

Academic Standards for Career Education and Work



Pennsylvania Department of Education

Academic Standards for Career Education and Work

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Academic Standards for Career Education and Work

XXXVIII. INTRODUCTION

The Academic Standards for Career Education and Work reflect the increasing complexity and sophistication that students experience as they progress through school. Career Education and Work Standards describe what students should know and be able to do at four grade levels (3, 5, 8 and 11) in four areas:

- ◆ 13.1 Career Awareness and Preparation
- ◆ 13.2 Career Acquisition (Getting a Job)
- ◆ 13.3 Career Retention and Advancement
- ◆ 13.4 Entrepreneurship

Pennsylvania's economic future depends on having a well-educated and skilled workforce. No student should leave secondary education without a solid foundation in Career Education and Work. It is the rapidly changing workplace and the demand for continuous learning and innovation on the part of the workers that drive the need to establish academic standards in Career Education and Work.

Through a comprehensive approach, Career Education and Work Standards complement all disciplines and other academic standards. If Pennsylvania's students are to succeed in the workplace, there are certain skills that they need to obtain prior to graduation from high school. These skills have been identified in the Career Education and Work Standards, but it is up to individual school districts to decide how they are to be taught. Districts can implement integration strategies within existing disciplines or can implement stand-alone courses to specifically address these standards.

A glossary is included to assist the reader in understanding terminology contained in the standards.

13.1. Career Awareness and Preparation			
13.1.3. GRADE 3	13.1.5. GRADE 5	13.1.8. GRADE 8	13.1.11. GRADE 11
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his maximum potential and to acquire the knowledge and skills needed to:</i>			
<p>A. Recognize that individuals have unique interests.</p> <p>B. Identify current personal interests.</p> <p>C. Recognize that the roles of individuals at home, in the workplace and in the community are constantly changing.</p> <p>D. Identify the range of jobs available in the community.</p> <p>E. Describe the work done by school personnel and other individuals in the community.</p>	<p>A. Describe the impact of individual interests and abilities on career choices.</p> <p>B. Describe the impact of personal interest and abilities on career choices.</p> <p>C. Relate the impact of change to both traditional and nontraditional careers.</p> <p>D. Describe the range of career training programs in the community such as, but not limited to: <ul style="list-style-type: none"> • Two-and-four year colleges • Career and technical education programs at centers (formerly AVTS) and high schools • CareerLinks • Community/recreation centers • Faith-based organizations • Local industry training centers • Military • Registered apprenticeship • Vocational rehabilitation centers • Web-based training </p> <p>E. Describe the factors that influence career choices, such as, but not limited to:</p>	<p>A. Relate careers to individual interests, abilities, and aptitudes.</p> <p>B. Relate careers to personal interests, abilities and aptitudes.</p> <p>C. Explain how both traditional and nontraditional careers offer or hinder career opportunities.</p> <p>D. Explain the relationship of career training programs to employment opportunities.</p> <p>E. Analyze the economic factors that impact employment opportunities, such as, but not limited to:</p>	<p>A. Relate careers to individual interests, abilities, and aptitudes.</p> <p>B. Analyze career options based on personal interests, abilities, aptitudes, achievements and goals.</p> <p>C. Analyze how the changing roles of individuals in the workplace relate to new opportunities within career choices.</p> <p>D. Evaluate school-based opportunities for career awareness/preparation, such as, but not limited to: <ul style="list-style-type: none"> • Career days • Career portfolio • Community service • Cooperative education • Graduation/senior project • Internship • Job shadowing • Part-time employment • Registered apprenticeship • School-based enterprise </p> <p>E. Justify the selection of a career.</p>

