

PROPOSED RULEMAKING

STATE BOARD OF EDUCATION

[22 PA. CODE CH. 4]

Academic Standards and Assessment for Career Education and Work

The State Board of Education (Board) proposes to amend Chapter 4 (relating to academic standards and assessment) to add academic standards for Career Education and Work to read as set forth in Annex A. The statutory authority for this proposed rulemaking is the Public School Code of 1949 (24 P.S. §§ 1-101—27-2702).

Purpose

This proposed rulemaking adds academic standards for Career Education and Work. The purpose of adding these requirements is to specify academic standards to be achieved by students enrolled at various grade levels in the public schools (including public charter schools) of this Commonwealth.

Requirements of this Proposed Rulemaking

This proposed rulemaking defines the academic standards for Career Education and Work to be achieved by students enrolled at various grade levels in the public schools (including public charter schools) of this Commonwealth. Academic standards for Career Education and Work are organized into four areas: (1) career awareness and planning; (2) career acquisition (getting a job); (3) career retention (keeping a job) and (4) entrepreneurship. Specific standards describe what students should know and be able to do by the end of third, fifth, eighth and eleventh grade.

Affected Parties

This proposed rulemaking will affect the students and professional employees of the public schools of this Commonwealth (including intermediate units, area vocational-technical schools, public charter and alternative schools).

Cost and Paperwork Estimates

Costs to implement this proposed rulemaking may include curriculum development and the professional development of teachers. These costs may vary by school district. Curriculum development is an ongoing activity for schools and is typically part of their normal budgeting. Costs associated with aligning curricula with these standards at the local level will be minimized by the following efforts: technical assistance in curriculum development provided by the Department of Education's (Department) staff; detailed implementation materials developed by the Department, intermediate units and professional associations and provided to school districts; and the Standards Implementation Project which funds intermediate unit services throughout this Commonwealth supporting the implementation of these and other standards.

Professional development of teachers is an ongoing activity for schools and is addressed in the normal budgeting of school districts. Specific programs designed to support the implementation of these standards will minimize any financial impact on school districts. Professional development is provided through Governor's Institutes for Teachers (currently provided in career education and work) and is included within current year appropriations. In addition, the act of November 23, 1999 (P.L. 529, No. 48) (Act 48) established a requirement for educators to engage in continuing professional education. Act 48 also requires the Department to provide 40 hours of professional development annually at no cost to teachers. Online professional development courses will be developed for Career Education and Work.

Effective Date

This proposed rulemaking will become effective upon final-form publication in the *Pennsylvania Bulletin*.

Sunset Date

Under § 4.12(i) (relating to academic standards), the effectiveness of these academic standards will be reviewed by the Board every 3 years. Thus, no sunset date is necessary.

Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)), on March 31, 2003, the Board submitted a copy of this proposed rulemaking to the Independent Regulatory Review Commission (IRRC) and to the Chairpersons of the House and Senate Committees on Education. A copy of this material is available to the public upon request.

Under section 5(g) of the Regulatory Review Act, IRRC may convey any comments, recommendations or objections to the proposed regulations within 30 days of the close of the public comment period. The comments, recommendations or objections shall specify the regulatory review criteria which have not been met. The Regulatory Review Act specifies detailed procedures for review, prior to final publication of the regulation, by the Department, the General Assembly and the Governor of comments, recommendations or objections raised.

Public Comments and Contact Person

Interested persons are invited to submit written comments, suggestions or objections regarding this proposal to Patricia A. White, Executive Director, State Board of Education, 333 Market Street, Harrisburg, PA 17126-0333 within 30 days following publication in the *Pennsylvania Bulletin*.

Persons with disabilities needing an alternative means of providing public comment should make arrangements by calling Patricia White at (717) 787-3787 or TDD (717) 787-7367.

PATRICIA A. WHITE,
Executive Director

Fiscal Note: 6-283. No fiscal impact; (8) recommends adoption.

