Academic Standards for Career Education and Work



Pennsylvania Department of Education

22 Pa. Code Chapter 4 - Appendix E Career Education and Work Academic Standards (#006-296)

Annex A

Academic Standards for Career Education and Work

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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 standards.

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

13.1.3. GRADE 3	13.1.5. GRADE 5	13.1.8. GRADE 8	13.1.11. GRADE 11
	shall teach, challenge and support every		
and skills needed to:		-	
A. Recognize that individuals have unique interests.	A. Describe the impact of individual interests and abilities on career choices.	A. Relate careers to individual interests, abilities, and aptitudes.	A. Relate careers to individual interests, abilities, and aptitudes.
B. Identify current personal interests.	B. Describe the impact of personal interest and abilities on career choices.	B. Relate careers to personal interests, abilities and aptitudes.	B. Analyze career options based on personal interests, abilities, aptitudes, achievements and goals.
C. Recognize that the roles of individuals at home, in the workplace and in the community are constantly changing.	C. Relate the impact of change to both traditional and nontraditional careers.	C. Explain how both traditional and nontraditional careers offer or hinder career opportunities.	C. Analyze how the changing roles of individuals in the workplace relate to new opportunities within career choices.
D. Identify the range of jobs available in the community.	 D. Describe the range of career training programs in the community such as, but not limited to: 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 	D. Explain the relationship of career training programs to employment opportunities.	 D. Evaluate school-based opportunities for career awareness/preparation, such as, but not limited to: Career days Career portfolio Community service Cooperative education Graduation/senior project Internship Job shadowing Part-time employment Registered apprenticeship School-based enterprise
E. Describe the work done by school personnel and other individuals in the community.	E. Describe the factors that influence career choices, such as, but not limited to:	E. Analyze the economic factors that impact employment opportunities, such as, but not limited to:	E. Justify the selection of a career.

	 Geographic location Job description Salaries/benefits Work schedule Working conditions 	 Competition Geographic location Global influences Job growth Job openings Labor supply Potential advancement Potential earnings Salaries/benefits Unemployment 	
F. Explore how people prepare for careers.	F. Investigate people's rationale for making career choices.	F. Analyze the relationship of school subjects, extracurricular activities, and community experiences to career preparation.	 F. Analyze the relationship between career choices and career preparation opportunities, such as, but not limited to: Associate degree Baccalaureate degree Certificate/licensure Entrepreneurship Immediate part/full time employment Industry training Professional degree Registered apprenticeship Tech Prep Vocational rehabilitation centers
G. Explain why education and training plans are important to careers.	 G. Identify the components of a career plan, such as, but not limited to: Beginnings of career portfolio Career goals Individual interests and abilities Training/education requirements and costs 	 G. Create an individualized career plan including, such as, but not limited to: Assessment and continued development of career portfolio Career goals Cluster/pathway opportunities 	G. Assess the implementation of the individualized career plan through the ongoing development of the career portfolio.

Annex A

		 Individual interests and abilities Training/education requirements and financing 	
H. Explain how workers in their careers use what is learned in the classroom.	H. Connect personal interests and abilities and academic strengths to personal career options.	H. Choose personal electives and extra curricular activities based upon personal career interests, abilities and academic strengths.	H. Review personal high school plan against current personal career goals and select postsecondary opportunities based upon personal career interests.

13.2.3. GRADE 3	13.2.5. GRADE 5	13.2.8. GRADE 8	13.2.11. GRADE 11
Pennsylvania's public schools sh and skills needed to:	all teach, challenge and support every s	tudent to realize his maximum poten	tial and to acquire the knowledge
A. Identify appropriate speaking and listening techniques used in conversation.	A. Apply appropriate speaking and listening techniques used in conversation.	A. Identify effective speaking and listening skills used in a job interview.	A. Apply effective speaking and listening skills used in a job interview.
 B. Discuss resources available in researching job opportunities, such as, but not limited to: Internet Magazines Newspapers 	 B. Identify and review resources available in researching job opportunities, such as, but not limited to: Internet Magazines Newspapers 	 B. Evaluate resources available in researching job opportunities, such as, but not limited to: CareerLinks Internet (i.e. O*NET) Networking Newspapers Professional associations Resource books (that is <i>Occupational Outlook Handbook, PA Career Guide</i>) 	 B. Apply research skills in searching for a job. CareerLinks Internet (i.e. O*NET) Networking Newspapers Professional associations Resource books (that is <i>Occupational Outlook Handbook, PA Career Guide</i>)
C. Compose a personal letter.	C. Compose and compare a business and a personal letter.	 C. Prepare a draft of career acquisition documents, such as, but not limited to: Job application Letter of appreciation following an interview Letter of introduction Request for letter of recommendation Resume 	 C. Develop and assemble, for career portfolio placement, career acquisition documents, such as, but not limited to: Job application Letter of appreciation following an interview Letter of introduction Postsecondary education/training applications Request for letter of recommendation Resume

 D. Identify the importance of developing a plan for the future. E. Discuss the importance of the 	 D. Identify individualized career portfolio components, such as, but not limited to: Achievements Awards/recognitions Career exploration results Career plans Community service involvement/projects Interests/hobbies Personal career goals Selected school work Self inventories 	 D. Develop an individualized career portfolio including components, such as, but not limited to: Achievements Awards/recognitions Career exploration results Career plans Community service involvement/projects Interests/hobbies Personal career goals Selected school work 	D. Analyze, revise, and apply an individualized career portfolio to chosen career path.
 as but not limited to: Dependability Health/safety Team building Technology 	 E. Apply to daily activities, the essential workplace skills, such as, but not limited to: Commitment Communication Dependability Health/safety Personal initiative Scheduling/time management Team building Technical literacy Technology 	 E. Explain, in the career acquisition process, the importance of the essential workplace skills/knowledge, such as, but not limited to: 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 	 E. Demonstrate, in the career acquisition process, the application of essential workplace skills/knowledge, such as, but not limited to: 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

