Learning Standards for Career Development and Occupational Studies at Three Levels

Standard 1: Career Development
Students will be knowledgeable about the world of work, explore career options, and relate personal skills, aptitudes, and abilities to future career decisions.

Standard 2: Integrated Learning
Students will demonstrate how academic knowledge and skills are applied in the workplace and other settings.

Standard 3a: Universal Foundation Skills
Students will demonstrate mastery of the foundation skills and competencies essential for success in the workplace.

and

Standard 3b: Career Majors
Students who choose a career major will acquire the career-specific technical knowledge/skills necessary to progress toward gainful employment, career advancement, and success in postsecondary programs.

CAREER PLAN as prescribed in these learning standards is intended to promote exploration and research into broad career areas of interest to individual students. Basic principles of career planning such as decision-making, self-evaluation, and goal setting have been integrated within the sample tasks. It is not the intent of these learning standards to limit options or narrowly define the educational preparation of students.

Standard 1—Career Development

Elementary

1. Students will learn about the changing nature of the workplace, the value of work to society, and the connection of work to the achievement of personal goals.

Students:

- **begin a career plan that would assist in the transition from school to eventual entry into a career option**
- **demonstrate an awareness of their interests, aptitudes, and abilities**
- **know the value of work to the individual and society in general**
- **describe the changing nature of the workplace brought about by global competition and technology**
- **explore their preferences for working with people, information, and/or things**
- **demonstrate understanding of the relationship of decision making to the attainment of future goals**
- **describe the changing roles of men and women at home and in the workplace.**

This is evident, for example, when students:

▲ classify hobbies, favorite school subjects, interests, and special talents with their relationship to working with people, information, or things*

▲ identify favorite school subjects and special talents and relate them to specific occupations*

▲ explain reasons why people work, describe different occupations in their community, including those in public service, and how these occupations benefit others (e.g., firefighter, police officer, pharmacist, attorney, teacher)

▲ identify long-range personal goals and relate their attainment to successful employment*

▲ identify common skills that would be important for success in the workplace and relate them to personal strengths and areas in need of improvement*

▲ describe nontraditional career options and provide examples of how the roles of men and women are changing in the home, workplace, and community (e.g., women in law enforcement and men in nursing)

▲ explain how global competition and technology have changed three specific occupations

▲ relate the negative impact of unemployment to the health of the individual and the economy in general.

Intermediate

1. Students will learn about the changing nature of the workplace, the value of work to society, and the connection of work to the achievement of personal goals.

Students:

- **continue development of a career plan that would assist in the transition from school to eventual entry into a career option of their choosing**
- **demonstrate an understanding of the relationship among personal interests, skills and abilities, and career research**
- **understand the relationship of personal interests, skills, and abilities to successful employment**
- **demonstrate an understanding of the relationship between the changing nature of work and educational requirements**
- **understand the relationship of personal choices to future career decisions.**

This is evident, for example, when students:

▲ identify characteristics and educational requirements of three career options, including those considered nontraditional*

▲ reassess personal interests and abilities and match them to career options*

▲ contrast the advantages and disadvantages of working for someone else with owning a business

▲ reevaluate long-range personal goals, including employment priorities such as salary, working conditions, and status*

▲ explain the importance of punctuality, dependability, integrity, and getting along with others for success in a work environment

▲ work cooperatively in group situations and analyze the importance of using collective abilities in achieving group goals and objectives*

▲ explain through example how work can influence an individual's life style.

Key ideas are identified by numbers (1).
Performance indicators are identified by bullets (•).
Sample tasks are identified by triangles (▲).
Sample tasks appropriate for inclusion in a student's career plan are followed by (*).

Students will be knowledgeable about the world of work, explore career options, and relate personal skills, aptitudes, and abilities to future career decisions.

Commencement

1. Students will learn about the changing nature of the workplace, the value of work to society, and the connection of work to the achievement of personal goals.