Annex A
TITLE 22. EDUCATION
PART I. STATE BOARD OF EDUCATION
CHAPTER 4. ACADEMIC STANDARDS AND ASSESSMENT
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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 Planning
- 13.2. Career Acquisition (Getting a Job)
- 13.3. Career Retention (Keeping a Job)
- 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 drives 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 Planning			
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 or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
A. Recognize that individuals have unique interests.	A. Describe career implications of individual interests and abilities.	A. Identify careers that are related to student interests, abilities and aptitudes.	A. Analyze career options based on student interests, abilities, aptitudes and accomplishments.
B. Describe the changing roles of men and women at home and in the workplace.	B. Identify occupations that are nontraditional by gender.	B. Explain how non-traditional occupations offer career opportunities.	B. Analyze how the changing male/female roles relate to career choice.

13.1. Career Awareness and Planning			
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 or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
<p>C. Identify types of jobs available in the community based upon the products and services of local employers.</p> <p>D. Describe the work done by school personnel and other community workers.</p> <p>E. Explore how people prepare for their careers.</p> <p>F. Identify career and educational opportunities.</p> <p>G. Explain why education/training is important to meet career goals.</p>	<p>C. Identify career-training programs.</p> <ul style="list-style-type: none"> • Career and technical centers • Career Link centers • Colleges • Community/recreation centers • Local industry training centers • Vocational-technical schools <p>D. Identify the elements of employment opportunities within the community.</p> <ul style="list-style-type: none"> • Average wages • Seasonal labor • Supply • Unemployment rates • Vacancies <p>E. Investigate people's rationale for making career changes.</p> <p>F. Identify the components of a career plan.</p> <p>G. Compare and contrast alternative educational and vocational choices and the required preparation for them.</p>	<p>C. Explain the relationship among local employment, training programs and employment opportunities.</p> <p>D. Analyze employment opportunity factors.</p> <ul style="list-style-type: none"> • Benefits • Geographic location • Job openings • Labor market data • Labor supply • Retirement plans • Potential advancement • Unemployment • Potential earnings • Supply and demand <p>E. Analyze the relationship between school subjects and extra-curricular activities to career preparation.</p> <p>F. Apply the components of career planning through the development of an individualized career plan.</p> <p>G. Analyze factors related to the cost of education or training and sources of scholarships and sources of student loans.</p>	<p>C. Evaluate opportunities for career preparation.</p> <ul style="list-style-type: none"> • Cooperative education • Internship • Job shadowing • Part-time employment • Registered apprenticeship • School-based enterprise • Volunteerism <p>D. Justify the selection of a career.</p> <p>E. Evaluate all opportunities for the transition from secondary to postsecondary education, training or work.</p> <ul style="list-style-type: none"> • Two-year degree • Four-year degree • Immediate employment • Industry training • Military training • Part-time employment • Full-time employment • Professional degree • Registered apprenticeship • Tech Prep <p>F. Evaluate individual career plan using decision-making skills.</p> <p>G. Analyze the opportunity cost/benefit of continuous learning.</p>

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 or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
<p>A. Evaluate formal and informal introduction techniques.</p>	<p>A. Identify appropriate speaking, listening and feedback techniques used in conversations.</p>	<p>A. Identify persuasive speaking skills used during job interviews.</p>	<p>A. Know and demonstrate industry acceptable job interviewing techniques.</p>

