

MONTANA STANDARDS FOR CAREER AND VOCATIONAL TECHNICAL EDUCATION

Career and Vocational/Technical Education is a program of articulated sequential experiences that prepare students for successful participation in community, family, postsecondary education and careers.

Career and Vocational/Technical Education programs include Agriculture, Business and Marketing, Family and Consumer Sciences, Industrial Technology, and Trades and Industry.

Career and Vocational/Technical Education programs focus on career preparation, resource management, communication, technical skill development, applied academics, technological literacy; and personal skills and leadership. Programs are driven by authentic applications where students will be prepared for the workplace.

Through Career and Vocational/Technical Education students are empowered to be successful in today's world.

Content Standards indicate what all students should know, understand and be able to do in a specific content area.

Benchmarks define our expectations for students' knowledge, skills and abilities along a developmental continuum in each content area. That continuum is focused at three points—at the end of grade 8, the end of one high school course, and the completion of six units of vocational coursework.

Content Standard 1: Students experience various career opportunities and assess personal career pathways.

Content Standard 2: Students demonstrate an understanding and apply principles of Resource Management (i.e., financial, time, personal management).

Content Standard 3: Students acquire and utilize personal and leadership skills to become successful, productive citizens.

Content Standard 4: Students acquire and demonstrate current technical skills leading to an occupation.

Content Standard 5: Students know and demonstrate the requirements of the workplace through authentic application.

Career and Vocational/Technical Education Content Standard 1

Students experience various career opportunities and assess personal career pathways.

Rationale

Rewarding careers and productive employment are built through exploration and an understanding of career choices.

Benchmarks

Students will:

Benchmark I (by the end of 8th grade)	Benchmark II (grades 9-12)	Benchmark III (concentrators)
<ol style="list-style-type: none">1. describe and demonstrate the importance of goal setting and career planning.2. explore and investigate career opportunities.3. describe various lifetime roles (e.g., friend, student, leader, worker, family member).	<ol style="list-style-type: none">1. explore and identify personal interests, aptitudes, and abilities and develop strategies to achieve tentative career goals.2. utilize local resources to research career plans.3. recognize the interrelationships of family, community, career, and leisure roles.	<ol style="list-style-type: none">1. develop, evaluate, and modify personal career plans.2. experience an internship, job shadow, or work experience related to their career plan.3. evaluate career choices and the effect on family and lifestyle.

Career and Vocational/Technical Education Content Standard 2

Students demonstrate an understanding and apply principles of Resource Management (i.e., financial, time, personal management).

Rationale

Students must be able to manage workplace resources in order to become successful members of society.

Benchmarks

Students will:

Benchmark I (by the end of 8th grade)	Benchmark II (grades 9-12)	Benchmark III (concentrators)
<ol style="list-style-type: none">1. use basic monetary skills, practice maintaining basic financial records.2. follow detailed instructions and complete assignment (e.g., project/time management).3. recognize time constraints (e.g., personal time).4. recognize limitations on physical resources.	<ol style="list-style-type: none">1. prepare a budget and keep financial records.2. prioritize, allocate time, prepare and follow schedules to complete a project.3. apply appropriate time to task.4. use physical resources wisely to accomplish a goal.	<ol style="list-style-type: none">1. prepare and analyze financial plans, make forecasts, make adjustments to meet objectives, and evaluate financial records.2. select, design, complete and evaluate a project (e.g., manage multiple facets of a project).3. manage multiple priorities and assess effectiveness of outcomes (school, work, family).4. evaluate the use of physical resources.

Career and Vocational/Technical Education Content Standard 3

Students acquire and utilize personal and leadership skills to become successful, productive citizens.

Rationale

The development of positive personal qualities and leadership is a vital component in career success. This development can be achieved through a variety of methods, which may include Career and Technical Student Organizations.

Benchmarks

Students will:

Benchmark I (by the end of 8th grade)	Benchmark II (grades 9-12)	Benchmark III (concentrators)
<ol style="list-style-type: none">1. serve as a positive role model by following the rules, regulations, and policies of the school community.2. identify personal and work ethics.3. recognize characteristics of good citizenship.4. identify methods that can increase a person's self-esteem.5. observe and recognize diversity.6. describe several methods of communication.	<ol style="list-style-type: none">1. demonstrate active leadership skills by participation in group activities and projects.2. demonstrate positive personal and work ethics.3. demonstrate skills to be a productive citizen.4. apply self-esteem building practices.5. demonstrate appreciation for diverse perspective needs and characteristics.6. practice several methods of effective communication.	<ol style="list-style-type: none">1. assume a leadership role (e.g., team leader, CTSO officer, committee chair).2. evaluate, compare and contrast positive personal and work ethics.3. implement and evaluate a successful, productive citizenship activity (i.e., community service project).4. select methods to constructively build esteem in others as well as self.5. respect differences and works well with individuals from diverse backgrounds and philosophies.6. utilize multiple communication methods to complete a class project.