Students:

- **complete the development of a career plan that would permit eventual entry into a career option of their choosing**
- **apply decision-making skills in the selection of a career option of strong personal interest**
- **analyze skills and abilities required in a career option and relate them to their own skills and abilities.**

This is evident, for example, when students:

- ▲ reevaluate long-range personal goals and match them to a career option*
- ▲ prepare a personal balance sheet showing an inventory of acquired skills, qualities, and experiences needed for successful employment in a career option*
- ▲ prepare a research paper that contains:
  - -details of three specific jobs within the career option
  - -the education and/or training level and qualifications necessary for entry-level/career-sustaining employment
  - -the number of job openings in the career option
  - -list of three postsecondary programs offering advanced study/training in the career option
  - -entrepreneurial possibilities*
- ▲ develop resumes and letters of application and demonstrate effective interviewing techniques that could be used to gain entry into a career option*
- ▲ design a personal school-to-work plan containing specific steps/activities toward attainment of a career goal.*

Standard 2—Integrated Learning

Elementary

1. Integrated learning encourages students to use essential academic concepts, facts, and procedures in applications related to life skills and the world of work. This approach allows students to see the usefulness of the concepts that they are being asked to learn and to understand their potential application in the world of work.

Students:

- **identify academic knowledge and skills that are required in specific occupations**
- **demonstrate the difference between the knowledge of a skill and the ability to use the skill**
- **solve problems that call for applying academic knowledge and skills.**

This is evident, for example, when students:

- ▲ describe jobs in the local community; list academic knowledge and technical skills needed to perform a specific job, and make a diorama showing a person engaged in work*
- ▲ retell a story about how a school cafeteria employee uses mathematical and English language arts skills on the job
- ▲ interview a person from the community in an occupation of interest and describe for the class how the competencies they are learning in school (mathematics, science, health, English language arts) are used in the selected occupation
- ▲ integrate mathematical/science concepts to plan and design a garden, basketball court, or fish pond
- ▲ describe jobs in the local community, list academic knowledge and technical skills needed to perform a specific job, and make a diorama showing a person engaged in work
- ▲ apply mathematical skills to purchase items from a grocery store, compare prices, total their purchases, and count change
- ▲ explain why being able to tell time is important to an airline pilot, a football referee, or a teacher
- ▲ participate in a show-and-tell exercise to inform their classmates how reading, writing, speaking, and mathematics are used by a poet, musician, nurse, clown, or police officer
- ▲ select four samples of their work (completed hands-on projects depicting various occupations) and describe the academic knowledge and technical skills needed for those particular jobs.*

Intermediate

1. Integrated learning encourages students to use essential academic concepts, facts, and procedures in applications related to life skills and the world of work. This approach allows students to see the usefulness of the concepts that they are being asked to learn and to understand their potential application in the world of work.

Students:

- **apply academic knowledge and skills using an interdisciplinary approach to demonstrate the relevance of how these skills are applied in work-related situations in local, state, national, and international communities**
- **solve problems that call for applying academic knowledge and skills**
- **use academic knowledge and skills in an occupational context, and demonstrate the application of these skills by using a variety of communication techniques (e.g., sign language, pictures, videos, reports, and technology).**

This is evident, for example, when students:

- ▲ match an inventory of academic knowledge and technical skills to specific careers in which they would be useful
- ▲ prepare job descriptions with emphasis on language arts and mathematic requirements
- ▲ work in teams to complete a promotional campaign, applying the principles of various disciplines (e.g., art, music, language arts and languages other than English) to sell products on a national level*
- ▲ attend a school or community theater production and then interview the director, cast, and stage crew, and prepare a presentation illustrating academic knowledge and technical skills applied in various theater careers*
- ▲ complete a project that demonstrates how two or more academic disciplines are applied to implement news media presentations
- ▲ prepare a report based on a shadowing experience, describing the various jobs observed and the academic knowledge and technical skills needed for these jobs
- ▲ use mathematical skills to compute performance statistics for a school athletic team
- ▲ edit the work of other students for a school newsletter
- ▲ use language arts skills to evaluate a student debate
- ▲ select six samples of their work (completed hands-on projects depicting various occupations) and describe the academic knowledge and technical skills that are applied for occupations.*

Key ideas are identified by numbers (1).
Performance indicators are identified by bullets (•).
Sample tasks are identified by triangles (▲).
Sample tasks appropriate for inclusion in a student's career plan are followed by (*).

