

# Regulatory Analysis Form

This space for use by IRRC

(1) Agency

State Board of Education

(2) I.D. Number (Governor's Office Use)

6-276

IRRC Number: 2253

(3) Short Title

Chapter 4 – Academic Standards and Assessment, Appendix D

(4) PA Code Cite

22 Pa. Code Chapter 4

(5) Agency Contacts & Telephone Numbers

Primary Contact: James Buckheit  
(717) 787-3787

Secondary Contact:

(6) Type of Rulemaking (check one)

- Proposed Rulemaking
- Final Order Adopting Regulation
- Final Order, Proposed Rulemaking Omitted

(7) Is a 120-Day Emergency Certification Attached?

- No
- Yes: By the Attorney General
- Yes: By the Governor

(8) Briefly explain the regulation in clear and nontechnical language.

This regulation sets forth academic standards to be attained by students in public schools. These final form revisions to Chapter 4 would establish academic standards for Arts and Humanities; Health, Safety and Physical Education; and Family and Consumer Sciences in Appendix D of Chapter 4.

(9) State the statutory authority for the regulation and any relevant state or federal court decisions.

The Public School Code of 1949 (24 P.S. Secs. 1-101— 27-2702).

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(10) Is the regulation mandated by any federal or state law or court order, or federal regulation? If yes, cite the specific law, case or regulation, and any deadlines for action.

The proposed regulation is not mandated by federal statute or court order. The enabling statute for the State Board of Education requires it to “establish standards governing the educational program of the Commonwealth.” (24 P.S. § 26-2603-B(a)).

(11) Explain the compelling public interest that justifies the regulation. What is the problem it addresses?

Academic standards and assessments add clarity, focus and accountability to the educational programs of the Commonwealth’s public schools. Academic standards in Arts and Humanities; Health, Safety and Physical Education; and Family and Consumer Sciences will ensure that students throughout the Commonwealth attain the skills and knowledge necessary to become good citizens and productive, competitive contributors to Pennsylvania’s economy.

(12) State the public health, safety, environmental or general welfare risks associated with nonregulation.

Academic standards ensure that students in the Commonwealth are provided an education to develop the skills and knowledge necessary to succeed in an increasingly competitive world.

(13) Describe who will benefit from the regulation. (Quantify the benefits as completely as possible and approximate the number of people who will benefit.)

The approximately 1.8 million students enrolled in the Commonwealth’s public schools will be direct beneficiaries. Parents, taxpayers and employers generally will benefit from public school graduates demonstrating the attainment of high academic standards.

### Regulatory Analysis Form

(14) Describe who will be adversely affected by the regulation. (Quantify the adverse effects as completely as possible and approximate the number of people who will be adversely affected.)

No adverse effect is anticipated.

(15) List the persons, groups or entities that will be required to comply with the regulation. (Approximate the number of people who will be required to comply.)

All public schools of the Commonwealth (including intermediate units, area vocational-technical schools, charter schools and alternative schools), their professional employees and students.

(16) Describe the communications with and input from the public in the development and drafting of the regulation. List the persons and/or groups who were involved, if applicable.

Over 350 people throughout the Commonwealth assisted in the development of the standards. They included parents, business and community leaders, teachers, higher education professors, school administrators and Department of Education staff. In developing the Pennsylvania Academic Standards, the development committees reviewed and used national benchmarks, other states' standards and international academic standards.

(17) Provide a specific estimate of the costs and/or savings to the regulated community associated with compliance, including any legal, accounting or consulting procedures which may be required.

The Department believes implementation of these regulations will be cost neutral to the school districts. Costs to implement this regulation may include curriculum development and the professional development of teachers. However, these costs may be cost neutral, as they have already been included in the budget. For example, curriculum revision 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 state efforts: technical assistance in curriculum development provided by Department staff; implementation materials developed by the Department; training provided by intermediate units and professional associations to public schools. Professional development of teachers is an ongoing activity for schools and is addressed in the normal budgeting process by school districts. Specific programs designed to support the implementation of these standards will minimize any financial impact on school districts.

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(18) Provide a specific estimate of the costs and/or savings to local governments associated with

compliance, including any legal, accounting or consulting procedures which may be required.

It is estimated that these regulations will be cost neutral to school districts, intermediate units, area vocational-technical schools, charter schools and alternative schools.

(19) Provide a specific estimate of the costs and/or savings to state government associated with the implementation of the regulation, including any legal, accounting, or consulting procedures which may be required.

There are no increased costs directly attributable to this regulation. However, the Department does provide professional development to school districts, which may aid in the implementation of these regulations. State funded professional development is provided through Governor's Institutes for Educators, through on-line courses, and through specialized programs and workshops. Costs for these professional development activities are listed in the chart detailed in Item 20 of this Regulatory Analysis Form, and funding is available in the current fiscal year for these activities.

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(20) In the table below, provide an estimate of the fiscal savings and costs associated with implementation and compliance for the regulated community, local government, and state government

for the current year and five subsequent years.

	<b>Current FY Year</b>	<b>FY +1 Year</b>	<b>FY +2 Year</b>	<b>FY +3 Year</b>	<b>FY +4 Year</b>	<b>FY +5 Year</b>
<b>SAVINGS:</b>	\$	\$	\$	\$	\$	\$
<b>Regulated</b>						
<b>Local Government</b>						
<b>State Government</b>						
<b>Total Savings</b>						
<b>COSTS:</b>						
<b>Regulated</b>	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral
<b>Local Government</b>	No Cost	No Cost	No Cost	No Cost	No Cost	No Cost
<b>State Government</b>	4.38 million	4.38 million	4.38 million	4.38 million	4.38 million	4.38 million
<b>Total Costs</b>						
<b>REVENUE LOSSES:</b>						
<b>Regulated</b>						
<b>Local Government</b>						
<b>State Government</b>						
<b>Total Revenue Losses</b>						

### Regulatory Analysis Form

(20b) Provide the past three-year expenditure history for programs affected by the regulation.

<b>Program</b>	<b>FY -3</b>	<b>FY -2</b>	<b>FY -1</b>	<b>Current FY(02-03)</b>
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On-line Courses	\$428,410	\$1.6 million	\$1.4 million	\$750,000
Governor's Institutes	\$1.4 million	\$2.3 million	\$2.1 million	\$3.46 million
Prof. Ed Records Mgt System	\$92,000	\$48,000	\$177,000	\$170,000

(21) Using the cost-benefit information provided above, explain how the benefits of the regulation outweigh the adverse effects and costs.

The benefits provided to students, parents, taxpayers and employers through the establishment of clear, challenging academic standards far outweigh direct costs to the Commonwealth. The Commonwealth's taxpayers spend more than \$14 billion each year on the education of 1.8 million students enrolled in the public schools of the Commonwealth.

Academic standards provide teachers, parents and students a clear understanding of what they should know and be able to do at the appropriate grade levels. Post-secondary institutions and employers also gain a better understanding of the knowledge, skills and abilities that students graduated from the state's public schools are to possess.

(22) Describe the nonregulatory alternatives considered and the costs associated with those alternatives. Provide the reasons for their dismissal.

The only alternatives available are to have voluntary academic standards or no standards at all. Not establishing these academic standards would result in a negative impact on students, teachers, schools and employers in lowered educational opportunities and accountability.

(23) Describe alternative regulatory schemes considered and the costs associated with those schemes. Provide the reasons for their dismissal.

The Chapter 4 regulations already provide for the establishment of these academic standards. Alternatives would be to amend Chapter 4 to delegate to each local school district the responsibility for establishing their own academic standards or to not address them at all and let each school district determine what it should teach in these subject areas beyond what is specified in the Public School Code. As outlined above, the Board believes the benefits of establishing clear, rigorous academic standards are the best alternative.

## Regulatory Analysis Form

(24) Are there any provisions that are more stringent than federal standards? If yes, identify the specific provisions and the compelling Pennsylvania interest that demands stronger regulation.

The federal government has not established requirements for states to develop academic standards in these disciplines.

(25) How does this regulation compare with those of other states? Will the regulation put Pennsylvania at a competitive disadvantage with other states?

Pennsylvanians established the academic standards for Pennsylvania's schools. However, they were benchmarked against academic standards created in other states and against national academic standards developed by the relevant national professional organization. These regulations will place Pennsylvania on an even field or above that of other states.

(26) Will the regulation affect existing or proposed regulations of the promulgating agency or other state agencies? If yes, explain and provide specific citations.

22 Pa. Code §§ 4.11(g)(6), (8), (9) and 22 Pa. Code §§ 4.12(4), (6), (7) provide for the establishment of state academic standards in Arts and Humanities; Health, Safety and Physical Education; and Family and Consumer Sciences. These regulations will allow the Board to meet its commitment of issuing academic standards in these subject areas.

(27) Will any public hearings or informational meetings be scheduled? Please provide the dates, times, and locations, if available.

The Board developed these regulations through an open public process. Meetings and hearings conducted by the Board's Academic Standards Committee were held on the following dates:

Meetings July 17, 2002 Harrisburg, Dept. of Education 10:00 a.m.

May 16, 2002 Harrisburg, Keystone Bldg. 1:00 p.m.

November 14, 2001 Harrisburg, Dept. of Education 10:00 a.m.

May 9, 2001 Harrisburg, Dept. of Education 10:30 a.m.

April 18, 2001 Harrisburg, Dept. of Education 10:00 a.m.

Hearings November 1, 2001 Gibsonia, Pa Tech Asst. & Trng. Network 11:00 a.m.

October 30, 2001 Harrisburg, Dept. of Education 9:00 a.m.

March 12, 2001 Harrisburg, Dept. of Education 2:00 p.m.

## Regulatory Analysis Form

(28) Will the regulation change existing reporting, record keeping, or other paperwork requirements? Describe the changes and attach copies of forms or reports which will be required as a result of implementation, if available.

The final form regulations will not change existing reports, record keeping or other paperwork requirements.

(29) Please list any special provisions which have been developed to meet the particular needs of affected groups or persons including, but not limited to, minorities, elderly, small businesses, and farmers.

None

(30) What is the anticipated effective date of the regulation; the date by which compliance with the regulation will be required; and the date by which any required permits, licenses or other approvals must be obtained?

Effective upon final publication in the *Pennsylvania Bulletin*.

(31) Provide the schedule for continual review of the regulation.

The State Board has a practice of reviewing its regulations every four years. It plans to commence its review of the Chapter 4 regulations in 2003.



APPENDIX D - OFFICIAL PUBLIC  
COMMENTS

Mr. Tim Wonder  
Executive Vice President  
PA Indep. Insurance Agents  
800 Corporate Cr., Ste.201  
Harrisburg, PA 17110

Mr. Vince Phillips  
PASE Lobbyist  
Phillips Associates  
3610 Kent Drive  
Mechanicsburg, PA 17055

Ms. Karen Y. Christie  
507 Deubler Road  
Camp Hill, PA 17011

Mr. Fredrick Cabell, Jr.  
Director, Education Dept.  
PA Catholic Conference  
223 North Street, Box 2835  
Harrisburg, PA 17126-7367

# Arts + Humanities

Bob Ferguson  
Box 160  
Orbisonia, PA 17243

Resident  
8 Seminary Road  
Wilkes Barre, PA 18702

James Ritchey  
1232 Smithfield Circle  
State College, PA 16801

Ron Delong  
2908 Rockdale Road  
Slatington, PA 18080

Richard Coulter  
Williamsport ASD  
201 W. 3<sup>rd</sup> Street  
Williamsport, PA 17701-6409

Margaret Bauer  
1001 S. 4<sup>th</sup> Street  
Hamburg, PA 19526

Ben Holste  
321 Cypress Hill Drive  
Pittsburgh, PA 15235

Gary Margolis  
Suite 2650  
425 6<sup>th</sup> Avenue  
Pittsburgh, PA 15219

Natalie Ozeas  
778 Lebanon Ave.  
Pittsburgh, PA 15228

Kathleen Welling  
301 Kambach St.  
Pittsburgh, PA 15211

Judy Bernardini  
279 Darlan Hill Drive  
Harrisburg, PA 15239

Pat Chapaitis  
914 Allegheny Ave.  
New Kensington, PA 15068

Mr. Thomas J. West  
Muncy Jr./Sr. H.S.  
200 West Penn St.  
Muncy, PA 17756

Mr. Wayne Fox  
Elementary Band Director  
Cornwall-Lebanon S.D  
105 East Evergreen Road  
Lebanon, PA 17042