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 or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
<p>B. Know and apply basic procedures described in technical instructions.</p> <ul style="list-style-type: none"> • Diagrams • Electronics • Interlocking building blocks • Video games 	<p>B. Explain and demonstrate basic technical tasks using appropriate tools.</p> <ul style="list-style-type: none"> • K-nex • Interlocking building blocks • Robotics • Schematics 	<p>B. Explain and demonstrate the completion of multifaceted technical tasks using a variety of sources.</p> <ul style="list-style-type: none"> • Equipment • Facilities • Information • Instruments • Processes • Tools 	<p>B. Analyze and evaluate complex technical tasks using sophisticated processes.</p> <ul style="list-style-type: none"> • Equipment • Facilities • Materials • Techniques • Technology • Tools
<p>C. Describe the use of technology in the workforce.</p>	<p>C. Contrast current use of technology in the workplace with past practices.</p>	<p>C. Compare and contrast technical operation, maintenance and repair resources.</p>	<p>C. Analyze workplace problems and cite technological solutions.</p>
<p>D. Identify activities within the school day that promote health and safety.</p>	<p>D. Explain how health and safety practices relate to employment.</p>	<p>D. Evaluate health and safety practices in the workplace.</p> <ul style="list-style-type: none"> • Accident prevention • Engineered solutions/guards • Environmental concerns • Equipment/tool safety • Personal hygiene and attire 	<p>D. Identify sources of health, safety and regulatory practices and their effect on the work environment.</p> <ul style="list-style-type: none"> • Child Labor Laws • Employee Right to Know • Fair Labor Standards Act • Hazardous occupations • Material Safety Data Sheets (MSDS) information • Occupational Safety and Health Administration (OSHA) regulations • Student work permits
<p>E. Identify the components of a personal letter.</p>	<p>E. Compare and contrast a business letter and a personal letter.</p>	<p>E. Know and apply established criteria to the development of career acquisition documents.</p> <ul style="list-style-type: none"> • Job application • Letter of appreciation following an interview • Letter of introduction • Letter of reference • Resume 	<p>E. Evaluate prepared career acquisition documents based upon industry acceptable practices.</p> <ul style="list-style-type: none"> • Accuracy • Completeness • Neatness • Qualifications
<p>F. Identify selection criteria of work samples for a career portfolio.</p>	<p>F. Explain why specific samples of work were selected for inclusion in a career portfolio.</p>	<p>F. Evaluate career portfolio content for its accuracy in reflecting skills and knowledge.</p>	<p>F. Analyze performance-based assessments components.</p> <ul style="list-style-type: none"> • Portfolio review • Nationally validated assessment • Local/State/National skill certificate

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 or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
G. Identify and demonstrate manipulative/motor skills.	G. Explain and prepare samples of work generated through various techniques.	G. Identify and demonstrate knowledge of manipulative/motor skills related to the student's career interests.	G. Analyze the need for manipulative/motor skills. <ul style="list-style-type: none"> • Cooperative education • Internship • Job shadowing • Part-time employment • Registered apprenticeship • School-based enterprise • Tech-Prep • Vocational program completion • Volunteerism

13.3. Career Retention (Keeping a Job)			
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 or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
A. Identify work contributions and responsibilities at home and at school. B. Explain cooperation. C. Explain terms related to group interaction. <ul style="list-style-type: none"> • Compliment • Encourage • Cooperate • Communicate one's opinion D. Explain how money is used. E. Explain how time is used. F. Identify changes impacting the workplace.	A. Explain how student work habits transfer to the workplace. B. Explain the importance of working cooperatively with others at home and in school to complete a task or resolve a conflict. C. Identify roadblocks to communication and explain ways to overcome them. D. Explain budgeting. E. Explain the budgeting of one's time. F. Identify characteristics of the changing workplace and explain their impact on jobs and employment.	A. Relate work habits to employment longevity. B. Explain and demonstrate conflict resolution skills. <ul style="list-style-type: none"> • Constructive criticism • Group dynamics • Managing • Mediation • Negotiation • Problem solving C. Explain the role of each participant's contributions in a team setting. D. Analyze personal budgets. <ul style="list-style-type: none"> • Expenses • Income • Investing • Needs • Savings • Taxes • Wants E. Identify and apply strategies used to manage time. F. Identify and analyze effectiveness of strategies to deal with rapid change.	A. Analyze work habits needed to advance within a career. B. Evaluate conflict resolution skills. C. Evaluate team member roles to describe and illustrate active listening techniques. <ul style="list-style-type: none"> • Clarifying • Encouraging • Restating • Reflecting • Summarizing D. Compare and contrast gross and net pay. E. Evaluate strategies used to manage time and their application in different work situations. F. Analyze the impact of change on the evolving world economy and the individual's work.

13.3. Career Retention (Keeping a Job)			
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 or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
G. Explain why learning is a lifelong pursuit.	G. Describe how personal interests relate to life-long learning.	G. Identify sources of formal and informal learning related to staying current in the individual's career area.	G. Analyze the availability and societal and economic factors of lifelong participation in career preparation and advancement opportunities.