<p>F. Explore how people prepare for careers.</p> <p>G. Explain why education and training plans are important to careers.</p>	<ul style="list-style-type: none"> • Geographic location • Job description • Salaries/benefits • Work schedule • Working conditions <p>F. Investigate people’s rationale for making career choices.</p> <p>G. Identify the components of a career plan, such as, but not limited to:</p> <ul style="list-style-type: none"> • Beginnings of career portfolio • Career goals • Individual interests and abilities • Training/education requirements and costs 	<ul style="list-style-type: none"> • Competition • Geographic location • Global influences • Job growth • Job openings • Labor supply • Potential advancement • Potential earnings • Salaries/benefits • Unemployment <p>F. Analyze the relationship of school subjects, extracurricular activities, and community experiences to career preparation.</p> <p>G. Create an individualized career plan including, such as, but not limited to:</p> <ul style="list-style-type: none"> • Assessment and continued development of career portfolio • Career goals • Cluster/pathway opportunities 	<p>F. Analyze the relationship between career choices and career preparation opportunities, such as, but not limited to:</p> <ul style="list-style-type: none"> • Associate degree • Baccalaureate degree • Certificate/licensure • Entrepreneurship • Immediate part/full time employment • Industry training • Military training • Professional degree • Registered apprenticeship • Tech Prep • Vocational rehabilitation centers <p>G. Assess the implementation of the individualized career plan through the ongoing development of the career portfolio.</p>
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<p>H. Explain how workers in their careers use what is learned in the classroom.</p>	<p>H. Connect personal interests and abilities and academic strengths to personal career options.</p>	<ul style="list-style-type: none"> • Individual interests and abilities • Training/education requirements and financing <p>H. Choose personal electives and extra curricular activities based upon personal career interests, abilities and academic strengths.</p>	<p>H. Review personal high school plan against current personal career goals and select postsecondary opportunities based upon personal career interests.</p>
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13.2. Career Acquisition (Getting a Job)			
13.2.3. GRADE 3	13.2.5. GRADE 5	13.2.8. GRADE 8	13.2.11. GRADE 11
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his maximum potential and to acquire the knowledge and skills needed to:</i>			
<p>A. Identify appropriate speaking and listening techniques used in conversation.</p> <p>B. Discuss resources available in researching job opportunities, such as, but not limited to:</p> <ul style="list-style-type: none"> • Internet • Magazines • Newspapers <p>C. Compose a personal letter.</p>	<p>A. Apply appropriate speaking and listening techniques used in conversation.</p> <p>B. Identify and review resources available in researching job opportunities, such as, but not limited to:</p> <ul style="list-style-type: none"> • Internet • Magazines • Newspapers <p>C. Compose and compare a business and a personal letter.</p>	<p>A. Identify effective speaking and listening skills used in a job interview.</p> <p>B. Evaluate resources available in researching job opportunities, such as, but not limited to:</p> <ul style="list-style-type: none"> • CareerLinks • Internet (i.e. O*NET) • Networking • Newspapers • Professional associations • Resource books (that is <i>Occupational Outlook Handbook, PA Career Guide</i>) <p>C. Prepare a draft of career acquisition documents, such as, but not limited to:</p> <ul style="list-style-type: none"> • Job application • Letter of appreciation following an interview • Letter of introduction • Request for letter of recommendation • Resume 	<p>A. Apply effective speaking and listening skills used in a job interview.</p> <p>B. Apply research skills in searching for a job.</p> <ul style="list-style-type: none"> • CareerLinks • Internet (i.e. O*NET) • Networking • Newspapers • Professional associations • Resource books (that is <i>Occupational Outlook Handbook, PA Career Guide</i>) <p>C. Develop and assemble, for career portfolio placement, career acquisition documents, such as, but not limited to:</p> <ul style="list-style-type: none"> • Job application • Letter of appreciation following an interview • Letter of introduction • Postsecondary education/training applications • Request for letter of recommendation • Resume