Ms. Karen Y. Christie  
507 Deubler Road  
Camp Hill, PA 17011

Dr. Gary Ledebur  
School District of  
Philadelphia  
21<sup>st</sup> Street South of Parkway  
Room 509  
Philadelphia, PA 19103

Jake Dailey  
535 James Hance Court  
Exton, PA 19341

Jennifer Clark  
16 Welden Drive  
Doylestown, PA 18901

Jon Drescher  
425 6<sup>th</sup> Avenue  
Suite 2650  
Pittsburgh, PA 15219

Michael Budden  
1033 Calmar Drive  
Jeannette, PA 15644

Lynn Lavelle  
743 Perry Highway  
Pittsburgh, PA 15229

Kathleen Welling  
301 Kambach Street  
Pittsburgh, PA 15211

Dr. Victoria Smith  
Elizabethtown College  
1 Alpha Drive  
Elizabethtown, PA 17022

Kenneth Cutway  
Hempfield Area S.D.  
RR 6, Box 77  
Greensburg, PA 15601

Ruth Shirey  
PA Geographic Alliance  
680 Diamond Avenue  
Indiana, PA 15701

*Health*

Cindy Douglass  
Director of Education  
Byrnes Health Education Ctr.  
515 S. George Street  
York, PA 17403

Dr. Michael Niziol  
Family Practice Associates of  
Dryden  
POB 669  
83 Lewis Street  
Dryden, NY 13053

Linda Woods Huber  
202 East Third Avenue  
Lititz, PA 17543

Dr. Laura Borsdorf  
120 Spring Mount Road  
Schwenksville, PA 19473

Dr. Betsy McKinley  
R.D. #4, Box 764 Belmar Road  
Franklin, PA 16323

Marjorie Wuestner  
2265 Huntingdon Road  
Huntingdon Valley, PA 19005

Dr. Del Engstrom  
229 Armanda Lane  
Phoenixville, PA 19460

Anne Franchak  
PA Safe Kids Coalition  
1300 Market Street  
Suite 12  
Lemoyne, PA 17043

Ray Rothbardt, President  
P.S.A.H.P.E.R.D.  
820 Knorr Street  
Philadelphia, PA 19111

Dr. Cindy Clark  
10 Lincoln Avenue  
Avis, PA 17721

Sue Schiemer  
312 Boone Road  
Bloomsburg, PA 17815

Dr. Catherine Balsley, Dir.  
Office of Curriculum Support  
S.D. of Philadelphia  
21<sup>st</sup> St. South of the Parkway  
Philadelphia, PA 19103-1099

Matt Trout  
1007 Woodridge Blvd.  
Lancaster, PA 17601-2250

James Crawford, President  
PA Association of Safety Ed.  
RR 3, Box 178  
Wyalusing, PA 18853

Emily David  
1228 North 5<sup>th</sup> Street  
Perkasie, PA 18944

David Patterson  
705 Hood Blvd.  
Fairless Hills, PA 19030

James R. Crawford  
R.R. 3, Box 178  
Wyalusing, PA 18853

Donna Kleinert  
778 Keith Lane  
Lansdale, PA 19446

Grace Katz  
1102 Orleans Road  
Cheltenham, PA 19012

Ms. Karen Y. Christie  
507 Deubler Road  
Camp Hill, PA 17011

Bill Sheeley  
50 North Pine Street  
#302  
Marietta, PA 17547

Fran Bevan  
640 Stonebridge Drive  
Erwin, PA 15642

Michael Budden  
1033 Calmar Drive  
Jeannette, PA 15644

Dr. Gary Ledebur  
School District of  
Philadelphia  
21<sup>st</sup> Street South of Parkway,  
Room 509  
Philadelphia, PA 19103

Vince Phillips  
3610 Kent Drive  
Mechanicsburg, PA 17050

Marylou Folts  
Tredyffrin Easttown S.D.  
738 First Avenue  
Berwyn, PA 19312

Lois Heist  
Tredyffrin Easttown S.D.  
738 First Avenue  
Berwyn, PA 19312

Jan Moore  
2377 Harrow Road  
Pittsburgh, PA 15241

Bill Schrechengost  
Box A  
Alverton, PA 15612

Dr. Brad Bradshaw  
Highway Safety Center  
R. & T. Bldg.  
Indiana, PA 15705

# Family

Andrea Kinney  
Derry Area Middle School  
994 North Chestnut Street  
Derry, PA 15627

Irene Bender  
Superintendent, Springfield Twp.  
School District  
1901 E. Paper Mill Road  
Oreland, PA 19075-2499

Donna Kleinert  
778 Keith Lane  
Lansdale, PA 19446

Grace Katz  
1102 Orleans Road  
Cheltenham, PA 19012

Sandra Kokinda  
225 Gilberts Hill Road  
Lehighton, PA 18235

Jann MacClean  
1820 Ferguson Lane  
Blue Bell, PA 19422

Mary Jane Mcloud  
1816 Chestnut Street  
Philadelphia, PA 19103

Royanne Thorpe  
3127 N. Latrona Street  
Philadelphia, PA 19132

Lisa Nissley  
301 Parkview Drive  
Manheim, PA 17545

Peggy Lehnen  
518 Crescent Street  
Pendle, PA 19047

Pat Zito  
1300 Wintergreen Lane  
Fairview, PA 16415

Susan Stoner  
994 N. Chestnut Street,  
Extension  
Derry, PA 15627

Victoria Grebschaw  
Seton Hill College  
Box 307  
Greensburg, PA 15601-1599

Fran Bevan  
640 Stonebridge Drive  
Erwin, PA 15642

Michael Budden  
1033 Calmar Drive  
Jeannette, PA 15644

Michelle Chiavetta  
90 Coraopolis Road  
Coraopolis, PA 15108

Cecelia McCorale  
608 Washington Avenue  
Jeannette, PA 15644

Dr. Gary Ledebur  
School District of  
Philadelphia  
21<sup>st</sup> Street South of the  
Parkway, Room 509  
Philadelphia, PA 19103

Rob Brown  
Dept. of Education  
6<sup>th</sup> Floor

Jeanne Charlesworth  
Hatboro Horsham S.D.  
899 Horsham Road  
Horsham, PA 19044

Mary Kay Rhude-Faust  
2593 Washington Drive  
Gilbertsville, PA 19525

INTEROFFICE MAIL

Ms. Karen Y. Christie  
507 Deubler Road  
Camp Hill, PA 17011

Jeanne Charlesworth  
Hatboro Horsham S.D.  
899 Horsham Road  
Horsham, PA 19044

Lois Heist  
738 First Avenue  
Berwyn, PA 19312

Leah Christman  
9582 Ponderosa Court  
Kempton, PA 19529

Lydia Hess  
155 Ridge Road  
Boiling Springs, PA 17007

Patricia Koosar-Wall  
308 Davinci Drive  
Irwin, PA 15642

Susan Ansell  
Box A  
Alverton, PA 15612

FACE SHEET  
FOR FILING DOCUMENTS  
WITH THE LEGISLATIVE REFERENCE BUREAU  
(Pursuant to Commonwealth Documents Law)

# 2253

DO NOT WRITE IN THIS SPACE

Copy below is hereby approved as to form and legality, Attorney General

BY: \_\_\_\_\_  
(DEPUTY ATTORNEY GENERAL)

\_\_\_\_\_  
DATE OF APPROVAL

Check if applicable  
Copy not approved. Objections attached.

Copy below is hereby certified to be a true and correct copy of a document issued, prescribed or promulgated by:

State Board of Education  
\_\_\_\_\_  
(AGENCY)

DOCUMENT/FISCAL NOTE NO. 006-276

DATE OF ADOPTION: \_\_\_\_\_

BY: John Kest

TITLE: Acting Executive Director  
(EXECUTIVE OFFICER, CHAIRMAN OR SECRETARY)

Copy below is hereby approved as to form and legality, Executive or Independent Agencies.

BY: [Signature]

10/18/02  
\_\_\_\_\_  
DATE OF APPROVAL

(Deputy General Counsel)  
(~~Chief Counsel, Independent Agency~~)  
(Strike inapplicable title)

Check if applicable. No Attorney General approval or objection within 30 days after submission.

Final-Form

State Board of Education  
Title 22 - Education  
Chapter 4 - Annex A  
Appendix D: Academic Standards for  
Arts & Humanities, Health, Safety, & Physical Education  
and  
Family and Consumer Sciences

**PREAMBLE**  
**DEPARTMENT OF EDUCATION**  
**STATE BOARD OF EDUCATION**  
**22 PA. CODE-EDUCATION**  
**CHAPTER 4: ACADEMIC STANDARDS AND ASSESSMENT**

The State Board of Education amends Title 22 of the Pennsylvania Code by amending Chapter 4 (Academic Standards and Assessment) to add academic standards for Arts and Humanities; Health, Safety, and Physical Education; and Family and Consumer Sciences, as set forth in Annex A, under the authority of the Public School Code of 1949 (24 P.S. §§ 1-101—27-2702).

Notice of proposed rulemaking was published at 32 Pa.B.905 (February 16, 2002) with an invitation to submit written comments.

*Purpose*

These final form amendments to Chapter 4 will add academic standards for the Arts and Humanities; Health, Safety, and Physical Education; and Family and Consumer Sciences. 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.

*Comments and Responses*

Public comment was received with regard to the proposed changes to the standards, with many requests for technical edits and clarifications. The Senate Education Committee held hearings on March 26<sup>th</sup>, 2002. The House Education Committee held hearings on April 3, 2002. While no official House Education Committee comments were submitted, the Chairman of the Committee forwarded House staff comments to the Board for consideration. In his letter to the Board included with the comments, the Chairman

noted the need to emphasize, in the standards for Health, Safety and Physical Education, sexual abstinence and avoid sharing drug paraphernalia as means for prevention of diseases such as AIDS, HIV, and sexually transmitted diseases. In addition, the House staff raised issues related to the omission of driver safety in the standards. IRRC provided detailed comments on the regulations, largely to clarify and technically correct the proposed standards, as well as suggested improvements of the standards.

Comments concerning the proposed standards were most commonly received in the areas of general comments, clarifying the meaning of individual standards, added and deleted words, definitions and examples, misspellings, punctuation errors and typographical errors, and policy considerations.

#### *Overall Comments and Policy Considerations*

There were general comments and policy considerations about all three of the proposed standards as a whole. The House staff suggested that the term “descriptor” be removed from all of the proposed standards because it is not a common usage term. This term should remain in the standards since it has become a more widely used term in the field of education. This is due to the fact that educators have added such terms as “standard category,” “standard statement,” and “standard descriptor” to their lexicon in order to communicate with one another regarding the outline of the standards.

Aside from general comments, there was the submission of comments on overall policy considerations. A public commentator indicated that the standards created financial hardships for the districts. Districts are charged with curriculum development. Although the standards may require some realignment and adjustment to the district’s planned instruction, most standards concepts have been part of the courses previously

taught. Therefore, the impact of the proposed standards in their final form would not create financial hardship for the districts.

There was the concern that there was too much to teach with the new standards, and as a result, educational basics would suffer. There was the issue of whether the standards discouraged local school board control of curriculum and allocation of resources to best meet the needs of their school's population. Educational basics for the twenty first century, however, require students to deal with massive amounts of information. Instruction should model how many sources of information can be combined within one topic. Standards need to be taught through an interdisciplinary approach across curriculums. All content areas should be required to teach and instruct the basics within their subject areas. In addition, the standards encourage schools to offer planned instruction through separate courses, separate instructional units within a course or as part of an interdisciplinary practice.

A public commentator questioned whether textbooks are written to comport with the standards. While standards-based textbooks exist, they are often aligned with national standards, and the standards of large states. It is anticipated that Pennsylvania's standards will be considered when textbook publishers revise and update their offerings. Therefore, as a result, the districts will have to do a crosswalk in order to match the textbooks to the standards, and where gaps exist, use handouts, workbooks, videos, library resources, the internet, or other instructional resources.

The same public commentator also addressed whether assessments needed to be changed to align with the standards. Schools continually update and revise their curriculum and local assessment tools. Upon final publication of new academic



standards, Section 4.12 requires that schools will revise their curriculum and align their local assessments. State assessments are neither planned for these standards, nor are they required by the new federal education requirements of the *No Child Left Behind Act of 2001*. See P.L. 107-110, 115 Stat. 1425 (January 8, 2001).