Career and Vocational/Technical Education Content Standard 4

Students acquire and demonstrate current technical skills leading to an occupation.

Rationale

In today's technology-driven society, students must be able to use tools, materials and processes to improve task completion and transfer technical skills within a variety of workplace settings.

Benchmarks

Students will:

Benchmark I (by the end of 8th grade)	Benchmark II (grades 9-12)	Benchmark III (concentrators)
<ol style="list-style-type: none">1. identify appropriate technical skills required for selected occupation.2. practice safe and appropriate use of technology.3. identify and use the appropriate tools and equipment for the task.4. identify and demonstrate appropriate care of technological tools.5. follow basic technical instruction.	<ol style="list-style-type: none">1. practice technical skills and procedures required for an occupation.2. practice safe and appropriate use of technology.3. select the appropriate tools, equipment, and procedures for the task.4. manage and maintain technological tools and follow troubleshooting protocol.5. apply technical information to a variety of sources.	<ol style="list-style-type: none">1. master the technical skills required for an entry level job or advanced training.2. practice safe and appropriate use of technology.3. mastery of tools and equipment needed for an entry level job or advanced training.4. manage and maintain technological systems and follow troubleshooting protocol.5. adapt technical information generated from a variety of technical sources.

Career and Vocational/Technical Education Content Standard 5

Students know and demonstrate the requirements of the workplace through authentic application.

Rationale

Students who have the opportunity to learn in a relevant, authentic context will be prepared to meet the demands of today's workforce.

Benchmarks

Students will:

Benchmark I (by the end of 8th grade)	Benchmark II (grades 9-12)	Benchmark III (concentrators)
<ol style="list-style-type: none">1. apply academic and technical skills to a class project.2. identify the concepts of entrepreneurship.3. describe how decisions affect self and others.4. use acceptable industry standard equipment in a school setting.	<ol style="list-style-type: none">1. practice and demonstrate academic and technical skills to a workplace setting.2. apply the concepts of entrepreneurship.3. identify possible outcomes and consequences of decisions.4. use acceptable industry standard equipment in a school setting.	<ol style="list-style-type: none">1. transfer academic and technical skills to the level of industry standards.2. evaluate and/or design components of a business plan.3. demonstrate decision-making and problem-solving skills.4. use acceptable industry standard equipment in a school setting.

Career and Vocational/Technical Education Performance Standards: A Profile of Four Levels

The Career and Vocational/Technical Education Performance Standards describe students' knowledge, skills, and abilities in the Career and Vocational/Technical content areas on a continuum from kindergarten through grade 12. These descriptions provide a picture or profile of student achievement at the four performance levels: advanced, proficient, nearing proficiency, and novice.

<u>Advanced</u>	This level denotes superior performance.
<u>Proficient</u>	This level denotes solid academic performance for each benchmark. Students reaching this level have demonstrated competency over challenging subject matter, including subject-matter knowledge, application of such knowledge to real-world situations, and analytical skills appropriate to the subject matter.
<u>Nearing Proficiency</u>	This level denotes that the student has partial mastery or prerequisite knowledge and skills fundamental for proficient work at each benchmark.
<u>Novice</u>	This level denotes that the student is beginning to attain the prerequisite knowledge and skills that are fundamental for work at each benchmark.

Benchmark I

Advanced An eighth-grade student at the advanced level in career and vocational/technical education demonstrates superior performance. He/she:

- (a) consistently and independently demonstrates the skills needed to research a career;
- (b) consistently identifies and use all available resources;
- (c) consistently demonstrates the skills needed to become a successful productive citizen;
- (d) consistently identifies and uses technical skills, tools and equipment for a task; and
- (e) consistently applies acceptable industry standards to a classroom project.

Proficient An eighth-grade student at the proficient level in career and vocational/technical education demonstrates solid academic performance. He/she:

- (a) demonstrates the skills needed to research a career;
- (b) identifies all available resources;
- (c) usually recognizes the skills needed to become a successful, productive citizen;
- (d) usually identifies and uses technical skills, tools and equipment for a task; and
- (e) usually applies acceptable industry standards to a classroom project.

Nearing Proficiency An eighth-grade student at the nearing proficiency level in career and vocational/technical education demonstrates partial mastery of prerequisite knowledge and skills fundamental for proficiency in career and vocational/technical education. He/she:

- (a) usually demonstrates the skills needed to research a career;

- (b) usually identifies all available resources.
- (c) sometimes identifies the skills needed to become a successful, productive citizen;
- (d) sometimes identifies and uses technical skills, tools, and equipment for a task; and
- (e) with assistance, applies acceptable industry standards to a classroom project.