<p>D. Identify the importance of developing a plan for the future.</p> <p>E. Discuss the importance of the essential workplace skills, such as, but not limited to:</p> <ul style="list-style-type: none"> • Dependability • Health/safety • Team building • Technology 	<p>D. Identify individualized career portfolio components, such as, but not limited to:</p> <ul style="list-style-type: none"> • Achievements • Awards/recognitions • Career exploration results • Career plans • Community service involvement/projects • Interests/hobbies • Personal career goals • Selected school work • Self inventories <p>E. Apply to daily activities, the essential workplace skills, such as, but not limited to:</p> <ul style="list-style-type: none"> • Commitment • Communication • Dependability • Health/safety • Personal initiative • Scheduling/time management • Team building • Technical literacy • Technology 	<p>D. Develop an individualized career portfolio including components, such as, but not limited to:</p> <ul style="list-style-type: none"> • Achievements • Awards/recognitions • Career exploration results • Career plans • Community service involvement/projects • Interests/hobbies • Personal career goals • Selected school work • Self inventories <p>E. Explain, in the career acquisition process, the importance of the essential workplace skills/knowledge, such as, but not limited to:</p> <ul style="list-style-type: none"> • Commitment • Communication • Dependability • Health/safety • Laws and regulations (that is Americans With Disabilities Act, child labor laws, Fair Labor Standards Act, OSHA, Material Safety Data Sheets) • Personal initiative • Self-advocacy • Scheduling/time management • Team building • Technical literacy • Technology 	<p>D. Analyze, revise, and apply an individualized career portfolio to chosen career path.</p> <p>E. Demonstrate, in the career acquisition process, the application of essential workplace skills/knowledge, such as, but not limited to:</p> <ul style="list-style-type: none"> • Commitment • Communication • Dependability • Health/safety • Laws and regulations (that is Americans With Disabilities Act, child labor laws, Fair Labor Standards Act, OSHA, Material Safety Data Sheets) • Personal initiative • Self-advocacy • Scheduling/time management • Team building • Technical literacy • Technology
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13.3. Career Retention and Advancement			
13.3.3. GRADE 3	13.3.5. GRADE 5	13.3.8. GRADE 8	13.3.11. GRADE 11
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his maximum potential and to acquire the knowledge and skills needed to:</i>			
<p>A. Identify attitudes and work habits that contribute to success at home and school.</p> <p>B. Identify how to cooperate at both home and school.</p> <p>C. Explain effective group interaction terms, such as, but not limited to:</p> <ul style="list-style-type: none"> • Compliment • Cooperate • Encourage • Participate <p>D. Explain how money is used.</p>	<p>A. Explain how student attitudes and work habits transfer from the home and school to the workplace.</p> <p>B. Explain the importance of working cooperatively with others at both home and school to complete a task.</p> <p>C. Identify effective group interaction strategies, such as, but not limited to:</p> <ul style="list-style-type: none"> • Building consensus • Communicating effectively • Establishing ground rules • Listening to others <p>D. Explain budgeting.</p>	<p>A. Determine attitudes and work habits that support career retention and advancement.</p> <p>B. Analyze the role of each participant's contribution in a team setting.</p> <p>C. Explain and demonstrate conflict resolution skills:</p> <ul style="list-style-type: none"> • Constructive criticism • Group dynamics • Managing/leadership • Mediation • Negotiation • Problem solving <p>D. Analyze budgets and pay statements, such as, but not limited to:</p> <ul style="list-style-type: none"> • Charitable contributions • Expenses • Gross pay • Net pay • Other income • Savings • Taxes 	<p>A. Evaluate personal attitudes and work habits that support career retention and advancement.</p> <p>B. Evaluate team member roles to describe and illustrate active listening techniques:</p> <ul style="list-style-type: none"> • Clarifying • Encouraging • Reflecting • Restating • Summarizing <p>C. Evaluate conflict resolution skills as they relate to the workplace:</p> <ul style="list-style-type: none"> • Constructive criticism • Group dynamics • Managing/leadership • Mediation • Negotiation • Problem solving <p>D. Develop a personal budget based on career choice, such as, but not limited to:</p> <ul style="list-style-type: none"> • Charitable contributions • Fixed/variable expenses • Gross pay • Net pay • Other income • Savings • Taxes

<p>E. Discuss how time is used at both home and school.</p> <p>F. Identify the changes in family and friend's roles at home, at school and in the community.</p> <p>G. Define and describe the importance of lifelong learning.</p>	<p>E. Develop a personal schedule based on activities and responsibilities at both home and school.</p> <p>F. Describe the impact of role changes at home, school, and at work, and how the role changes impact career advancement and retention.</p> <p>G. Describe how personal interests and abilities impact lifelong learning.</p>	<p>E. Identify and apply time management strategies as they relate to both personal and work situations.</p> <p>F. Identify characteristics of the changing workplace including Americans With Disabilities Act accommodations, and explain their impact on jobs and employment.</p> <p>G. Identify formal and informal lifelong learning opportunities that support career retention and advancement.</p>	<p>E. Evaluate time management strategies and their application to both personal and work situations.</p> <p>F. Evaluate strategies for career retention and advancement in response to the changing global workplace.</p> <p>G. Evaluate the impact of lifelong learning on career retention and advancement.</p>
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13.4. Entrepreneurship			
13.4.3. GRADE 3	13.4.5. GRADE 5	13.4.8. GRADE 8	13.4.11. GRADE 11
<i>Pennsylvania's public schools shall teach, challenge and support every student to realize his maximum potential and to acquire the knowledge and skills needed to:</i>			
<p>A. Define entrepreneurship.</p> <p>B. Describe the character traits of successful entrepreneurs, such as, but not limited to:</p> <ul style="list-style-type: none"> • Adaptability • Creative thinking • Ethical behavior • Leadership • Positive attitude • Risk-taking <p>C. Describe age-appropriate entrepreneurial opportunities, such as, but not limited to:</p> <ul style="list-style-type: none"> • Bake sale • Crafts • Lemonade stand • Pet care 	<p>A. Identify the risks and rewards of entrepreneurship.</p> <p>B. Discuss the entrepreneurial character traits of historical or contemporary entrepreneurs.</p> <p>C. Discuss the steps entrepreneurs take to bring their goods or services to market, such as, but not limited to:</p> <ul style="list-style-type: none"> • Marketing • Production • Research and development • Selection of goods and services 	<p>A. Compare and contrast entrepreneurship to traditional employment, such as, but not limited to:</p> <ul style="list-style-type: none"> • Benefits • Job security • Operating costs • Wages <p>B. Evaluate how entrepreneurial character traits influence career opportunities.</p> <p>C. Identify and describe the basic components of a business plan, such as, but not limited to:</p> <ul style="list-style-type: none"> • Business idea • Competitive analysis • Daily operations • Finances/budget • Marketing • Productive resources (human, capital, natural) • Sales forecasting 	<p>A. Analyze entrepreneurship as it relates to personal career goals and corporate opportunities.</p> <p>B. Analyze entrepreneurship as it relates to personal character traits.</p> <p>C. Develop a business plan for an entrepreneurial concept of personal interest and identify available resources, such as, but not limited to:</p> <ul style="list-style-type: none"> • Community based organizations (that is chambers of commerce, trade/technical associations, Industrial Resource Centers) • Financial institutions • School-based career centers