This public commentator suggested that a review process should be determined now and put into place upon implementation of the standards. Upon the Board's assessment of the review process, the Board determined that procedurally there is the need to focus on completion of the standards adoption process now, and then participate in an overall future review of Chapter 4 in its entirety. This review will take place in 2003.

#### *Arts and Humanities*

##### General Comments

IRRC provided general comments regarding the proposed standards for Arts and Humanities. In the Table of Contents, IRRC identified various inconsistencies between the Table of Contents and the format of the standards, including: in Standard 9.1, the Table of Contents lists standard statements A through H, but the text contains standard statements A through K; in Standard 9.2, the Table of Contents lists standard statements A through E, but the text of Section 9.2 contains standard statements A through L; in Section 9.3, the Table of Contents lists standard statement A through E, but the text contains standard statements A through G. IRRC recommended that in the final-form regulations, the lettering in the Table of Contents should match the lettering in the text of the standards. IRRC also suggested that the identifying title associated with each letter in the Table of Contents should reflect the content of the corresponding standards in the

body of the regulation. Both of these suggestions were included in the final-form regulation.

*Clarifying the Meaning of Individual Standards*

In addition to general comments, several changes were recommended by IRRC to make the individual standards for Arts and Humanities more precise and clear. First, Standards 9.1.3.H, 9.1.5.H, 9.1.8.H, and 9.1.12.H refer to “issues of cleanliness related to the arts.” IRRC indicated that the phrase “issue of cleanliness” is vague. IRRC suggested that clarity would be improved if these descriptors were rephrased to specifically identify the activities encompassed by these standards. In response to this suggestion, the phrase “at work and performance spaces” was added to each appropriate level of the standards in the final-form regulations in order to make clear that “cleanliness” involves issues of hygiene related to the work spaces in the arts.

Standards 9.1.3.J and 9.1.3.K require students “Know and use traditional and contemporary technologies.” Standard statements 9.1.5.J and 9.1.5.K require students to “Apply traditional and contemporary technologies . . . .” IRRC indicated that the difference between these standards is unclear, as the phrase “know and use” and the term “apply” could be interpreted as synonymous. IRRC suggested that examples of the types of skills required in each of these standards would help to clarify the actual intent of these standards.

These examples were not included in the final-form regulations, because “know and use” and “apply” require different levels of knowledge and skill, and therefore the terms are not synonymous and the suggested examples are not necessary. Application of “know and use” allows students to identify the traditional and contemporary technologies

at the lowest appropriate level (e.g., know and use a keyboard). At the third grade level “know and use” is the introduction, without application, to creative production. The fifth grade level is the application of “know and use” to practice and exploration through the creation of works in the art works (e.g. art, music, dance and theatre). Examples are listed at each grade level. At the third grade level, students can “know and use” any of the examples listed under traditional and contemporary technologies. For example, third graders can “know and use” charcoal as it is a traditional technology, and they also can “know and use” a CD-ROM as it is a contemporary technology.

“Apply” means a student may use the technologies to create a work in the arts (e.g., apply the use of the keyboarding skills to the creating of a work in the arts). By the fifth grade level, students can “apply” additional skills to traditional wooden tools used in ceramics. They can apply and work with multi-media to interface with CD-ROMs. Like application of “know and use,” each of these levels of “apply” has examples of both traditional and contemporary technologies.

Standards 9.3.3.A and 9.3.3.E require third graders to “Recognize critical processes used in the examination of works in the arts and humanities” and “Recognize and identify types of critical analyses in the arts and humanities.” IRRC agreed with the House staff, that these requirements are inappropriate, as these standards are higher-level processes and would be difficult for kindergarten through third grade students to achieve. IRRC suggested, therefore, that the inclusion of these standards at the third grade level be reexamined. The House Staff also questioned the age appropriateness of Standard 9.4.3.A, which requires third graders “Know how to respond to a philosophical statement

about works in the arts and humanities . . . .” The House Staff suggested that this standard needs clarification.

All of these standards should remain at the third grade level, as they were concepts supported by research. According to national research of critical response, students at this age can make judgments about art, music, dance, and theatre. Based upon documented evidence, this critical process is appropriate and very similar to that already used in the sciences.

Standard 9.4.5.B requires fifth grade students “Investigate and communicate multiple philosophical views about works in the arts.” The House staff suggested, and IRRC agreed, that this Standard is confusing, and should be reworded to clarify its intent. Both the House staff and IRRC also suggested clarification of the phrase “multiple philosophical views.”

“Multiple philosophical views” allow more than one specific interpretation of works in the arts. For example, individuals and children can have more than one philosophical view of a work in the arts; one child may like a work of art, while another may not like the images. This is philosophy at its lowest level. Currently, the Department is developing an online course for generalist and arts educators in order to provide them with a basic understanding of aesthetics. Four levels have been internationally researched and are identified, used, and practiced throughout the course. These four levels of aesthetics include: internalize, personalize, extend and transcend. For example, a viewer may see a movie and like it; another sees it and feels that it follows the book (internalize), while another may think that the movie does not follow the book and does not like the actor interpreting the male lead (personalize); another person may feel the

movie is great since it helps them connect to his or her heritage. The third level is where the person sees a movie, personalizes the ideas, thinks about them, and expands the idea to other thoughts and beliefs. The highest level is to transcend thoughts in order to create or behave differently. It is anticipated that these concepts will encompass the requirements of Standard 9.4.5.B, and therefore this standard was not re-worded in the final-form regulation.

*Added and Deleted Words, Definitions and Examples*

There were various suggestions that definitions be added or deleted from the Glossary. The glossary of terms used in the standards for the Arts and Humanities has been identified in the document, in order that educators, community resources (state art museums, artists, etc.), and parents use the same vocabulary when having a discussion in their school district. The committee for these standards used terms that were developed based on national standards, and sometimes more specifically applied to standards used in Pennsylvania.

Standard 9.1 lists the elements and principles of art forms that are included in the proposed standards. IRRC agreed with the suggestion of the House staff, and recommended that “style” should be added to the list of principles related to music. IRRC noted that “style” is included as a principle for dance and music. “Style” was not added to the list of principles related to music in Standard 9.1.3.A, because its inclusion as a principle is inconsistent with the National Standards for Music. These national standards indicate that style is not considered to be an element or principle. “Style” is listed in the national standards and is used as “how (distinctive or characteristic manner) the elements and principles are treated.”

Furthermore, “style” is included in Standard 9.2.3.C when students are required to “Relate works in the arts to varying *styles* and genre to the periods in which they were created . . . .” Students can study “style” in all of the art forms when they hear and/or see a work of art in relation to both historical and cultural contexts. Therefore, style was not added as a principle for dance and music in the final-form regulations. (It should be noted that all of the national standards for the arts were used to develop these standards, and Pennsylvania dance and theatre teachers were very active on the committee to develop these standards, and agreed with the use and interpretation of the terms in the standards that are related to their field.)

In addition, at the request of the House staff, a definition for “multi-media” was added to the Glossary, as the term was used in Standard 9.1.B.

At the suggestion of IRRC, the following terms were deleted from the Glossary in the final-form regulation, as these terms were not used in the standards: “arts criticism;” “arts integration;” “formal production/exhibition;” “repertoire;” and “synthesis.” “Arts resource” was not deleted, at the suggestion of IRRC, because it is used in Standard 9.1.12. (See Standard 9.1.12.A). In addition, the term “aesthetic response” was added to the Glossary. IRRC requested that the term “assess” be removed from the Glossary, and that the term “assessment” be added to the Glossary. “Assess” was included, as opposed to “assessment,” because the word “assess” was used in the standards.

### *Health, Safety, and Physical Education*

#### General Comments

IRRC indicated overall concerns with the age appropriateness of various portions of the proposed standards for Health, Safety, and Physical Education. For example,

IRRC questioned whether the content of Standards 10.5.3.B was appropriate for third graders, and whether the content of Standards 10.5.6.B was appropriate for sixth graders. IRRC suggested that the Board reexamine inclusion of these standards at the third and sixth grade levels. The House staff agreed, and further indicated that Standards 10.5.3.B, D, E, and 10.5.6.B, D, and E appear to be highly analytical and would be difficult for all third grade and all sixth grade children to achieve. Therefore, the House staff suggested that clarifying language or examples be used or that those standards, as written, be deleted.

These Standards, in their current forms, are appropriate at both levels. The age designation of these concepts is based on national research and the verbs used therein reflect Bloom's taxonomy. Furthermore, the teachers who participated in writing these standards are experts at these grade levels and have experience implementing these concepts at the levels designated. These teachers ensure that the students can be expected to "describe," "use," and "apply" the cognitive information in an age appropriate manner.

Furthermore, the standard statements were written to support both cognitive and psychomotor development. Children currently are introduced to these concepts but have not been provided with the appropriate terminology. In the past, these concepts have been taught through incidental rather than intentional teaching. Based on the proposed standards, children will now be provided with the appropriate terminology through intentional teaching.

The use of proper terminology supports the integration of subject learning across the disciplines. The language used within the standard statements encourages physical education teachers to intentionally teach the concepts with an interdisciplinary focus. By

utilizing the correct terminology, the physical education standards can support other disciplines as well as other disciplines supporting physical education. The local school district physical education teachers select the specific skill or activity that best demonstrates the specific concept that should be taught. Explanations of the terminology used are provided in the glossary.

Standard 10.5.3.E requires students “Know and describe scientific principles that affect movement . . . .” This standard lists gravity as an example of a scientific principle. IRRC questioned whether this standard is too advanced for the third grade level, as in the Board’s existing science standards; the concept of gravity is not addressed until the seventh grade. IRRC suggested that the Board reconsider inclusion of this standard at the third grade level.

Standard 10.5.6.E requires students to “Identify and use scientific principles that affect basic movement . . . .” This standard lists Newton’s Laws of Motion as one of the scientific principles. IRRC questioned whether this standard is too advanced for the sixth grade level, as Newton’s Laws are not addressed in the Board’s existing science standards until the tenth grade in Standard 3.4.10.C. IRRC suggested that the Board should reconsider inclusion of this standard at the sixth grade level.

The Health, Safety and Physical Education standards and the Science and Technology standards align with respect to content and student expectations. The science standards have been written in a descriptive format while the standards for Health, Safety and Physical Education reinforce the use of proper terminology. Science standards 3.4.4.C and 3.4.7.C align with the Standards 10.5.3.E and 10.5.6.E. Both of these standards address the issues of force and motion. Science standard 3.4.4.C indicates that



students at this level should “recognize forces that attract or repel other objects and demonstrate them.” One type of force that applies to this standard is gravity, which is listed as a scientific principle that affects movement in Standard 10.5.3.E. While the specific term “gravity” is not used until later in the science standards, the concept of gravity is introduced by grade 4. In Standard 3.4.4.C, students at this level should “describe various types of motion.” Standard 10.5.3.E identifies rotation, which is one type of motion. Standard 3.4.4.C requires students to “compare the relative movements of objects and describe types of motion that are evident.” Standard 10.5.3.C identifies the concept of “force production/force absorption.” These are factors that affect both movement and the resultant movement.

The same type of correlation can be made between Standard 3.4.7.C and Standard 10.5.6.E. Standard 3.4.7.C requires the student to “identify and explain the principles of force and motion” and “describe the motion of an object based on its position, direction and speed.” This information comprises Newton’s Laws of Motion that are identified in Standard 10.5.6.E. While the specific term “Newton’s Laws of Motion” is not used until later in the science standards, the concept of Newton’s Laws is introduced by grade 7.

Therefore, upon review, the Board determined that both of these standards were appropriate at the respective grade levels, and both standards remained in the final-form regulation.

#### *Clarifying the Meaning of Individual Standards*

A public commentator addressed that Standard 10.1.6.B requires that sixth grade students are taught to identify and describe the structure and function of the reproductive system, and Standard 10.1.6.E requires students to learn about sexually transmitted

diseases. This public commentator questioned whether parents would object to these topics being taught at that grade level, and whether parents would object to the topics being taught in a mixed group of boys and girls. Statistics demonstrate that as of fifth grade, students need to be aware of both the structure and function of the reproductive system, as well as of sexually transmitted diseases, due to the occurrence of pregnancy at very young ages. As a result, students must be properly educated on these topics for their own self-protection.