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 or her maximum potential and to acquire the knowledge and skills needed to . . .</i>			
A. Know the concepts of price.	A. Identify and explain factors that influence price. <ul style="list-style-type: none"> • Competition • Concept of marketplace • Demand for goods and services • Supply of goods and services 	A. Explain the relationship between competition and pricing strategies.	A. Analyze the relationship between competition and pricing strategies.
B. Describe the concept of self-employment.	B. Compare and contrast entrepreneurship to employment.	B. Define business principles and explain the components of an entrepreneurial business plan.	B. Apply business principles to the development of an entrepreneurial business plan.
C. Define entrepreneurship and describe the characteristics of successful entrepreneurs.	C. Explain how entrepreneurs generate profit.	C. Evaluate the risks of entrepreneurship.	C. Relate principles of entrepreneurship to career goals.
D. Identify entrepreneurial situations where assistance is needed to complete a task or solve a problem.	D. Explain the positive and negative outcomes of seeking informal and external assistance as an entrepreneur.	D. Identify and explain the components of an intervention plan.	D. Analyze intervention plans and evaluate their effectiveness in specific situations.

XXXIX. GLOSSARY

- CareerLink centers:** A first-in-the-nation "one-stop" system to link Pennsylvania workers with good jobs and to help Pennsylvania employers get the people they need. CareerLink is "one-stop" shopping for employment and training services.
- Child Labor Laws:** Legislation governing the employment of children under the age of 18.
- Competition:** The rivalry among people or business firms for resources and customers.
- 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 occupational objectives.
- Decision making:** Method to specify goals and constraints, generate alternatives, consider risks and evaluate and choose the best alternative.
- Demand:** The different quantities of a resource, goods or service that will be purchased at various possible prices during a specific time period.
- Employment trends:** The direction or movement of job availability or employment needs.
- Entrepreneurs:** Individuals who begin and manage the factors of a business, including risks.
- Hazardous occupations:** Occupations defined in Child Labor Laws where the employment of minors (under age 18 or 16) is prohibited unless they meet exceptions through a training program.
- Internship:** Situation where a student works for an employer for a specified period of time to learn about a particular industry or occupation.
- Intervention plan:** A strategy for an intentional entry into an ongoing system for the purpose of initiating or introducing change.
- Investing:** Using time or capital (money) to increase assets or productivity.
- Manipulate:** To control objects with body parts and implements, causing an object to move from one place to another.

Mediating:	Acting as an agent between parties in order to reconcile them.
MSDS:	Material Safety Data Sheet. These sheets contain required information regarding the health and safety of workers in the use of hazardous materials in the workplace.
Negotiating:	Arranging for or bringing about agreement through conference, discussion and compromise.
Networking:	The exchange of information or services among individuals, groups or institutions.
Nontraditional occupations:	Fields of work, including careers in computer science, technology and other emerging high skill occupations, for which individuals from one gender comprise less than 25% of the individuals employed in each such occupation or field of work.
Opportunity cost:	The highest valued alternative given up when a decision is made.
OSHA:	Occupational Safety and Health Administration. OSHA is a National agency with representatives in each state to monitor safety and health issues in the workplace.
Portfolio:	A collection of work that documents a student's education performance over time.
Profit:	The remainder after all costs of production have been deducted from the revenue derived from the sale of goods and services.
Registered apprenticeship:	A joint initiative designed to link employers in need of an educated workforce with local education agencies, postsecondary institutions, technical schools and other training facilities to provide quality work-based education.
Responsibility:	The exertion of a high level of effort and perseverance toward goal attainment; excellence at performing tasks; outstanding attendance standards and punctuality; enthusiasm, vitality and optimism in approaching and completing tasks.
Resume:	A summary of one's personal history and employment experience.
Right to know:	OSHA mandated safety training for any business or organization that has hazardous chemicals present in the workplace. Employees who are exposed to any kind of hazardous chemicals or work with or near hazardous chemicals must be trained within 30 days of their hire date and, in many states, annually thereafter.
School-based enterprise:	The production of goods or services as part of a school program.
Shadowing:	Following or observing someone to learn from that person.
Summarizing:	Relating information by concise rewording.
Supply:	The different quantities of a resource, good or service that will be offered for sale at various possible prices during a specific time period.
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.
Time management:	The process of directing or controlling activities with regard to use of time.
Unemployment rate:	The percentage of workers without jobs seeking employment.
Work habits:	Conduct at or attitude toward work.
Work permit:	A document, required under Child Labor Laws, filed when persons under the age of 18 are employed. School authorities issue these permits.

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