Students will demonstrate how academic knowledge and skills are applied in the workplace and other settings.

Commencement

1. Integrated learning encourages students to use essential academic concepts, facts, and procedures in applications related to life skills and the world of work. This approach allows students to see the usefulness of the concepts that they are being asked to learn and to understand their potential application in the world of work.

Students:

- **demonstrate the integration and application of academic and occupational skills in their school learning, work, and personal lives.**
- **use academic knowledge and skills in an occupational context, and demonstrate the application of these skills by using a variety of communication techniques (e.g., sign language, pictures, videos, reports, and technology)**
- **research, interpret, analyze, and evaluate information and experiences as related to academic knowledge and technical skills when completing a career plan.**

This is evident, for example, when students:

- ▲ read a series of job descriptions or training plans of interest to identify the necessary application of academic knowledge and technical skills that are required for particular careers as well as the job outlook (decline/growth) and possible earnings*
- ▲ interview a medical specialist and develop a presentation using a variety of tools/technology to depict knowledge and skills that are required for this career*
- ▲ select several local employers as well as employers with global operations and complete a project (e.g., video, photo collage, or report) that reflects the academic knowledge and technical skills required, along with the job outlook and potential earning capacity in a competitive international marketplace*
- ▲ complete an internship which focuses on a particular career of interest (e.g., architect, electrician, or veterinarian) and develop a slide presentation to demonstrate how concepts from mathematics, science, and/or English language arts are applied in a particular career*
- ▲ work in teams to formulate a historical presentation on specific careers and demonstrate how job requirements and training are changing due to new technology
- ▲ use various forms of technology and communication techniques (e.g., a CD-ROM, a video, slide show and sign language) to describe and illustrate how societal, economic, and governmental changes may require exploring a variety of careers and developing broad-based transferable skills that are needed for gainful employment*
- ▲ produce an annual career plan that includes eight samples of their work (e.g., completed hands-on projects, reports based on internships and/or depicting various occupations) and describe why they selected the particular samples of work, and indicate possible career choices of interest*
- ▲ use effective skills and techniques in a simulated job interview.

Standard 3a—Universal Foundation Skills

Elementary

Basic Skills

1. Basic skills include the ability to read, write, listen, and speak as well as perform arithmetical and mathematical functions.

Students:

- **listen to and read the ideas of others and express themselves both orally and in writing; they use basic mathematical concepts and computations to solve problems.**

This is evident, for example, when students:

- ▲ listen to and repeat simple directions
- ▲ read a variety of materials and prepare a report
- ▲ follow directions to power up a computer
- ▲ compile an inventory of office equipment
- ▲ use probability to solve a problem or use a single statistic to make a prediction
- ▲ measure an area for a swimming pool, basketball court, or employee work station.

Thinking Skills

2. Thinking skills lead to problem solving, experimenting, and focused observation and allow the application of knowledge to new and unfamiliar situations.

Students:

- **use ideas and information to make decisions and solve problems related to accomplishing a task.**

This is evident, for example, when students:

- ▲ provide examples of ways to raise money for a school field trip
- ▲ solve a riddle, puzzle, or problem, using written or oral instructions
- ▲ set up a computer, a monitor, and a keyboard according to written or oral instructions.

Key ideas are identified by numbers (1).
Performance indicators are identified by bullets (•).
Sample tasks are identified by triangles (▲).

Students will demonstrate mastery of the foundation skills and competencies essential for success in the workplace.

Elementary

Personal Qualities

3. Personal qualities generally include competence in self-management and the ability to plan, organize, and take independent action.

Students:

- **demonstrate the personal qualities that lead to responsible behavior.**

This is evident, for example, when students:

- ▲ arrive at school and complete assignments on time; explain why these behaviors would be important to an employer
- ▲ provide examples of people acting responsibly/irresponsibly in the community
- ▲ complete an inventory of personal strengths and select areas in which they would like to improve
- ▲ demonstrate positive behaviors through interactions in the classroom (e.g., sharing resources, helping classmates).

