

Agricultural Science and Middle Grades Exploration Standards Alignment

In January of 2022, The Delaware Department of Education, with the support of Rodel and partners at Education First, embarked upon the Rethinking Middle Grades project. The overarching goal of this project is to ensure that youth exit grade eight ready for high school, having found success in career and technical education (CTE), academic, and social-emotional (SEL) programming that is equity-centered and inspires student identity and a path to post-secondary success. The creation of CTE exploration standards for middle grades is a product of this project.

Developing these standards was a year-long project that began with a diverse Steering Committee of partners including school and district leaders, teachers, counselors, board members, parents, current and former students, post-secondary educators, employers, community-based organization representatives, and Delaware Department of Education staff. The Steering Committee developed a framework for standards adoption that they then turned over to a diverse subcommittee of educators, to draft the middle school CTE exploration standards.

Both the Steering Committee and the Standards Writing Subcommittee solicited extensive input from Delaware partners that informed the initial drafting (empathy interviews, surveys) as well as informed extensive revisions (focus groups, public input). Standards were also informed by: previous standards work done by Delaware; other state's standards; national research; guidance on best practices in middle school CTE; and interviews of national and Delaware experts.

The Agriculture, Food, and Natural Resources (AFNR) Career Cluster Content Standards align with the Middle Grades Exploration Standards through professional and employability skills that are transferable such as responsibility, communication, decision-making, problem-solving, critical-thinking, ethical leadership, career planning, and technology usage. The mastery of these skills are imperative for a student to succeed in any career field of their choosing, especially one that lands them within Agriculture, Food, and Natural Resources.

Standards Resources:

- [*Career and Technical Education \(CTE\) Middle Grades Exploration Standards*](#)
- [*Agriculture, Food, Natural Resources \(AFNR\) Standards*](#)
- [*Career Ready Practices for Agricultural Education*](#)

AFNR Career Ready Practice Standard 1	<p>Act as a responsible and contributing citizen and employee.</p> <p><i>Career-ready individuals understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good.</i></p>
<p align="center">CTE Middle Grades Exploration Standards</p>	
<p align="center">Domain</p>	<p align="center">Learning Priority</p>
<p>Domain 2: Increase self-awareness</p>	<p>Learning Priority B – Develops self-efficacy to explore community or global needs and generate solutions</p>
<p>Domain 3: Develop employability skills</p>	<p>Learning Priority B – Exhibits productive workplace behavior (interpersonal skills, cultural responsiveness, integrity, decision-making)</p>

AFNR Career Ready Practice Standard 2	<p>Apply appropriate academic and technical skills.</p> <p><i>Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive. They make connections between abstract concepts with real-world applications, and they make correct insights about when it is appropriate to apply the use of an academic skill in a workplace situation.</i></p>
<p align="center">CTE Middle Grades Exploration Standards</p>	
<p align="center">Domain</p>	<p align="center">Learning Priority</p>
<p>Domain 4: Develop foundational technical skills</p>	<p>Learning Priority B – Applies reading, writing, mathematics, science, critical thinking, and technology skills to career exploration</p>
<p>Domain 6: Develop the ability to make informed educational choices</p>	<p>Learning Priority C – Develops effective resolutions using available information</p>

AFNR Career Ready Practice Standard 3	<p>Attend to personal health and financial well-being.</p> <p><i>Career-ready individuals understand the relationship between personal health, workplace performance and personal well-being; they act on that understanding to regularly practice healthy diet, exercise and mental health activities. Career-ready individuals also take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success.</i></p>
<p align="center">CTE Middle Grades Exploration Standards</p>	
<p align="center">Domain</p>	<p align="center">Learning Priority</p>
<p>Domain 2: Increase self-awareness</p>	<p>Learning Priority A – Develops awareness of strengths, aptitudes, and interests</p>
<p>Domain 3: Develop employability skills</p>	<p>Learning Priority A – Recognizes relationship between personal behavior and employability</p>

AFNR Career Ready Practice Standard 4	<p>Communicate clearly, effectively and with reason.</p> <p><i>Career-ready individuals communicate thoughts, ideas and action plans with clarity, whether using written, verbal and/or visual methods. They communicate in the workplace with clarity and purpose to make maximum use of their own and others' time. They are excellent writers; they master conventions, word choice and organization, and use effective tone and presentation skills to articulate ideas. They are skilled at interacting with others; they are active listeners and speak clearly and with purpose. Career-ready individuals think about the audience for their communication and prepare accordingly to ensure the desired outcome.</i></p>
<p align="center">CTE Middle Grades Exploration Standards</p>	
<p align="center">Domain</p>	<p align="center">Learning Priority</p>
<p>Domain 3: Develop employability skills</p>	<p>Learning Priority B – Productive workplace communication and decision-making</p>
<p>Domain 4: Develop foundational technical skills</p>	<p>Learning Priority B – Applies literacy and communication skills to career exploration</p>