			<ul style="list-style-type: none">• Small Business Administration services (that is SCORE, Small Business Development Centers, Entrepreneurial Development Centers)• Venture capital
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Academic Standards for Career Education and Work

XXXIX. GLOSSARY

Americans With Disabilities Act (Pub. L. No. 101-336):	The Americans With Disabilities Act is a Federal civil rights law that prohibits discrimination and for ensuring equal opportunity for persons with disabilities in employment, state and local government services, public accommodations, commercial facilities, transportation, and requiring the establishment of TDD/telephone relay services.
Aptitudes:	Capacity to learn and understand.
Associate degree:	A postsecondary degree typically earned within a two-year time frame.
Baccalaureate degree:	A postsecondary degree, also known as a bachelor’s degree, typically earned within a 4-year time frame from a college or university.
Benefits:	Something of value that an employee receives in addition to a wage or salary. Examples include health and life insurance, vacation leave, retirement plans, and the like.
Budget:	A financial plan that summarizes anticipated income and expenditures over a period of time.
Business plan:	A prepared document detailing the past, present, and future of an organization.
Career and technical centers:	Schools that educate secondary students and adults through academic instruction, job preparation and acquisition of occupational skills leading to credentials or employment, or both, in specific industries. The centers also provide opportunities for transition to postsecondary education and continuing education.
Career cluster:	A grouping of related occupations, which share similar skill sets.

Career days:	Special events that allow students to meet with employers, career development specialists, community-based organization representatives, and postsecondary educators. Events are designed to encourage students to gain information about careers and job opportunities.
Career plan:	A document developed by the student that identifies a series of educational studies and experiences to prepare them for postsecondary education or work, or both, in a selected career cluster or area.
Career portfolio:	An ongoing, individualized collection of materials (electronic or hard copy) that documents a student’s educational performance, career exploration and employment experiences over time. While there is no standard format that a career portfolio must take, it typically includes a range of work, containing assignments by the teacher/counselor and selections by the student. It serves as a guide for the student to transition to postsecondary education or the workplace, or both.
Career retention and advancement:	Career retention is the process of keeping a job. Career advancement is the process of performing the necessary requirements to progress in a career.
CareerLinks:	A cooperative system that provides one-stop delivery of career services to job seekers, employers and other interested individuals.
Certificate/licensure:	A document, issued by associations, employers, educational institutions, government, and the like, confirming that one has fulfilled the requirements and is able to perform to a specified level of proficiency within a career field.
Child labor laws:	Legislation governing the employment of children under the age of 18.
Competitive analysis:	A tool that allows a business to identify its competitors and evaluate their respective strengths and weaknesses.
Cooperative education:	A structured method of instruction whereby students alternate or coordinate their high school studies with a job in a field related to their academic or career objectives.