Interpersonal Skills

4. Positive interpersonal qualities lead to teamwork and cooperation in large and small groups in family, social, and work situations.

Students:

- **relate to people of different ages and from diverse backgrounds.**

This is evident, for example, when students:

- ▲ work cooperatively with peers to accomplish a task
- ▲ describe, as models, successful people of varied backgrounds
- ▲ display skills needed to resolve conflicts with other people
- ▲ explain the importance of getting along with people in a work environment who are different from oneself.

STANDARD 3a

Standard 3a—Universal Foundation Skills

Elementary

Technology

5. Technology is the process and product of human skill and ingenuity in designing and creating things from available resources to satisfy personal and societal needs and wants.

Students:

- **demonstrate an awareness of the different types of technology available to them and of how technology affects society.**

This is evident, for example, when students:

- ▲ select the appropriate technology for designing and creating a flyer for a school-sponsored event
- ▲ identify examples of technology found at home, at school, and in a business environment
- ▲ choose a career area and research how technology has changed that cluster of occupations.

Managing Information

6. Information management focuses on the ability to access and use information obtained from other people, community resources, and computer networks.

Students:

- **describe the need for data and obtain data to make decisions.**

This is evident, for example, when students:

- ▲ explain the practical uses of weather forecasting data as it relates to the farm industry
- ▲ plan a school store and determine what items might sell best
- ▲ listen to a presentation about a career area and write a report summarizing the information.

Key ideas are identified by numbers (1).
Performance indicators are identified by bullets (•).
Sample tasks are identified by triangles (▲).

Students will demonstrate mastery of the foundation skills and competencies essential for success in the workplace.

Elementary

Managing Resources

7. Using resources includes the application of financial and human factors, and the elements of time and materials to successfully carry out a planned activity.

Students:

- **demonstrate an awareness of the knowledge, skills, abilities, and resources needed to complete a task.**

This is evident, for example, when students:

- ▲ describe the resources needed to inventory the art supply cabinet in the classroom
- ▲ explain the resources needed to build a simple item (e.g., footstool, sandbox).

Systems

8. Systems skills include the understanding of and ability to work within natural and constructed systems.

Students:

- **demonstrate understanding of how a system operates and identify where to obtain information and resources within the system.**

This is evident, for example, when students:

- ▲ understand the process used to order supplies for a school store or local business
- ▲ explain the various components of the school system.

STANDARD 3a

Standard 3a—Universal Foundation Skills

Intermediate

Basic Skills

1. Basic skills include the ability to read, write, listen, and speak as well as perform arithmetical and mathematical functions.

Students:

- **listen to and read the ideas of others and analyze what they hear and read; acquire and use information from a variety of sources; and apply a combination of mathematical operations to solve problems in oral or written form.**

This is evident, for example, when students:

- ▲ follow directions that involve a series of actions
- ▲ locate and use information on a wide range of topics from many different sources
- ▲ present an oral report to the class after investigating several career clusters
- ▲ record data and prepare a graph on the movement of the stock market or a particular stock
- ▲ explore ways in which geometry is used in everyday life
- ▲ solve basic problems involving integers, fractions, and decimals.

Thinking Skills

2. Thinking skills lead to problem solving, experimenting, and focused observation and allow the application of knowledge to new and unfamiliar situations.

Students:

- **evaluate facts, solve advanced problems, and make decisions by applying logic and reasoning skills.**

This is evident, for example, when students:

- ▲ describe the best method to evaluate customer interest in the establishment of a new product line for a business
- ▲ describe the best method to evaluate student interest in the establishment of a new school sport or club
- ▲ create a work schedule to ensure equity in employee hours and days worked
- ▲ sequence facts in a logical order to solve a problem.

Key ideas are identified by numbers (1).
Performance indicators are identified by bullets (•).
Sample tasks are identified by triangles (▲).

Students will demonstrate mastery of the foundation skills and competencies essential for success in the workplace.

Intermediate

Personal Qualities

3. Personal qualities generally include competence in self-management and the ability to plan, organize, and take independent action.