This same public commentator suggested that parents should be informed that their children are being taught these subjects and be permitted to review the instructional materials. Parents also should have the option of allowing their children to be instructed on these subjects outside the classroom. These options exist at present. Sections 4.4(d)(1) and (3) provide that: “[s]chool districts . . . shall adopt policies to assure that parents or guardians have . . . access to information about the curriculum, including academic standards to be achieved, instructional materials . . . the right to have their children excused from specific instruction which conflicts with their religious beliefs . . . .” Furthermore, the standards are not only written for teachers to plan their instruction, but also to aid parents in the education of their children. As a result, parents have access to the actual standards as they are provided on the Department’s website.

With respect to the concept of the family, this public commentator also recommended that the standards should be written to address the importance of marriage as an institution. It is not the purpose of the standards to discuss personal relationships or establish a value system, in order to ensure that no lifestyle judgments should ever be made or encouraged in the classroom.

In Standards 10.1.6.E and 10.1.9.E, the House staff suggested that the use of “sexual abstinence” as a separate bullet (not simply as an example) should be included in the standards on prevention of STD/HIV/AIDS and personal choice in disease prevention, as current regulations emphasize that abstinence is the only “reliable way” to prevent the transmission of sexually transmitted diseases (STDs). See 22 Pa. Code §4.29(b). The House staff further indicated that abstinence as well should be emphasized in these standards in this manner. IRRC agreed with a concern addressed by a public commentator regarding Standard 10.1. In this standard, education on sexually transmitted diseases is included in the sixth grade in Standard 10.1.6.E, but abstinence is not addressed until ninth grade in Standard 10.1.9.A. IRRC agreed that this apparent inconsistency is confusing.

Standard 10.1.6.E requires students “Identify and describe health problems that can occur throughout life.” According to IRRC, it would appear that classroom discussion of *any* disease would logically include dialogue on how a disease is contracted *and* how it can be prevented. Therefore, IRRC suggested that the Board should consider including disease prevention in both the 6<sup>th</sup> and the 9<sup>th</sup> grade standards.

In order to reinforce the concept and to make the introduction of abstinence consistent, Standard 10.1.6.E was revised to read as follows: “Identify health problems that can occur throughout life and describe ways to prevent them. Diseases (e.g. cancer, diabetes, STD/HIV/AIDS, cardiovascular disease). Preventions (i.e. do not smoke, maintain proper weight, eat a balanced diet, practice sexual abstinence, be physically active).” According to this standard, to practice sexual abstinence is an “i.e.” which, therefore, means that this prevention is mandated and must be taught by grade 6. It also

must be noted that the standard statements (the statements with letters) are intertwined, and can be taught simultaneously. However, the information within the grade levels is written so that grade 3 information is a precursor to grade 6 information, etc. The standards statements are to be integrated and should not be taught in isolation of the other standard statements.

Stressing abstinence from sexual activity was an extremely important focal point within the standards committee. Section 4.29 (relating to HIV/AIDS and other life-threatening and communicable diseases) states: “[P] rograms discussing transmission [of disease] through sexual activity shall stress that abstinence from sexual activity is the only reliable means of preventing sexual transmission [of disease].” See §4.29(b). Section 4.29 should remain in the curriculum regulations to emphasize the importance of abstinence. The listing of abstinence as a bullet, in addition to the content of Section 4.29, will reinforce the importance of abstinence.

Standard 10.2.9.D states: “Analyze and apply a decision-making process to adolescent health and safety issues.” The House staff suggested that the example of teenage sexual abstinence should be included in this standard. Understanding the decision-making process and possessing the ability to apply the process is a foundation of health education and the development of a health literate individual. This process is critical to every topic that is discussed in health education. Since this process is critical to all areas of health, the standards committee determined that no bullets should be provided. By not listing specific bullets, the standard would emphasize the importance of the decision making process for all areas.

Added and Deleted Words, Definitions, and Examples

The other issue raised regarding the proposed standards was driver's safety education. In Standard 10.3, the House staff suggested the inclusion of driver's safety education. The staff indicated to specifically include vehicle safety, traffic safety, and basic driving skills to Standards 10.3.9. and 10.3.12. In addition, IRRC considered the recommendations of a public commentator, who also suggested the expansion of proposed Standard 10.3 to include driver's education. IRRC indicated that it is reasonable to assume that most students will drive during their lifetime. Given the statistical significance of teenage motor vehicle accidents and fatalities, IRRC suggested that a standard should be included for classroom instruction of driver's safety education.

The Standards recognize the importance of driver education. Safety education begins in grade 3 and progresses through grade 12. In Standard 10.3.3.A, modes of transportation are addressed. Children learn about following rules, wearing seatbelts and safety practices involved in different modes of transportation. By grade 9, Standard 10.3.9 requires that the students "Analyze the role of individual responsibility for safe practices and injury prevention in the home, school and community." Modes of transportation are once again discussed, including vehicular, passenger, and all-terrain vehicles. By grade 12, Standard 10.3.12.A requires that students "Assess the personal and legal consequences of unsafe practices in the home, school, or community." Discussion involves personal injury, impact on others, loss of motor vehicle operator's license, etc. Every bullet listed in these standards encourages driver's safety education. Therefore, the Board felt that the issue of driver's safety education had been sufficiently addressed by the proposed standards. Furthermore, driver's education is not currently mandated in

Chapter 4; therefore, these particular standards cannot mandate the teaching of basic driving skills.

Aside from the issue of driver education, other additions were suggested. Standard 10.2.3.A refers to “community helpers.” IRRC suggested that for clarity, this term be defined in the Glossary, and such a definition was included in the final-form regulation.

In the Glossary, the term “biomechanics” was changed to “biomechanical principles,” at the suggestion of IRRC, in order for consistency with its usage in Standard 10.5.12.E. IRRC recommended that the term “cardiorespiratory fitness” be added to the Glossary. In order to be consistent with the standards, the term “cardiorespiratory fitness,” therefore, was added to the Glossary.

The term “refusal strategies” was removed from the Glossary and replaced with “refusal skills,” in order to be consistent with Standard 10.3.3.C. While IRRC suggested that the term “multi-media” be added to the Glossary, the term “media sources” was added to the Glossary because this term is used in Standard 10.2.3.C.

#### *Family and Consumer Sciences*

##### General Comments

IRRC noted that a public commentator encouraged the need to include insurance concepts in the proposed standards (by way of its inclusion in either Appendix C or D). IRRC agreed when this public commentator indicated that every student will eventually be faced with purchasing an insurance policy of some type, such as car insurance, health insurance, or renter’s or homeowner’s insurance. IRRC stated, therefore, that it would be reasonable to include basic insurance concepts in the standards, in particular in Standard

11.1. While the standards do not include an actual definition of insurance, the final-form regulations include “insurance” as an example used in Standard 11.1.9.B: “Explain the responsibilities associated with managing personal finances (e.g. savings, checking, credit, non-cash systems, investments, insurance).” Through application of this standard, teachers should develop and provide their students with a basic understanding of insurance concepts.

*Clarifying the Meaning of Individual Standards*

The House staff questioned the age appropriateness for Standard 11.1.3.F. The House staff was concerned that all third-grade students might be instructed in the criteria for evaluating goods and services, but there was the question of whether they would be able to apply those criteria. All of the areas listed, however, have elementary level teaching resources. The purpose of these standards is to help students realize that they are making a decision when they exchange money for a product or services. Furthermore, these elementary level teaching resources indicate that the relevant age and grade levels applied to this particular standard can understand this concept. The House staff also suggested clarification for the use of “sound” in classifying foods in Standard 11.3.3.G. In the area of weight management, one of the newer practices is to use foods with a loud crunch, as these sounds are more satisfying (i.e. “celery”).

*Added and Deleted Words, Definitions, and Examples*

At the suggestion of IRRC, the final-form regulation resolved the inconsistency of the definition of “child development stage” in the Glossary and the appropriate stages listed in Standard 11.4.3.A were included in the definition. Age ranges were added to correspond to stages of child development in Standard 11.4.3.A. The job of a glossary is

to clearly communicate the intent of the standard. An individual looking for the stages of child development would begin with the term “child development.” While it is true that the two terms are almost interchangeable, “child development stage” was maintained for the convenience of the reader. As a result, the definition “child development stage” remained in the Glossary, as opposed to “stages of child development.”

A typographical error also was changed in Standard 11.4.6.A. The inconsistency between the Glossary term “child-care provider considerations” and the use of “consideration prior to selecting child care providers” in Standard 11.4.6.D also was addressed and resolved in the final-form regulation, as Standard 11.4.6.D was amended to read: “Identify child-care provider considerations.”

#### *Affected Parties*

The final form amendments to Chapter 4 affect the students and professional employees of the public schools of the Commonwealth (including intermediate units, area vocational-technical schools, public charter and alternative schools).

#### *Costs and Paperwork Estimates*

The Department believes implementation of these regulations will be cost neutral to school districts. Costs to implement this regulation may include curriculum development and the professional development of teachers. However, these costs may be cost neutral, as they have already been included in the budget. For example, curriculum revision 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 state efforts: technical assistance in curriculum development provided by Department staff; implementation materials developed by the Department;



training provided by intermediate units and professional associations to public schools. Professional development of teachers is an ongoing activity for schools and is addressed in the normal budgeting process by school districts. Specific programs designed to support the implementation of these standards will minimize any financial impact on school districts. Current year funds available for the Department to support these activities total \$4.38 million. These funds are available for implementation of both Appendix D, and other academic standards, by way of professional development.

*Effective Date*

These amendments to Chapter 4 will become effective upon final publication in the *Pennsylvania Bulletin*.

*Sunset Date*

The effectiveness of Chapter 4 will be reviewed by the State Board of Education every 4 years, in accordance with the Board's policy and practice respecting all regulations promulgated by the Board. The Board plans to initiate its review of Chapter 4 in 2003. Thus, no sunset date is necessary.

*Regulatory Review*

Under Section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)) on January 31, 2002, the Board submitted a copy of the proposed rulemaking published at 32 Pa.B.905 to IRRC and to the Chairpersons of the House and Senate Committees on Education for review and comment.

In compliance with section 5 (c) of the Regulatory Review Act, the Board also provided IRRC and the Committees with copies of the comments received as well as

other documentation. In preparing the final-form regulations, the Board considered the comments received from IRRC, the Committees and the public.

Under section 5.1(d) of the Regulatory Review Act (71 P.S. § 745.5a(d)), the final-form regulations were approved by the Senate Education Committee on \_\_\_\_\_ and approved by the House Education Committee on \_\_\_\_\_. IRRC met on \_\_\_\_\_ and approved the final-form regulations in accordance with section 5.1(e) of the Regulatory Review Act.

#### *Contact Person*

The official responsible for information on these final-form regulations is James E. Buckheit, Acting Executive Director of the State Board of Education, 333 Market Street, Harrisburg, PA 17126-0333, (717) 787-3787 or TDD (717) 787-7367.

#### *Findings*

The Department finds that:

- (1) Public notice of the intention to adopt these final-form regulations was given under sections 201 and 202 of the act of July 31, 1968 (P.L. 769, No. 240) (45 P.S. §§ 1201 and 1202) and the regulations promulgated thereunder in 1 Pa. Code §§ 7.1 and 7.2.
- (2) A public comment period was provided as required by law and all comments were considered.
- (3) The final-form regulations are necessary and appropriate for the administration of the Act.

*Order*

The Board, acting under the authorizing statute, orders that:

- (a) The regulations of the Board, 22 Pa. Code Chapter 4, are amended by adding Appendix D to read as set forth in Annex A.
- (b) The Acting Executive Director will submit this order and Annex A to the Office of General Counsel and the Office of Attorney General for review and approval as to legality and form as required by law.
- (c) The Acting Executive Director of the Board shall certify this order and Annex A and deposit them with the Legislative Reference Bureau as required by law.
- (d) This order is effective upon final publication in the *Pennsylvania Bulletin*.