AFNR Career Ready Practice Standard 5	<p>Consider the environmental, social and economic impacts of decisions.</p> <p><i>Career-ready individuals understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organizations and the environment. They are aware of and utilize new technologies, understandings, procedures, materials and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization.</i></p>
<p align="center">CTE Middle Grades Exploration Standards</p>	
<p align="center">Domain</p>	<p align="center">Learning Priority</p>
<p>Domain 1: Increase career awareness and exposure</p>	<p>Learning Priority A – Analyzes industries and their economic/societal relationships</p>
<p>Domain 6: Develop the ability to make informed educational choices</p>	<p>Learning Priority C – Develops effective resolutions using available information</p>

AFNR Career Ready Practice Standard 6	<p>Demonstrate creativity and innovation.</p> <p><i>Career-ready individuals regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization.</i></p>
<p align="center">CTE Middle Grades Exploration Standards</p>	
<p align="center">Domain</p>	<p align="center">Learning Priority</p>
<p>Domain 3: Develop employability skills</p>	<p>Learning Priority B – Creative decision-making and problem-solving in collaborative environments</p>
<p>Domain 4: Develop foundational technical skills</p>	<p>Learning Priority A – Explores knowledge and skills specific to industries or pathways</p>

AFNR Career Ready Practice Standard 7	<p>Employ valid and reliable research strategies.</p> <p><i>Career-ready individuals are discerning in accepting and using new information to make decisions, change practices or inform strategies. They use a reliable research process to search for new information. They evaluate the validity of sources when considering the use and adoption of external information or practices. They use an informed process to test new ideas, information and practices in their workplace situation.</i></p>
<p align="center">CTE Middle Grades Exploration Standards</p>	
<p align="center">Domain</p>	<p align="center">Learning Priority</p>
<p>Domain 1: Increase career awareness and exposure</p>	<p>Learning Priority A – Analyzes industries and their roles in the economy and global society</p>
<p>Domain 4: Develop foundational technical skills</p>	<p>Learning Priority B – Applies critical thinking and technology skills to research in career exploration</p>

AFNR Career Ready Practice Standard 8	<p>Utilize critical thinking to make sense of problems and persevere in solving them.</p> <p><i>Career-ready individuals readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem. They thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others.</i></p>
<p align="center">CTE Middle Grades Exploration Standards</p>	
<p align="center">Domain</p>	<p align="center">Learning Priority</p>
<p>Domain 3: Develop employability skills</p>	<p>Learning Priority B – Sound decision-making, task prioritization, collaboration, conflict resolution</p>
<p>Domain 6: Develop the ability to make informed educational choices</p>	<p>Learning Priority C – Develops effective resolutions for problems and decisions</p>

AFNR Career Ready Practice Standard 9	<p>Model integrity, ethical leadership and effective management.</p> <p><i>Career-ready individuals readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem. They thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others.</i></p>
<p align="center">CTE Middle Grades Exploration Standards</p>	
<p align="center">Domain</p>	<p align="center">Learning Priority</p>
<p>Domain 2: Increase self-awareness</p>	<p>Learning Priority B – Develops self-efficacy and awareness of leadership needs and community engagement</p>
<p>Domain 3: Develop employability skills</p>	<p>Learning Priority B – Demonstrates equitable and just workplace behavior (integrity, honesty, cultural responsiveness)</p>

AFNR Career Ready Practice Standard 10	<p>Plan education and career path aligned to personal goals.</p> <p><i>Career-ready individuals take personal ownership of their own educational and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the educational and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors and other experts to assist in the planning and execution of career and personal goals.</i></p>
<p align="center">CTE Middle Grades Exploration Standards</p>	
<p align="center">Domain</p>	<p align="center">Learning Priority</p>
<p>Domain 5: Develop an actionable plan for next steps in high-school</p>	<p>Learning Priority A – Prepares an academic and career plan</p>
<p>Domain 6: Develop the ability to make informed educational choices</p>	<p>Learning Priority B – Chooses coursework aligned to interests and aspirations</p>

AFNR Career Ready Practice Standard 11	Use technology to enhance productivity. <i>Career-ready individuals find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring and using new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks – personal and organizational – of technology applications, and they take actions to prevent or mitigate these risks.</i>
CTE Middle Grades Exploration Standards	
Domain	Learning Priority
Domain 1: Increase career awareness and exposure	Learning Priority B – Explains connections among career options, education, and lifelong learning
Domain 4: Develop foundational technical skills	Learning Priority B – Applies technology skills to career exploration

AFNR Career Ready Practice Standard 12	<p>Work productively in teams while using cultural/global competence.</p> <p><i>Career-ready individuals positively contribute to every team, whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings.</i></p>
<p align="center">CTE Middle Grades Exploration Standards</p>	
<p align="center">Domain</p>	<p align="center">Learning Priority</p>
<p>Domain 2: Increase self-awareness</p>	<p>Learning Priority B – Explores community or global needs and generates possible solutions</p>
<p>Domain 3: Develop employability skills</p>	<p>Learning Priority C – Respects individual differences and collaborates with diverse groups</p>