Students:

- **demonstrate an understanding of the relationship between individuals and society and interact with others in a positive manner.**

This is evident, for example, when students:

- ▲ participate in a fund-raising activity in or out of school such as carwash, flower sale, etc. (refer to Regents Rule 19.6 governing student fund-raising)
- ▲ volunteer to participate in a local charitable organization's activities
- ▲ work with other students on a group project to improve one aspect of the school's operation.

Interpersonal Skills

4. Positive interpersonal qualities lead to teamwork and cooperation in large and small groups in family, social, and work situations.

Students:

- **demonstrate the ability to work with others, present facts that support arguments, listen to dissenting points of view, and reach a shared decision.**

This is evident, for example, when students:

- ▲ react positively to constructive criticism
- ▲ work as a member of a team toward a common goal.

STANDARD 3a

Standard 3a—Universal Foundation Skills

Intermediate

Technology

5. Technology is the process and product of human skill and ingenuity in designing and creating things from available resources to satisfy personal and societal needs and wants.

Students:

- **select and use appropriate technology to complete a task.**

This is evident, for example, when students:

- ▲ use a telecommunications service to check current airline schedules and price information for a trip to another state or country
- ▲ use appropriate technology to present information in table/chart form
- ▲ use word processing software to make an inquiry to a business
- ▲ make a presentation explaining how technology has changed the work site.

Managing Information

6. Information management focuses on the ability to access and use information obtained from other people, community resources, and computer networks.

Students:

- **select and communicate information in an appropriate format (e.g., oral, written, graphic, pictorial, multimedia).**

This is evident, for example, when students:

- ▲ prepare a financial report showing the annual revenue and expenses of a business or club for three years and presenting that information to a group
- ▲ design a chart or graph to evaluate personal progress toward a goal or objective
- ▲ collect the necessary data from local employers to develop a speakers' bureau for their school
- ▲ given directions, correctly complete a job application.

Key ideas are identified by numbers (1).
Performance indicators are identified by bullets (•).
Sample tasks are identified by triangles (▲).

Students will demonstrate mastery of the foundation skills and competencies essential for success in the workplace.

Intermediate

Managing Resources

7. Using resources includes the application of financial and human factors, and the elements of time and materials to successfully carry out a planned activity.

Students:

- **understand the material, human, and financial resources needed to accomplish tasks and activities.**

This is evident, for example, when students:

- ▲ develop a plan for a work experience (e.g., lawn mowing, snow removal, paper route) by formulating a budget, allocating equipment, and recording expenses and income
- ▲ create and follow a personal schedule to maximize the use of time.

Systems

8. Systems skills include the understanding of and ability to work within natural and constructed systems.

Students:

- **understand the process of evaluating and modifying systems within an organization.**

This is evident, for example, when students:

- ▲ survey teachers to develop modifications in the school's discipline policy
- ▲ observe how customer returns have been handled in a store over a period of time and develop strategies to improve the system
- ▲ describe the functioning of a simple ecosystem.

Standard 3a—Universal Foundation Skills

Commencement

Basic Skills

1. Basic skills include the ability to read, write, listen, and speak as well as perform arithmetical and mathematical functions.

Students:

- **use a combination of techniques to read or listen to complex information and analyze what they hear or read; convey information confidently and coherently in written or oral form; and analyze and solve mathematical problems requiring use of multiple computational skills.**

This is evident, for example, when students:

- ▲ gather and use information presented in print and electronic sources to create a research report and database
- ▲ examine a case study to evaluate whether the information contained within it is adequate to support generalizations about the topic
- ▲ participate in debates, interviews, and panel discussions
- ▲ use word processing and desktop publishing software to present information on a sales campaign
- ▲ analyze a company's balance sheet and income statement for industry-recognized ratios for assets, liabilities, and net income/loss
- ▲ order and price inventory appropriately as part of a work experience program.

Thinking Skills

2. Thinking skills lead to problem solving, experimenting, and focused observation and allow the application of knowledge to new and unfamiliar situations.