JAMES E. BUCKHEIT,

*Acting Executive Director*

**ANNEX A  
TITLE 22: EDUCATION  
CHAPTER 4**

**APPENDIX D**

**Academic Standards for the Arts and Humanities**

**and**

**Health, Safety, and Physical Education**

**and**

**Family and Consumer Sciences**

# **Proposed Academic Standards for the Arts and Humanities**



*Pennsylvania Department of Education*

# Proposed Academic Standards for the Arts and Humanities

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# **Proposed Academic Standards for the Arts and Humanities**

## **XXVI. INTRODUCTION**

The **Proposed Academic Standards for the Arts and Humanities** describe what students should know and be able to do at the end of grades 3, 5, 8 and 12 in the visual and performing arts and the understanding about humanities context within the arts. The arts include dance, music, theatre and visual arts. The arts and the humanities are interconnected through the inclusion of history, criticism and aesthetics. In addition, the humanities include literature and language, philosophy, social studies and world languages. The areas encompassed in the humanities such as jurisprudence, comparative religions and ethics are included among other standards documents. The interconnected arts and humanities areas are divided into these standards categories:

- ◇ 9.1. Production, Performance and Exhibition of Dance, Music, Theatre and Visual Arts
- ◇ 9.2. Historical and Cultural Contexts
- ◇ 9.3. Critical Response
- ◇ 9.4. Aesthetic Response

The **Proposed Academic Standards for the Arts and Humanities** define the content for planned instruction that will result in measurable gains for all students in knowledge and skills and provide a basis of learning for continued study in the arts. The unifying themes of production, history, criticism and aesthetics are common to each area of study within the **Proposed Academic Standards in the Arts and Humanities**.

- Dance Education is a kinesthetic art form that satisfies the human need to respond to life experiences through movement of the physical being.
- Music Education is an aural art form that satisfies the human need to respond to life experiences through singing, listening and/or playing an instrument.
- Theatre Education is an interdisciplinary art form that satisfies the human need to express thoughts and feelings through written text, dramatic interpretation and multimedia production.
- Visual Arts Education is a spatial art form that satisfies the human need to respond to life experiences through images, structures and tactile works.
- Humanities Education is the understanding and integration of human thought and accomplishment.

## **Proposed Academic Standards for the Arts and Humanities**

Knowledge of the Proposed Academic Standards for the Arts and Humanities incorporates carefully developed and integrated components:

- Application of problem solving skills
- Extensive practice in the comprehension of basic symbol systems and abstract concepts
- Application of technical skills in practical production and performance
- Comprehension and application of the creative process
- Development and practice of creative thinking skills
- Development of verbal and non-verbal communication skills

These standards provide the targets essential for success in student learning in arts and humanities. They describe the expectations for students' achievement and performance throughout their education in Pennsylvania schools. Utilizing these standards, school entities can develop a local school curriculum that will meet their students' needs.

The arts represent society's capacity to integrate human experience with individual creativity. Comprehensive study of the arts provides an opportunity for all students to observe, reflect and participate both in the arts of their culture and the cultures of others. Sequential study in the arts and humanities provides the knowledge and the analytical skills necessary to evaluate and critique a media-saturated culture. An arts education contributes to the development of productive citizens who have gained creative and technological knowledge necessary for employment in the 21st Century.

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



## Proposed Academic Standards for the Arts and Humanities

<b>9.1. Production, Performance and Exhibition of Dance, Music, Theatre and Visual Arts</b>			
9.1.3. GRADE 3	9.1.5. GRADE 5	9.1.8. GRADE 8	9.1.12. GRADE 12
<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>A. Know and use the elements and principles of each art form to create works in the arts and humanities.</b></p> <ul style="list-style-type: none"> <li>• Elements               <ul style="list-style-type: none"> <li>➤ Dance: • energy/force • space • time</li> <li>➤ Music: • duration • intensity • pitch • timbre</li> <li>➤ Theatre: • scenario • script/text • set design</li> <li>➤ Visual Arts: • color • form/shape • line • space • texture • value</li> </ul> </li> <li>• Principles               <ul style="list-style-type: none"> <li>➤ Dance: • choreography • form • genre • improvisation • style • technique</li> <li>➤ Music: • composition • form • genre • harmony • rhythm • texture</li> <li>➤ Theatre: • balance • collaboration • discipline • emphasis • focus • intention • movement • rhythm • style • voice</li> <li>➤ Visual Arts: • balance • contrast • emphasis/focal point • movement/rhythm • proportion/scale • repetition • unity/harmony</li> </ul> </li> </ul>			
<p><b>B. Recognize, know, use and demonstrate a variety of appropriate arts elements and principles to produce, review and revise original works in the arts.</b></p> <ul style="list-style-type: none"> <li>• Dance: • move • perform • read and notate dance • create and choreograph • improvise</li> <li>• Music: • sing • play an instrument • read and notate music • compose and arrange • improvise</li> <li>• Theatre: • stage productions • read and write scripts • improvise • interpret a role • design sets • direct</li> <li>• Visual Arts: • paint • draw • craft • sculpt • print • design for environment, communication, multi-media</li> </ul>			
<p><b>C. Recognize and use fundamental vocabulary within each of the arts forms.</b></p>	<p><b>C. Know and use fundamental vocabulary within each of the arts forms.</b></p>	<p><b>C. Identify and use comprehensive vocabulary within each of the arts forms.</b></p>	<p><b>C. Integrate and apply advanced vocabulary to the arts forms.</b></p>

## Proposed Academic Standards for the Arts and Humanities

<p>D. Use knowledge of varied styles within each art form through a performance or exhibition of unique work.</p> <p>E. Demonstrate the ability to define objects, express emotions, illustrate an action or relate an experience through creation of works in the arts.</p> <p>F. Identify works of others through a performance or exhibition (e.g., exhibition of student paintings based on the study of Picasso).</p> <p>G. Recognize the function of rehearsals and practice sessions.</p> <p>H. Handle materials, equipment and tools safely AT WORK AND PERFORMANCE SPACES.</p> <ul style="list-style-type: none"> <li>• Identify materials used.</li> <li>• Identify issues of cleanliness related to the arts.</li> <li>• Recognize some mechanical/electrical equipment.</li> <li>• Recognize differences in selected physical space/environments.</li> <li>• Recognize the need to select safe props/stage equipment.</li> <li>• Identify methods for storing materials in the arts.</li> </ul>	<p>D. Describe and use knowledge of a specific style within each art form through a performance or exhibition of a unique work.</p> <p>E. Know and demonstrate how arts can communicate experiences, stories or emotions through the production of works in the arts.</p> <p>F. Describe works of others through performance or exhibition in two art forms.</p> <p>G. Identify the function and benefits of rehearsal and practice sessions.</p> <p>H. Use and maintain materials, equipment and tools safely AT WORK AND PERFORMANCE SPACES.</p> <ul style="list-style-type: none"> <li>• Describe some materials used.</li> <li>• Describe issues of cleanliness related to the arts.</li> <li>• Describe types of mechanical/electrical equipment usage.</li> <li>• Know how to work in selected physical space/environments.</li> <li>• Identify the qualities of safe props/stage equipment.</li> <li>• Describe methods for storing materials in the arts.</li> </ul>	<p>D. Demonstrate knowledge of at least two styles within each art form through performance or exhibition of unique works.</p> <p>E. Communicate a unifying theme or point of view through the production of works in the arts.</p> <p>F. Explain works of others within each art form through performance or exhibition.</p> <p>G. Explain the function and benefits of rehearsal and practice sessions.</p> <p>H. Demonstrate and maintain materials, equipment and tools safely AT WORK AND PERFORMANCE SPACES.</p> <ul style="list-style-type: none"> <li>• Analyze the use of materials.</li> <li>• Explain issues of cleanliness related to the arts.</li> <li>• Explain the use of mechanical/electrical equipment.</li> <li>• Demonstrate how to work in selected physical space/environment.</li> <li>• Demonstrate the selection of safe props/stage equipment.</li> <li>• Demonstrate methods for storing materials in the arts.</li> </ul>	<p>D. Demonstrate specific styles in combination through the production or performance of a unique work of art (e.g., a dance composition that combines jazz dance and African dance).</p> <p>E. Delineate a unifying theme through the production of a work of art that reflects skills in media processes and techniques.</p> <p>F. Analyze works of arts influenced by experiences or historical and cultural events through production, performance or exhibition.</p> <p>G. Analyze the effect of rehearsal and practice sessions.</p> <p>H. Incorporate the effective and safe use of materials, equipment and tools into the production of works in the arts AT WORK AND PERFORMANCE SPACES.</p> <ul style="list-style-type: none"> <li>• Evaluate the use and applications of materials.</li> <li>• Evaluate issues of cleanliness related to the arts.</li> <li>• Evaluate the use and applications of mechanical/electrical equipment.</li> <li>• Evaluate differences among selected physical space/environment.</li> <li>• Evaluate the use and applications of safe props/stage equipment.</li> <li>• Evaluate the use and apply safe methods for storing materials in the arts.</li> </ul>
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## Proposed Academic Standards for the Arts and Humanities

<p>I. Identify arts events that take place in schools and in communities.</p> <p>J. Know and use traditional and contemporary technologies for producing, performing and exhibiting works in the arts or the works of others.</p> <ul style="list-style-type: none"> <li>• Know and use traditional technologies (e.g., charcoal, pigments, clay, needle/thread, quill pens, stencils, tools for wood carving, looms, stage equipment).</li> <li>• Know and use contemporary technologies (e.g., CDs/software, audio/sound equipment, polymers, clays, board-mixers, photographs, recorders).</li> </ul> <p>K. Know and use traditional and contemporary technologies for furthering knowledge and understanding in the humanities.</p>	<p>I. Describe arts events that take place in schools and in communities.</p> <p>J. Apply traditional and contemporary technologies for producing, performing and exhibiting works in the arts or the works of others.</p> <ul style="list-style-type: none"> <li>• Experiment with traditional technologies (e.g., ceramic/wooden tools, earthen clays, masks, instruments, folk shoes, etching tools, folk looms).</li> <li>• Experiment with contemporary technologies (e.g., color fills on computers, fonts/point systems, animation techniques, video teleconferencing, multimedia techniques, internet access, library computer card catalogues).</li> </ul> <p>K. Apply traditional and contemporary technology in furthering knowledge and understanding in the humanities.</p>	<p>I. Know where arts events, performances and exhibitions occur and how to gain admission.</p> <p>J. Incorporate specific uses of traditional and contemporary technologies within the design for producing, performing and exhibiting works in the arts or the works of others.</p> <ul style="list-style-type: none"> <li>• Explain and demonstrate traditional technologies (e.g., paint, tools, sponges, weaving designs, instruments, natural pigments/glazes).</li> <li>• Explain and demonstrate contemporary technologies (e.g., MIDI keyboards, Internet design, computers, interactive technologies, audio/sound equipment, board-mixer, video equipment, computerized lighting design).</li> </ul> <p>K. Incorporate specific uses of traditional and contemporary technologies in furthering knowledge and understanding in the humanities.</p>	<p>I. Distinguish among a variety of regional arts events and resources and analyze methods of selection and admission.</p> <p>J. Analyze and evaluate the use of traditional and contemporary technologies for producing, performing and exhibiting works in the arts or the works of others.</p> <ul style="list-style-type: none"> <li>• Analyze traditional technologies (e.g., acid printing, etching methods, musical instruments, costume materials, eight track recording, super 8 movies).</li> <li>• Analyze contemporary technologies (e.g., virtual reality design, instrument enhancements, photographic tools, broadcast equipment, film cameras, preservation tools, web graphics, computer generated marching band designs).</li> </ul> <p>K. Analyze and evaluate the use of traditional and contemporary technologies in furthering knowledge and understanding in the humanities.</p>
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## Proposed Academic Standards for the Arts and Humanities

<b>9.2. Historical and Cultural Contexts</b>			
9.2.3. GRADE 3	9.2.5. GRADE 5	9.2.8. GRADE 8	9.2.12. GRADE 12
<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 identify, compare, contrast and analyze works in the arts in their historical and cultural context appropriate for each grade level in concert with districts' social studies, literature and language standards.</i>			
<p>A. Explain the historical, cultural and social context of an individual work in the arts.</p> <p>B. Relate works in the arts chronologically to historical events (e.g., 10,000 B.C. to present).</p> <p>C. Relate works in the arts to varying styles and genre and to the periods in which they were created (e.g., Bronze Age, Ming Dynasty, Renaissance, Classical, Modern, Post-Modern, Contemporary, Futuristic, others).</p> <p>D. Analyze a work of art from its historical and cultural perspective.</p> <p>E. Analyze how historical events and culture impact forms, techniques and purposes of works in the arts (e.g., Gilbert and Sullivan operettas)</p> <p>F. Know and apply appropriate vocabulary used between social studies and the arts and humanities.</p> <p>G. Relate works in the arts to geographic regions:</p> <ul style="list-style-type: none"> <li>• Africa</li> <li>• Asia</li> <li>• Australia</li> <li>• Central America</li> <li>• Europe</li> <li>• North America</li> <li>• South America</li> </ul> <p>H. Identify, describe and analyze the work of Pennsylvania artists in dance, music, theatre and visual arts.</p> <p>I. Identify, explain and analyze philosophical beliefs as they relate to works in the arts (e.g., classical architecture, rock music, Native American dance, contemporary American musical theatre).</p>			

## Proposed Academic Standards for the Arts and Humanities

- J. Identify, explain and analyze historical and cultural differences as they relate to works in the arts (e.g., PLAYS BY Shakespeare, works by Michelangelo, ethnic dance and music).
- K. Identify, explain and analyze traditions as they relate to works in the arts (e.g., story telling – plays, oral histories- poetry, work songs- blue grass).
- L. Identify, explain and analyze common themes, forms and techniques from works in the arts (e.g., Copland and Graham's *Appalachian Spring* and Millet's *The Gleaners*).