Novice An eighth-grade student at the novice level in career and vocational/technical education is beginning to attain prerequisite knowledge and skills that are fundamental in career and vocational/technical education. He/she:

- (a) sometimes demonstrates the skills needed to research a career;
- (b) sometimes identifies all available resources;
- (c) rarely identifies the skills needed to become a successful productive citizen;
- (d) seldom identifies and uses technical skills, tools and equipment for a task; and
- (e) with difficulty applies acceptable industry standards to a classroom project.

Benchmark II

Advanced A high school student completing one course in career and vocational/technical education at the advanced level demonstrates superior performance. He/she:

- (a) clearly utilizes local resources and identifies his/her interests, aptitudes, and personal needs as related to career plans;
- (b) consistently uses resources and applies principles of resource management;
- (c) consistently demonstrates leadership and citizenship skills;
- (d) consistently uses and demonstrates advanced technical skills and problem-solving; and
- (e) effectively applies the concepts of an entrepreneur and technical skills to a workplace setting.

Proficient A high school student completing one course in career and vocational/technical education at the proficient level demonstrates solid academic performance. He/she:

- (a) usually utilizes local resources and identifies his/her interests, aptitudes, and personal needs as related to career plans;
- (b) usually uses resources and applies basic principles of resource management;
- (c) usually demonstrates leadership and citizenship skills in classroom activities;
- (d) usually demonstrates advanced technical skills and problem-solving; and
- (e) applies the concepts of an entrepreneur and technical skills to a workplace setting.

Nearing Proficiency A high school student completing one course in career and vocational/technical education at the nearing proficiency level demonstrates partial mastery of prerequisite knowledge and skills fundamental for proficiency in career and vocational/technical education. He/she:

- (a) sometimes locates local resources and identifies his/her interests, aptitudes, and personal needs as related to career plans;
- (b) sometimes uses resources and applies principles of resource management;
- (c) sometimes demonstrates leadership and citizenship skills in classroom activities;
- (d) sometimes demonstrates advanced technical skills and problem-solving; and
- (e) sometimes applies the concepts of an entrepreneur and technical skills to a workplace setting.

Novice A high school student completing one course in career and vocational/technical education at the novice level is beginning to attain prerequisite knowledge and skills that are fundamental for proficient in career and vocational/technical education. He/she:

- (a) with assistance, finds local resources and identifies their interest, aptitudes, personal needs as related to career plans;
- (b) with assistance, uses resources and applies principles of resource management;
- (c) rarely demonstrates leadership and citizenship skills;

- (d) rarely demonstrates advanced technical skills and problem-solving; and
- (e) rarely applies the concepts of an entrepreneur and technical skills to a workplace setting.

Benchmark III

Advanced A graduating student and vocational concentrator at the advanced level in career and vocational/technical education demonstrates superior performance. He/she:

- (a) purposefully develop and evaluate a career plan that includes work experience;
- (b) consistently manages and evaluates resource use;
- (c) readily assumes leadership roles and is a productive citizen;
- (d) masters current technical skills, tools and equipment for an entry level job or advanced training; and
- (e) independently transfers academic and technical skills to Industry standards.

Proficient A graduating student and vocational concentrator at the proficient level in career and vocational/technical education demonstrates solid academic performance. He/she:

- (a) completes a career plan that includes work experience;
- (b) manages and evaluates resource use;
- (c) accepts leadership roles and is a productive citizen;
- (d) demonstrate current technical skills, tools and equipment for an entry level job or advanced training; and
- (e) often transfers academic and technical skills to Industry standards.

Nearing Proficiency A graduating student and vocational concentrator at the nearing proficiency level in career and vocational/technical education demonstrates partial mastery of prerequisite knowledge and skills fundamental for proficiency in career and vocational/technical education. He/she:

- (a) develops a partial career plan that includes work experience;
- (b) sometimes manages and evaluates resource use;
- (c) sometimes assumes leadership roles and is a productive citizen;
- (d) sometimes demonstrates current technical skills, tools and equipment for an entry level job or advanced training; and
- (e) with assistance, transfers academic and technical skills to Industry standards.

Novice A graduating student and vocational concentrator at the novice level in career and vocational/technical education is beginning to attain prerequisite knowledge and skills that are fundamental in career and vocational/technical education. He/she:

- (a) rarely develops a complete career plan;
- (b) seldom manages and evaluates resource use;
- (c) rarely assumes leadership roles and is a productive citizen;
- (d) has difficulty with current technical skills, tools and equipment for an entry level job or advanced training; and
- (e) struggles to transfer academic and technical skills to Industry standards.