Students:

- **demonstrate the ability to organize and process information and apply skills in new ways.**

This is evident, for example, when students:

- ▲ provide examples of ways to alter a work schedule to allow for more job sharing among two or more employees
- ▲ evaluate a variety of options suggested, select an option, explain the reason for the selection, and provide the strategies for implementation
- ▲ recognize a problem and design steps to solve the problem
- ▲ prepare and present a report on how knowledge gained from one content area helped solve a problem in another area.

Key ideas are identified by numbers (1).
Performance indicators are identified by bullets (•).
Sample tasks are identified by triangles (▲).

Students will demonstrate mastery of the foundation skills and competencies essential for success in the workplace.

Commencement

Personal Qualities

3. Personal qualities generally include competence in self-management and the ability to plan, organize, and take independent action.

Students:

- **demonstrate leadership skills in setting goals, monitoring progress, and improving their performance.**

This is evident, for example, when students:

- ▲ work with a local employer to establish a sales goal and devise a plan to reach that goal
- ▲ motivate other group members and demonstrate leadership skills in a student leadership organization or job experience
- ▲ give and accept constructive criticism in a group project
- ▲ evaluate decisions for legal and ethical implications
- ▲ establish a set of personal goals and record progress in attaining them.

Interpersonal Skills

4. Positive interpersonal qualities lead to teamwork and cooperation in large and small groups in family, social, and work situations.

Students:

- **communicate effectively and help others to learn a new skill.**

This is evident, for example, when students:

- ▲ demonstrate how to respond effectively to a dissatisfied customer
- ▲ assist in the teaching of an acquired skill in an elementary/ middle school class or business environment
- ▲ provide feedback to others in a group project
- ▲ participate in a job interview.

STANDARD 3a

Standard 3a—Universal Foundation Skills

Commencement

Technology

5. Technology is the process and product of human skill and ingenuity in designing and creating things from available resources to satisfy personal and societal needs and wants.

Students:

- **apply their knowledge of technology to identify and solve problems.**

This is evident, for example, when students:

- ▲ evaluate why a school or business facsimile (fax) machine is not working
- ▲ take the proper steps to make an inoperative printer work
- ▲ use a software program to compile and analyze statistical data and prepare a presentation for a group
- ▲ use an integrated software program to solve a business-related problem
- ▲ prepare a report predicting how technology may change various aspects of life 50 years from now.

Managing Information

6. Information management focuses on the ability to access and use information obtained from other people, community resources, and computer networks.

Students:

- **use technology to acquire, organize, and communicate information by entering, modifying, retrieving, and storing data.**

This is evident, for example, when students:

- ▲ construct a computer-generated form to survey local employers for possible participation in a work-study program
- ▲ use graphics software to present survey findings to the student body
- ▲ use telecommunications software to access and communicate information
- ▲ use presentation graphics software which will illustrate to a group of employers the increase in work-based learning experiences
- ▲ use a computer to record and organize statistical information to assist a coach of a school athletic team.

Key ideas are identified by numbers (1).
Performance indicators are identified by bullets (•).
Sample tasks are identified by triangles (▲).

Students will demonstrate mastery of the foundation skills and competencies essential for success in the workplace.

Commencement

Managing Resources

7. Using resources includes the application of financial and human factors, and the elements of time and materials to successfully carry out a planned activity.

Students:

- **allocate resources to complete a task.**

This is evident, for example, when students:

- ▲ plan a two-week activity that requires tasks to be divided among students or coworkers, including determining priorities and following timelines
- ▲ prepare a long-range budget for a school organization or hypothetical business
- ▲ complete multiple tasks for concurrent activities by adjusting personal schedules or negotiating deadlines
- ▲ work as a team to decide how resources should be allocated to accomplish a task.

Systems

8. Systems skills include the understanding of and ability to work within natural and constructed systems.

Students:

- **demonstrate an understanding of how systems performance relates to the goals, resources, and functions of an organization.**

This is evident, for example, when students:

- ▲ evaluate the roles or positions within an organization and make suggestions for improvement of the organization
- ▲ write a proposal for ways a company can reduce expenses
- ▲ prepare an organizational chart for a club or business
- ▲ develop a presentation using visual aids to explain how an automobile or other machine operates.

STANDARD 3a