## Proposed Academic Standards for the Arts and Humanities

9.3. Critical Response			
9.3.3. GRADE 3	9.3.5. GRADE 5	9.3.8. GRADE 8	9.3.12. GRADE 12
<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. Recognize critical processes used in the examination of works in the arts and humanities.</p> <ul style="list-style-type: none"> <li>• Compare and contrast</li> <li>• Analyze</li> <li>• Interpret</li> <li>• Form and test hypotheses</li> <li>• Evaluate/form judgments</li> </ul> <p>B. Know that works in the arts can be described by using the arts elements, principles and concepts (e.g., use of color, shape and pattern in Mondrian's <i>Broadway Boogie-Woogie</i>; use of dynamics, tempo, texture in Ravel's <i>Bolero</i>).</p> <p>C. Know classification skills with materials and processes used to create works in the arts (e.g., sorting and matching textiles, musical chants, television comedies).</p> <p>D. Explain meanings in the arts and humanities through individual works and the works of others using a fundamental vocabulary of critical response.</p>	<p>A. Identify critical processes in the examination of works in the arts and humanities.</p> <ul style="list-style-type: none"> <li>• Compare and contrast</li> <li>• Analyze</li> <li>• Interpret</li> <li>• Form and test hypotheses</li> <li>• Evaluate/form judgments</li> </ul> <p>B. Describe works in the arts comparing similar and contrasting characteristics (e.g., staccato in Grieg's <i>In the Hall of the Mountain King</i> and in tap dance).</p> <p>C. Classify works in the arts by forms in which they are found (e.g., farce, architecture, graphic design).</p> <p>D. Compare similar and contrasting important aspects of works in the arts and humanities based on a set of guidelines using a comprehensive vocabulary of critical response.</p>	<p>A. Know and use the critical process of the examination of works in the arts and humanities.</p> <ul style="list-style-type: none"> <li>• Compare and contrast</li> <li>• Analyze</li> <li>• Interpret</li> <li>• Form and test hypotheses</li> <li>• Evaluate/form judgments</li> </ul> <p>B. Analyze and interpret specific characteristics of works in the arts within each art form (e.g., pentatonic scales in Korean and Indonesian music).</p> <p>C. Identify and classify styles, forms, types and genre within art forms (e.g., modern dance and the ethnic dance, a ballad and a patriotic song).</p> <p>D. Evaluate works in the arts and humanities using a complex vocabulary of critical response.</p>	<p>A. Explain and apply the critical examination processes of works in the arts and humanities.</p> <ul style="list-style-type: none"> <li>• Compare and contrast</li> <li>• Analyze</li> <li>• Interpret</li> <li>• Form and test hypotheses</li> <li>• Evaluate/form judgments</li> </ul> <p>B. Determine and apply criteria to a person's work and works of others in the arts (e.g., use visual scanning techniques to critique the student's own use of sculptural space in comparison to Julio Gonzales' use of space in <i>Woman Combing Her Hair</i>).</p> <p>C. Apply systems of classification for interpreting works in the arts and forming a critical response.</p> <p>D. Analyze and interpret works in the arts and humanities from different societies using culturally specific vocabulary of critical response.</p>

## Proposed Academic Standards for the Arts and Humanities

<p><b>E. Recognize and identify types of critical analysis in the arts and humanities.</b></p> <ul style="list-style-type: none"> <li>• Contextual criticism</li> <li>• Formal criticism</li> <li>• Intuitive criticism</li> </ul> <p><b>F. Know how to recognize and identify similar and different characteristics among works in the arts (e.g., Amish and Hawaiian quilts, Navaho weavings and Kente cloth from West Africa).</b></p> <p><b>G. Know and demonstrate what a critic's position or opinion is related to works in the arts and humanities (e.g., I like patriotic songs BECAUSE...; The movie was enjoyed for its exceptional special effects).</b></p>	<p><b>E. Describe and use types of critical analysis in the arts and humanities.</b></p> <ul style="list-style-type: none"> <li>• Contextual criticism</li> <li>• Formal criticism</li> <li>• Intuitive criticism</li> </ul> <p><b>F. Know how to recognize the process of criticism in identifying and analyzing characteristics among works in the arts.</b></p> <p><b>G. Describe a critic's position or opinion about selected works in the arts and humanities (e.g., student's presentation of a critical position on Walt Disney's <i>Evolution of Mickey and Minnie Mouse</i>).</b></p>	<p><b>E. Interpret and use various types of critical analysis in the arts and humanities.</b></p> <ul style="list-style-type: none"> <li>• Contextual criticism</li> <li>• Formal criticism</li> <li>• Intuitive criticism</li> </ul> <p><b>F. Apply the process of criticism to identify characteristics among works in the arts.</b></p> <p><b>G. Compare and contrast critical positions or opinions about selected works in the arts and humanities (e.g., critic's review and comparison of Alvin Ailey's <i>Revelations</i> to Tchaikovsky's <i>Swan Lake</i>).</b></p>	<p><b>E. Examine and evaluate various types of critical analysis of works in the arts and humanities.</b></p> <ul style="list-style-type: none"> <li>• Contextual criticism</li> <li>• Formal criticism</li> <li>• Intuitive criticism</li> </ul> <p><b>F. Analyze the processes of criticism used to compare the meanings of a work in the arts in both its own and present time.</b></p> <p><b>G. Analyze works in the arts by referencing the judgments advanced by arts critics as well as one's own analysis and critique.</b></p>
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## Proposed Academic Standards for the Arts and Humanities

<b>9.4. Aesthetic Response</b>			
9.4.3. GRADE 3	9.4.5. GRADE 5	9.4.8. GRADE 8	9.4.12. GRADE 12
<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. Know how to respond to a philosophical statement about works in the arts and humanities (e.g., "Can artworks that depict or are about ugly or unpleasant things ever be beautiful?").</p> <p>B. Know how to communicate an informed individual opinion about the meaning of works in the arts (e.g., works of an artist of the month).</p> <p>C. Recognize that the environment of the observer influences individual aesthetic responses to works in the arts (e.g., the effect of live music as opposed to listening to the same piece on a car radio).</p> <p>D. Recognize that choices made by artists regarding subject matter and themes communicate ideas through works in the arts and humanities (e.g., artist's interpretation through the use of classical ballet of the American West in Agnes De Mille's <i>Rodeo</i>).</p>	<p>A. Identify uses of expressive symbols that show philosophical meanings in works in the arts and humanities (e.g., American TV ads versus Asian TV ads).</p> <p>B. Investigate and communicate multiple philosophical views about works in the arts.</p> <p>C. Identify the attributes of various audiences' environments as they influence individual aesthetic response (e.g., Beatles' music played by the Boston Pops versus video taped concerts from the 1970s).</p> <p>D. Explain choices made regarding media, technique, form, subject matter and themes that communicate the artist's philosophy within a work in the arts and humanities (e.g., selection of stage lighting in Leonard Bernstein's <i>West Side Story</i> to communicate mood).</p>	<p>A. Compare and contrast examples of group and individual philosophical meanings of works in the arts and humanities (e.g., group discussions on musical theatre versus the individual's concept of musical theatre).</p> <p>B. Compare and contrast informed individual opinions about the meaning of works in the arts to others (e.g., debate philosophical opinions within a listserv or at an artist's website).</p> <p>C. Describe how the attributes of the audience's environment influence aesthetic responses (e.g., the ambiance of the theatre in a performance of Andrew Lloyd Weber's <i>Cats</i>).</p> <p>D. Describe to what purpose philosophical ideas generated by artists can be conveyed through works in the arts and humanities (e.g., T. Ganson's <i>Destructive Periods in Russia During Stalin's and Deniken's Leadership</i> conveys her memories and emotions of a specific incident).</p>	<p>A. Evaluate an individual's philosophical statement on a work in the arts and its relationship to one's own life based on knowledge and experience.</p> <p>B. Describe and analyze the effects that works in the arts have on groups, individuals and the culture (e.g., Orson Welles' 1938 radio broadcast, <i>War of the Worlds</i>).</p> <p>C. Compare and contrast the attributes of various audiences' environments as they influence individual aesthetic response (e.g., viewing traditional <i>Irish</i> dance at county fair versus the performance of <i>River Dance</i> in a concert hall).</p> <p>D. Analyze and interpret a philosophical position identified in works in the arts and humanities.</p>



# Proposed Academic Standards for the Arts and Humanities

## XXVII. GLOSSARY

<b>Aesthetics:</b>	A branch of philosophy that focuses on the nature of beauty, the nature and value of the arts and the inquiry processes and human responses they produce.
<b>Aesthetic criteria:</b>	Standards on which to make judgments about the artistic merit of a work of art, derived from cultural and emotional values and cognitive meaning.
<b>AESTHETIC RESPONSE:</b>	A PHILOSOPHICAL REPLY TO WORKS IN THE ARTS.
<b>Artistic choices:</b>	Selections made by artists in order to convey meaning.
<b>Arts criticism:</b>	<del>The act or process of describing and evaluating the media, processes and meanings of works in the arts and making comparative judgments.</del>
<b>Arts integration:</b>	<del>The act or process of incorporating the arts disciplines—dance, music, theater and visual arts—as equal partners with the other disciplines in the curriculum in order to enhance meanings and relationships between, within and across all the disciplines in the curriculum.</del>
<b>Arts resource:</b>	An outside community source of arts performances or exhibitions: ASSET (E.G., PERFORMANCES, EXHIBITIONS, PERFORMERS, ARTISTS).
<b>Assess:</b>	To analyze and determine the nature and quality of the process/product through means appropriate to the art form.
<b>Community:</b>	A group of people who share a common social, historical, regional or cultural heritage.
<b>Contemporary technology:</b>	Tools, machines or implements emerging and used today for the practice or production of works in the arts.

## Proposed Academic Standards for the Arts and Humanities

<b>Context:</b>	A set of interrelated background conditions (e.g., social, economic, political) that influence and give meaning to the development and reception of thoughts, ideas or concepts and that define specific cultures and eras.
<b>Create:</b>	To produce works of art IN THE ARTS using materials, techniques, processes, elements, principles and analysis.
<b>Critical analysis:</b>	The process of examining and discussing the effective uses of specific aspects of a work of art WORKS IN THE ARTS.
<b>Contextual criticism:</b>	Discussion and evaluation with consideration of factors surrounding the origin and heritage to works in the arts and humanities.
<b>Formal criticism:</b>	Discussion and evaluation of the elements and principles essential to works in the arts and humanities.
<b>Intuitive criticism:</b>	Discussion and evaluation of one's subjective insight to works in the arts and humanities.
<b>Critical process:</b>	The use of sequential examination through comparison, analysis, interpretation, formation and testing of hypothesis and evaluation to form judgments.
<b>CRITICAL RESPONSE:</b>	THE ACT OR PROCESS OF DESCRIBING AND EVALUATING THE MEDIA, PROCESSES AND MEANINGS OF WORKS IN THE ARTS AND MAKING COMPARATIVE JUDGMENTS.
<b>Culture:</b>	The way of life of a group of people, including customs, beliefs, arts, institutions and worldview. Culture is acquired through many means and is always changing.
<b>Elements:</b>	Core components that support the principles of the arts.
<b>Formal production/exhibition:</b>	<del>The showing or performance of a work in the arts for an audience.</del>
<b>Genre:</b>	A type or category (e.g., music - opera, oratorio; theater - tragedy, comedy; dance - modern, ballet; visual arts- pastoral, scenes of everyday life).