Entrepreneurs:	Individuals who engage in the process of organizing, managing, and assuming the risk of a business or enterprise.
Entrepreneurship:	The process of organizing, managing, and assuming the risks of a business or enterprise.
Fair Labor Standards Act:	A Federal law that defines overtime and wage requirements (26 U.S.C.A. §§ 201—219).
Fixed/variable expenses:	Fixed expenses are regular in their timing and amount, and include such things as rent, mortgage, car payment, and insurance. Variable expenses are irregular in their timing and amount, and include such things as food, clothing, home and car maintenance, entertainment, and gifts.
Global influences:	Political and cultural changes, which impact the world and its economy.
Gross pay:	The amount earned before deductions, such as taxes, insurance, and retirement/pension plan.
Industrial Resource Centers:	Non-profit corporations, which provide assistance to improve the competitive position of small-to-medium sized manufacturers.
Internship:	A work experience with an employer for a specified period of time to learn about a particular industry or occupation, which may or may not include financial compensation. The workplace activities may include special projects, a sample of tasks from different jobs, or tasks from a single occupation.
Job shadowing:	Typically as part of career exploration activities in late middle and early high school, a student follows an employee for 1 or more days to learn about a particular occupation or industry. Job shadowing is intended to help students explore a range of career objectives and to possibly select a career pathway.
Labor supply:	The number of persons either working or unemployed and actively seeking work.
Marketing:	The process or technique of promoting, selling, and distributing a product or service.

Material Safety Data Sheets:	Federally mandated listings of all hazardous materials that will impact the health and safety of the workers and that are required to be posted in the workplace.
Mediation:	Third-party intervention between conflicting parties to promote reconciliation, settlement, or compromise.
Net pay:	The amount remaining after deductions, such as taxes, insurance, and retirement/pension plan.
Networking:	The act of exchanging information, contacts, and services.
Nontraditional careers:	Fields of work for which individuals from one gender comprise less than 25% of the individuals employed in each such occupation or field of work.
O*NET:	Occupational Information Network-- is a free public access online web-based system provided by the United States Department of Labor, which includes comprehensive up-to-date occupational information including skills, knowledge, abilities and tasks for more than 950 occupations.
Operating costs:	The funds necessary to operate a business, not including the cost of goods sold. This is also referred to as overhead.
OSHA:	The Occupational Safety and Health Administration--A National agency with representatives in each state who monitor health and safety issues in the workplace.
Professional associations:	Organizations of people having common interests.
Professional degree:	A title conferred on students by a college, university or professional school upon completion of a program of study.
Registered apprenticeship:	A formal program registered with the United States Department of Labor's Bureau of Apprenticeship and Training and with the Pennsylvania Apprenticeship Council. This program must follow strict guidelines as to the types of training and amount of training time an apprentice receives and leads directly into occupations requiring such training for entry.

Resume:	A summary of one’s personal qualifications, education/training and employment experience.
Salaries/benefits:	Financial compensation paid regularly for services (See "benefits" for definition).
Sales forecasting:	Predicting the number of services or units likely to be sold over a specified period of time.
School-based career centers:	Specialized areas in schools equipped with resources and materials used to research postsecondary and occupational opportunities.
School-based enterprise:	The production of goods or services as part of a school program.
SCORE:	Service Corps of Retired Executives--A Small Business Administration Federally-sponsored program to assist small-to-medium sized companies.
Self inventories:	Evaluations of an individual’s strengths, weaknesses, and interests, as it relates to career planning.
Tech Prep:	The name given to programs that offer at least 4 years of sequential course work at the secondary and postsecondary levels to prepare students for technical careers. The curricula are designed to build student competency in academic subjects, as well as to provide broad technical preparation in a career area.
Technical literacy:	The ability of individuals to use existing and emerging technologies, equipment, language, materials, and manuals to participate intelligently in performing tasks related to everyday life, school or job.
Time management strategies:	Scheduling techniques used to effectively and efficiently direct or control activities.
Traditional careers:	Fields of work for which individuals from one gender comprise more than 25% of the individuals employed in each such occupation or field of work.
Unemployment:	Measurement of the number of people who are not working and who are actively seeking work.

Venture capital:	Public or private funds invested in a potentially profitable business enterprise despite risk of loss.
Vocational rehabilitation centers:	Educational facilities that provide life skills and occupational training services for individuals with special needs.
Wages:	Payments of money for labor or services according to contract and on an hourly, daily, or piecework basis.
Web-based training:	Instruction that is available online.
Work habits:	Acquired behaviors that individuals regularly perform in completing tasks related to chores, school or job.
Working conditions:	The environment in which an individual is employed.