13.3.3. GRADE 3	13.3.5. GRADE 5	13.3.8. GRADE 8	13.3.11. GRADE 11
Pennsylvania's public schools sh and skills needed to:	all teach, challenge and support every	student to realize his maximum poter	ntial and to acquire the knowledge
A. Identify attitudes and work habits that contribute to success at home and school.	A. Explain how student attitudes and work habits transfer from the home and school to the workplace.	A. Determine attitudes and work habits that support career retention and advancement.	A. Evaluate personal attitudes and work habits that support career retention and advancement.
B. Identify how to cooperate at both home and school.	B. Explain the importance of working cooperatively with others at both home and school to complete a task.	B. Analyze the role of each participant's contribution in a team setting.	 B. Evaluate team member roles to describe and illustrate active listening techniques: Clarifying Encouraging Reflecting Restating Summarizing
 C. Explain effective group interaction terms, such as, but not limited to: Compliment Cooperate Encourage Participate 	 C. Identify effective group interaction strategies, such as, but not limited to: Building consensus Communicating effectively Establishing ground rules Listening to others 	 C. Explain and demonstrate conflict resolution skills: Constructive criticism Group dynamics Managing/leadership Mediation Negotiation Problem solving 	 C. Evaluate conflict resolution skills as they relate to the workplace: Constructive criticism Group dynamics Managing/leadership Mediation Negotiation Problem solving
D. Explain how money is used.	D. Explain budgeting.	 D. Analyze budgets and pay statements, such as, but not limited to: Charitable contributions Expenses Gross pay Net pay Other income Savings Taxes 	 D. Develop a personal budget based on career choice, such as, but not limited to: Charitable contributions Fixed/variable expenses Gross pay Net pay Other income Savings Taxes

E. Discuss how time is used at both home and school.	E. Develop a personal schedule based on activities and responsibilities at both home and school.	E. Identify and apply time management strategies as they relate to both personal and work situations.	E. Evaluate time management strategies and their application to both personal and work situations.
F. Identify the changes in family and friend's roles at home, at school and in the community.	F. Describe the impact of role changes at home, school, and at work, and how the role changes impact career advancement and retention.	F. Identify characteristics of the changing workplace including Americans With Disabilities Act accommodations, and explain their impact on jobs and employment.	F. Evaluate strategies for career retention and advancement in response to the changing global workplace.
G. Define and describe the importance of lifelong learning.	G. Describe how personal interests and abilities impact lifelong learning.	G. Identify formal and informal lifelong learning opportunities that support career retention and advancement.	G. Evaluate the impact of lifelong learning on career retention and advancement.

13.4. Entrepreneurship			
13.4.3. GRADE 3	13.4.5. GRADE 5	13.4.8. GRADE 8	13.4.11. GRADE 11
Pennsylvania's public schools sh and skills needed to:	all teach, challenge and support every s	student to realize his maximum pote	ntial and to acquire the knowledge
A. Define entrepreneurship.	A. Identify the risks and rewards of entrepreneurship.	 A. Compare and contrast entrepreneurship to traditional employment, such as, but not limited to: Benefits Job security Operating costs Wages 	A. Analyze entrepreneurship as it relates to personal career goals and corporate opportunities.
 B. Describe the character traits of successful entrepreneurs, such as, but not limited to: Adaptability Creative thinking Ethical behavior Leadership Positive attitude Risk-taking 	B. Discuss the entrepreneurial character traits of historical or contemporary entrepreneurs.	B. Evaluate how entrepreneurial character traits influence career opportunities.	B. Analyze entrepreneurship as it relates to personal character traits.
 C. Describe age-appropriate entrepreneurial opportunities, such as, but not limited to: Bake sale Crafts Lemonade stand Pet care 	 C. Discuss the steps entrepreneurs take to bring their goods or services to market, such as, but not limited to: Marketing Production Research and development Selection of goods and services 	 C. Identify and describe the basic components of a business plan, such as, but not limited to: Business idea Competitive analysis Daily operations Finances/budget Marketing Productive resources (human, capital, natural) Sales forecasting 	 C. Develop a business plan for an entrepreneurial concept of personal interest and identify available resources, such as, but not limited to: Community based organizations (that is chambers of commerce, trade/technical associations, Industrial Resource Centers) Financial institutions School-based career centers

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Venture capital

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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.		of
Mediation:	Third-party intervention between conflicting parties to promote reconciliation, settlement, or compromise.		or
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.		luals
O*NET:	Occupational Information Network is a free public access online web-based so by the United States Department of Labor, which includes comprehensive up-to occupational information including skills, knowledge, abilities and tasks for mo occupations.	-date	ded
Operating costs:	The funds necessary to operate a business, not including the cost of goods sold. referred to as overhead.	This is also)
OSHA:	The Occupational Safety and Health AdministrationA 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.		
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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 ExecutivesA 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	y seeking wo	ork.	
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Venture capital:	Public or private funds invested in a potentially profitable business enterprise despite risk of loss.	
Vocational rehabilitation centers:	s: 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.	