## **Proposed Academic Standards for the Arts and Humanities**

<b>Humanities:</b>	The branch of learning that connects the fine arts, literature, languages, philosophy and cultural science. The humanities are concerned with the understanding and integration of human thought and accomplishment.
<b>Improvisation:</b>	Spontaneous creation requiring focus and concentration.
<b>MIDI keyboard:</b>	(Musical Instrument Digital Interface) Piece of equipment that interacts with a computer that uses a MIDI language set-up to notate and play music.
<b>MULTIMEDIA:</b>	THE COMBINED USE OF MEDIA, SUCH AS MOVIES, CD-ROMS, TELEVISION, RADIO, PRINT AND THE INTERNET FOR ENTERTAINMENT AND PUBLICITY.
<b>Original works in the arts:</b>	Dance, music, theatre and visual arts pieces created by performing or visual artists.
<b>Principles:</b>	Essential assumptions, basic or essential qualities determining intrinsic characteristics.
<b>Repertoire:</b>	<del>Prepared works in the art that a group/person is ready to perform that demonstrates a range of abilities.</del>
<b>Style:</b>	A distinctive or characteristic manner of expression.
<b>Synthesis:</b>	<del>The reassembling of separate parts into a new form.</del>
<b>Technique:</b>	Specific skills and details employed by an artist, craftsperson or performer in the production of works in the arts.
<b>Timbre:</b>	A unique quality of sound.
<b>Traditions:</b>	Knowledge, opinions and customs a group feels is so important that members continue to practice it and pass it onto other generations.
<b>Traditional technology:</b>	Tools, machines or implements used for the historical practice or production of works in the arts.
<b>Vocabulary:</b>	Age and content appropriate terms used in the instruction of the arts and humanities that demonstrate levels of proficiency as defined in local curriculum (i.e., fundamental – grade 3, comprehensive – grade 5, discriminating – grade 8 and advanced - grade 12).

# **Proposed Academic Standards for Health, Safety and Physical Education**



*Pennsylvania Department of Education*

# Proposed Academic Standards for Health, Safety and Physical Education

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~~Proposed Health, Safety and Physical Education Academic Standards~~  
**ACADEMIC STANDARDS FOR HEALTH, SAFETY AND PHYSICAL EDUCATION**

**XXIX. INTRODUCTION**

This document includes ~~Proposed~~ Academic Standards for Health, Safety and Physical Education in these categories:

- ◇ 10.1 Concepts of Health
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- ◇ 10.4 Physical Activity
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The ~~Proposed~~ Academic Standards for Health, Safety and Physical Education describe what students should know and be able to do by the end of third, sixth, ninth and twelfth grade. The standards are sequential across the grade levels and reflect the increasing complexity and rigor that students are expected to achieve. The ~~Proposed~~ standards define the content for planned instruction that will result in measurable gains for all students in knowledge and skill. School entities will use these standards to develop local school curriculum and assessments that will meet the needs of the students.

The ~~Proposed~~ Academic Standards for Health, Safety and Physical Education provide students with the knowledge and skills that will enable them to achieve and maintain a physically active and healthful life. The attainment of these standards will favorably impact their lives and the lives of those around them. By becoming and remaining physically, mentally, socially and emotionally healthy, students will increase their chances of achieving to their highest academic potential.

The ~~Proposed~~ Academic Standards for Health, Safety and Physical Education provide parents with specific information about the knowledge and skills students should be developing as they progress through their educational programs. With the standards serving as clearly defined targets, parents, students, teachers and community members will be able to become partners in helping children achieve educational success.

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

## Proposed Academic Standards for Health, Safety & Physical Education

<b>10.1. Concepts of Health</b>			
<b>10.1.3. GRADE 3</b>	<b>10.1.6. GRADE 6</b>	<b>10.1.9. GRADE 9</b>	<b>10.1.12. GRADE 12</b>
<b><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></b>			
<p><b>A. Identify and describe the stages of growth and development.</b></p> <ul style="list-style-type: none"> <li>• infancy</li> <li>• childhood</li> <li>• adolescence</li> <li>• adulthood</li> <li>• late adulthood</li> </ul> <p><b>B. Identify and know the location and function of the major body organs and systems.</b></p> <ul style="list-style-type: none"> <li>• circulatory</li> <li>• respiratory</li> <li>• muscular</li> <li>• skeletal</li> <li>• digestive</li> </ul>	<p><b>A. Describe growth and development changes that occur between childhood and adolescence and identify factors that can influence these changes.</b></p> <ul style="list-style-type: none"> <li>• education</li> <li>• socioeconomic</li> </ul> <p><b>B. Identify and describe the structure and function of the major body systems.</b></p> <ul style="list-style-type: none"> <li>• nervous</li> <li>• muscular</li> <li>• integumentary</li> <li>• urinary</li> <li>• endocrine</li> <li>• reproductive</li> <li>• immune</li> </ul>	<p><b>A. Analyze factors that impact growth and development between adolescence and adulthood.</b></p> <ul style="list-style-type: none"> <li>• relationships (e.g., dating, friendships, peer pressure)</li> <li>• interpersonal communication</li> <li>• risk factors (e.g., physical inactivity, substance abuse, intentional/unintentional injuries, dietary patterns)</li> <li>• abstinence</li> <li>• STD and HIV prevention</li> <li>• community</li> </ul> <p><b>B. Analyze the interdependence existing among the body systems.</b></p>	<p><b>A. Evaluate factors that impact growth and development during adulthood and late adulthood.</b></p> <ul style="list-style-type: none"> <li>• acute and chronic illness</li> <li>• communicable and non-communicable disease</li> <li>• health status</li> <li>• relationships (e.g., marriage, divorce, loss)</li> <li>• career choice</li> <li>• aging process</li> <li>• retirement</li> </ul> <p><b>B. Evaluate factors that impact the body systems and apply protective/preventive strategies.</b></p> <ul style="list-style-type: none"> <li>• fitness level</li> <li>• environment (e.g., pollutants, available health care)</li> <li>• health status (e.g., physical, mental, social)</li> <li>• nutrition</li> </ul>

## Proposed Academic Standards for Health, Safety & Physical Education

<p>C. Explain the role of the food guide pyramid in helping people eat a healthy diet.</p> <ul style="list-style-type: none"> <li>• food groups</li> <li>• number of servings</li> <li>• variety of food</li> <li>• nutrients</li> </ul> <p>D. Know age appropriate drug information.</p> <ul style="list-style-type: none"> <li>• definition of drugs</li> <li>• effects of drugs</li> <li>• proper use of medicine</li> <li>• healthy/unhealthy risk-taking (e.g. inhalant use, smoking)</li> <li>• skills to avoid drugs</li> </ul> <p>E. Identify types and causes of common health problems of children.</p> <ul style="list-style-type: none"> <li>• infectious diseases (e.g., colds, flu, chickenpox)</li> <li>• noninfectious diseases (e.g., asthma, hay fever, allergies, lyme disease)</li> <li>• germs</li> <li>• pathogens</li> <li>• heredity</li> </ul>	<p>C. Analyze nutritional concepts that impact health.</p> <ul style="list-style-type: none"> <li>• caloric content of foods</li> <li>• relationship of food intake and physical activity (energy output)</li> <li>• nutrient requirements</li> <li>• label reading</li> <li>• healthful food selection</li> </ul> <p>D. Explain factors that influence childhood and adolescent drug use.</p> <ul style="list-style-type: none"> <li>• peer influence</li> <li>• body image (e.g., steroids, enhancers)</li> <li>• social acceptance</li> <li>• stress</li> <li>• media influence</li> <li>• decision-making/refusal skills</li> <li>• rules, regulations and laws</li> <li>• consequences</li> </ul> <p>E. Identify <del>and describe</del> health problems that can occur throughout life AND DESCRIBE WAYS TO PREVENT THEM.</p> <ul style="list-style-type: none"> <li>• <del>Cancer</del></li> <li>• <del>Diabetes</del></li> <li>• <del>STD/HIV/AIDS</del></li> <li>• <del>stroke</del></li> <li>• <del>heart disease</del></li> <li>• DISEASES (E.G., CANCER, DIABETES, STD/HIV/AIDS, CARDIOVASCULAR DISEASE)</li> </ul>	<p>C. Analyze factors that impact nutritional choices of adolescents.</p> <ul style="list-style-type: none"> <li>• body image</li> <li>• advertising</li> <li>• dietary guidelines</li> <li>• eating disorders</li> <li>• peer influence</li> <li>• athletic goals</li> </ul> <p>D. Analyze prevention and intervention strategies in relation to adolescent and adult drug use.</p> <ul style="list-style-type: none"> <li>• decision-making/refusal skills</li> <li>• situation avoidance</li> <li>• goal setting</li> <li>• professional assistance (e.g., medical, counseling, support groups)</li> <li>• parent involvement</li> </ul> <p>E. Analyze how personal choice, disease and genetics can impact health maintenance and disease prevention.</p>	<p>C. Analyze factors that impact nutritional choices of adults.</p> <ul style="list-style-type: none"> <li>• cost</li> <li>• food preparation (e.g., time, skills)</li> <li>• consumer skills (e.g., understanding food labels, evaluating fads)</li> <li>• nutritional knowledge</li> <li>• changes in nutritional requirements (e.g., age, physical activity level)</li> </ul> <p>D. Evaluate issues relating to the use/non-use of drugs.</p> <ul style="list-style-type: none"> <li>• psychology of addiction</li> <li>• social impact (e.g., cost, relationships)</li> <li>• chemical use and fetal development</li> <li>• laws relating to alcohol, tobacco and chemical substances</li> <li>• impact on the individual</li> <li>• impact on the community</li> </ul> <p>E. Identify and analyze factors that influence the prevention and control of health problems.</p> <ul style="list-style-type: none"> <li>• research</li> <li>• medical advances</li> <li>• technology</li> <li>• government policies/regulations</li> </ul>
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# Proposed Academic Standards for Health, Safety & Physical Education

	<ul style="list-style-type: none"><li>• PREVENTIONS (I.E. DO NOT SMOKE, MAINTAIN PROPER WEIGHT, EAT A BALANCED DIET, PRACTICE SEXUAL ABSTINENCE, BE PHYSICALLY ACTIVE)</li></ul>		
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## Proposed Academic Standards for Health, Safety & Physical Education

<b>10.2. Healthful Living</b>			
<b>10.2.3. GRADE 3</b>	<b>10.2.6. GRADE 6</b>	<b>10.2.9. GRADE 9</b>	<b>10.2.12. GRADE 12</b>
<b><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></b>			
<p><b>A. Identify personal hygiene practices and community helpers that promote health and prevent the spread of disease.</b></p> <p><b>B. Identify health-related information.</b></p> <ul style="list-style-type: none"> <li>• signs and symbols</li> <li>• terminology</li> <li>• products and services</li> </ul> <p><b>C. Identify media sources that influence health and safety.</b></p> <p><b>D. Identify the steps in a decision-making process.</b></p> <p><b>E. Identify environmental factors that affect health.</b></p> <ul style="list-style-type: none"> <li>• pollution (e.g., air, water, noise, soil)</li> <li>• waste disposal</li> <li>• temperature extremes</li> <li>• insects/animals</li> </ul>	<p><b>A. Explain the relationship between personal health practices and individual well-being.</b></p> <ul style="list-style-type: none"> <li>• immunizations</li> <li>• health examinations</li> </ul> <p><b>B. Explain the relationship between health-related information and consumer choices.</b></p> <ul style="list-style-type: none"> <li>• dietary guidelines/food selection</li> <li>• sun exposure guidelines/sunscreen selection</li> </ul> <p><b>C. Explain the media's effect on health and safety issues.</b></p> <p><b>D. Describe and apply the steps of a decision-making process to health and safety issues.</b></p> <p><b>E. Analyze environmental factors that impact health.</b></p> <ul style="list-style-type: none"> <li>• indoor air quality (e.g., second-hand smoke, allergens)</li> <li>• chemicals, metals, gases (e.g., lead, radon, carbon monoxide)</li> <li>• radiation</li> <li>• natural disasters</li> </ul>	<p><b>A. Identify and describe health care products and services that impact adolescent health practices.</b></p> <p><b>B. Analyze the relationship between health-related information and adolescent consumer choices.</b></p> <ul style="list-style-type: none"> <li>• tobacco products</li> <li>• weight control products</li> </ul> <p><b>C. Analyze media health and safety messages and describe their impact on personal health and safety.</b></p> <p><b>D. Analyze and apply a decision-making process to adolescent health and safety issues.</b></p> <p><b>E. Explain the interrelationship between the environment and personal health.</b></p> <ul style="list-style-type: none"> <li>• ozone layer/skin cancer</li> <li>• availability of health care/individual health</li> <li>• air pollution/respiratory disease</li> <li>• breeding environments/lyme disease/west nile virus</li> </ul>	<p><b>A. Evaluate health care products and services that impact adult health practices.</b></p> <p><b>B. Assess factors that impact adult health consumer choices.</b></p> <ul style="list-style-type: none"> <li>• access to health information</li> <li>• access to health care</li> <li>• cost</li> <li>• safety</li> </ul> <p><b>C. Compare and contrast the positive and negative effects of the media on adult personal health and safety.</b></p> <p><b>D. Examine and apply a decision-making process to the development of short and long-term health goals.</b></p> <p><b>E. Analyze the interrelationship between environmental factors and community health.</b></p> <ul style="list-style-type: none"> <li>• public health policies and laws/health promotion and disease prevention</li> <li>• individual choices/maintenance of environment</li> <li>• recreational opportunities/health status</li> </ul>

