment	Evaluating one's work to improve.	Students taste-test dishes, score projects using a rubric, review audio voiceover recordings, compare work to professional examples, or adjust designs after performance reviews.
Stress Management	Handling pressure calmly.	Students remain polite during banquet service, stay focused after prototype failure, reorganize during busy meal service, keep calm during timed welding tasks, or maintain composure in a debate.
Sustainability	Using practices that reduce environmental impact.	Students compost food waste, use recycled materials, plan waste-minimizing menus, install energy-efficient lighting, or design packaging from biodegradable materials.
Task Management	Completing all necessary steps in a project.	Students follow baking steps in order, complete a checklist before rocket launch, verify reports are submitted, inspect safety equipment before events, or test all circuits before powering a system.
Teamwork	Cooperating to reach a goal.	Students care for animals together, assemble a robot, coordinate meal prep, set up an art exhibit, or manage event logistics.
Technical Problem Solving	Fixing or improving systems using specialized tools.	Students repair a machine belt, recalibrate a 3D printer, troubleshoot a model car, fix a sewing machine, or restore a damaged instrument.
Technology Use	Operating and applying technology effectively.	Students program microcontrollers, design flyers using desktop publishing software, enter patient data into an electronic health record, operate CNC machinery, or create animations in a digital design platform.