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<b>10.3. Safety and Injury Prevention</b>			
10.3.3. GRADE 3	10.3.6 GRADE 6	10.3.9. GRADE 9	10.3.12. GRADE 12
<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. Recognize safe/unsafe practices in the home, school and community.</p> <ul style="list-style-type: none"> <li>• general (e.g., fire, electrical, animals)</li> <li>• modes of transportation (e.g., pedestrian, bicycle, vehicular)</li> <li>• outdoor (e.g., play, weather, water)</li> <li>• safe around people (e.g., safe/unsafe touch, abuse, stranger, bully)</li> </ul> <p>B. Recognize emergency situations and explain appropriate responses.</p> <ul style="list-style-type: none"> <li>• importance of remaining calm</li> <li>• how to call for help</li> <li>• simple assistance procedures</li> <li>• how to protect self</li> </ul> <p>C. Recognize conflict situations and identify strategies to avoid or resolve.</p> <ul style="list-style-type: none"> <li>• walk away</li> <li>• I-statements</li> <li>• refusal skills</li> <li>• adult intervention</li> </ul>	<p>A. Explain and apply safe practices in the home, school and community.</p> <ul style="list-style-type: none"> <li>• emergencies (e.g., fire, natural disasters)</li> <li>• personal safety (e.g., home alone, latch key, harassment)</li> <li>• communication (e.g., telephone, Internet)</li> <li>• violence prevention (e.g., gangs, weapons)</li> </ul> <p>B. Know and apply appropriate emergency responses.</p> <ul style="list-style-type: none"> <li>• basic first aid</li> <li>• Heimlich maneuver</li> <li>• universal precautions</li> </ul> <p>C. Describe strategies to avoid or manage conflict and violence.</p> <ul style="list-style-type: none"> <li>• anger management</li> <li>• peer mediation</li> <li>• reflective listening</li> <li>• negotiation</li> </ul>	<p>A. Analyze the role of individual responsibility for safe practices and injury prevention in the home, school and community.</p> <ul style="list-style-type: none"> <li>• modes of transportation (e.g., pedestrian, bicycle, vehicular, passenger, farm vehicle, all-terrain vehicle)</li> <li>• violence prevention in school</li> <li>• self-protection in the home</li> <li>• self-protection in public places</li> </ul> <p>B. Describe and apply strategies for emergency and long-term management of injuries.</p> <ul style="list-style-type: none"> <li>• rescue breathing</li> <li>• water rescue</li> <li>• self-care</li> <li>• sport injuries</li> </ul> <p>C. Analyze and apply strategies to avoid or manage conflict and violence during adolescence.</p> <ul style="list-style-type: none"> <li>• effective negotiation</li> <li>• assertive behavior</li> </ul>	<p>A. Assess the personal and legal consequences of unsafe practices in the home, school or community.</p> <ul style="list-style-type: none"> <li>• loss of personal freedom</li> <li>• personal injury</li> <li>• loss of income</li> <li>• impact on others</li> <li>• loss of motor vehicle operator's license</li> </ul> <p>B. Analyze and apply strategies for the management of injuries.</p> <ul style="list-style-type: none"> <li>• CPR</li> <li>• advanced first aid</li> </ul> <p>C. Analyze the impact of violence on the victim and surrounding community.</p>

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<p>D. Identify and use safe practices in physical activity settings (e.g., proper equipment, knowledge of rules, sun safety, guidelines of safe play, warm-up, cool-down).</p>	<p>D. Analyze the role of individual responsibility for safety during physical activity.</p>	<p>D. Analyze the role of individual responsibility for safety during organized group activities.</p>	<p>D. Evaluate the benefits, risks and safety factors associated with self-selected life-long physical activities.</p>
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## Proposed Academic Standards for Health, Safety & Physical Education

<b>10.4. Physical Activity</b>			
<b>10.4.3. GRADE 3</b>	<b>10.4.6. GRADE 6</b>	<b>10.4.9. GRADE 9</b>	<b>10.4.12. GRADE 12</b>
<i><b>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:</b></i>			
<p><b>A. Identify and engage in physical activities that promote physical fitness and health.</b></p> <p><b>B. Know the positive and negative effects of regular participation in moderate to vigorous physical activities.</b></p> <p><b>C. Know and recognize changes in body responses during moderate to vigorous physical activity.</b></p> <ul style="list-style-type: none"> <li>• heart rate</li> <li>• breathing rate</li> </ul>	<p><b>A. Identify and engage in moderate to vigorous physical activities that contribute to physical fitness and health.</b></p> <p><b>B. Explain the effects of regular participation in moderate to vigorous physical activities on the body systems.</b></p> <p><b>C. Identify and apply ways to monitor and assess the body's response to moderate to vigorous physical activity.</b></p> <ul style="list-style-type: none"> <li>• heart rate monitoring</li> <li>• checking blood pressure</li> <li>• fitness assessment</li> </ul>	<p><b>A. Analyze and engage in physical activities that are developmentally/individually appropriate and support achievement of personal fitness and activity goals.</b></p> <p><b>B. Analyze the effects of regular participation in moderate to vigorous physical activities in relation to adolescent health improvement.</b></p> <ul style="list-style-type: none"> <li>• stress management</li> <li>• disease prevention</li> <li>• weight management</li> </ul> <p><b>C. Analyze factors that affect the responses of body systems during moderate to vigorous physical activities.</b></p> <ul style="list-style-type: none"> <li>• exercise (e.g., climate, altitude, location, temperature)</li> <li>• healthy fitness zone</li> <li>• individual fitness status (e.g., cardiorespiratory fitness, muscular endurance, muscular strength, flexibility)</li> <li>• drug/substance use/abuse</li> </ul>	<p><b>A. Evaluate and engage in an individualized physical activity plan that supports achievement of personal fitness and activity goals and promotes life-long participation.</b></p> <p><b>B. Analyze the effects of regular participation in a self-selected program of moderate to vigorous physical activities.</b></p> <ul style="list-style-type: none"> <li>• social</li> <li>• physiological</li> <li>• psychological</li> </ul> <p><b>C. Evaluate how changes in adult health status may affect the responses of the body systems during moderate to vigorous physical activity.</b></p> <ul style="list-style-type: none"> <li>• aging</li> <li>• injury</li> <li>• disease</li> </ul>

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<p>D. Identify likes and dislikes related to participation in physical activities.</p> <p>E. Identify reasons why regular participation in physical activities improves motor skills.</p> <p>F. Recognize positive and negative interactions of small group activities.</p> <ul style="list-style-type: none"> <li>• roles (e.g., leader, follower)</li> <li>• cooperation/sharing</li> <li>• on task participation</li> </ul>	<p>D. Describe factors that affect childhood physical activity preferences.</p> <ul style="list-style-type: none"> <li>• enjoyment</li> <li>• personal interest</li> <li>• social experience</li> <li>• opportunities to learn new activities</li> <li>• parental preference</li> <li>• environment</li> </ul> <p>E. Identify factors that have an impact on the relationship between regular participation in physical activity and the degree of motor skill improvement.</p> <ul style="list-style-type: none"> <li>• success-oriented activities</li> <li>• school-community resources</li> <li>• variety of activities</li> <li>• time on task</li> </ul> <p>F. Identify and describe positive and negative interactions of group members in physical activities.</p> <ul style="list-style-type: none"> <li>• leading</li> <li>• following</li> <li>• teamwork</li> <li>• etiquette</li> <li>• adherence to rules</li> </ul>	<p>D. Analyze factors that affect physical activity preferences of adolescents.</p> <ul style="list-style-type: none"> <li>• skill competence</li> <li>• social benefits</li> <li>• previous experience</li> <li>• activity confidence</li> </ul> <p>E. Analyze factors that impact on the relationship between regular participation in physical activity and motor skill improvement.</p> <ul style="list-style-type: none"> <li>• personal choice</li> <li>• developmental differences</li> <li>• amount of physical activity</li> <li>• authentic practice</li> </ul> <p>F. Analyze the effects of positive and negative interactions of adolescent group members in physical activities.</p> <ul style="list-style-type: none"> <li>• group dynamics</li> <li>• social pressure</li> </ul>	<p>D. Evaluate factors that affect physical activity and exercise preferences of adults.</p> <ul style="list-style-type: none"> <li>• personal challenge</li> <li>• physical benefits</li> <li>• finances</li> <li>• motivation</li> <li>• access to activity</li> <li>• self-improvement</li> </ul> <p>E. Analyze the interrelationships among regular participation in physical activity, motor skill improvement and the selection and engagement in lifetime physical activities.</p> <p>F. Assess and use strategies for enhancing adult group interaction in physical activities.</p> <ul style="list-style-type: none"> <li>• shared responsibility</li> <li>• open communication</li> <li>• goal setting</li> </ul>
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## Proposed Academic Standards for Health, Safety & Physical Education

<b>10.5. Concepts, Principles and Strategies of Movement</b>			
<b>10.5.3. GRADE 3</b>	<b>10.5.6. GRADE 6</b>	<b>10.5.9. GRADE 9</b>	<b>10.5.12. GRADE 12</b>
<p><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>			
<p><b>A. Recognize and use basic movement skills and concepts.</b></p> <ul style="list-style-type: none"> <li>• locomotor movements (e.g., run, leap, hop)</li> <li>• non-locomotor movements (e.g., bend, stretch, twist)</li> <li>• manipulative movements (e.g., throw, catch, kick)</li> <li>• relationships (e.g., over, under, beside)</li> <li>• combination movements (e.g., locomotor, non-locomotor, manipulative)</li> <li>• space awareness (e.g., self-space, levels, pathways, directions)</li> <li>• effort (e.g., speed, force)</li> </ul> <p><b>B. Recognize and describe the concepts of motor skill development using appropriate vocabulary.</b></p> <ul style="list-style-type: none"> <li>• form</li> <li>• developmental differences</li> <li>• critical elements</li> <li>• feedback</li> </ul>	<p><b>A. Explain and apply the basic movement skills and concepts to create and perform movement sequences and advanced skills.</b></p> <p><b>B. Identify and apply the concepts of motor skill development to a variety of basic skills.</b></p> <ul style="list-style-type: none"> <li>• transfer between skills</li> <li>• selecting relevant cues</li> <li>• types of feedback</li> <li>• movement efficiency</li> <li>• product (outcome/result)</li> </ul>	<p><b>A. Describe and apply the components of skill-related fitness to movement performance.</b></p> <ul style="list-style-type: none"> <li>• agility</li> <li>• balance</li> <li>• coordination</li> <li>• power</li> <li>• reaction time</li> <li>• speed</li> </ul> <p><b>B. Describe and apply concepts of motor skill development that impact the quality of increasingly complex movement.</b></p> <ul style="list-style-type: none"> <li>• response selection</li> <li>• stages of learning a motor skill (i.e. verbal cognitive, motor, automatic)</li> <li>• types of skill (i.e. discrete, serial, continuous)</li> </ul>	<p><b>A. Apply knowledge of movement skills, skill-related fitness and movement concepts to identify and evaluate physical activities that promote personal lifelong participation.</b></p> <p><b>B. Incorporate and synthesize knowledge of motor skill development concepts to improve the quality of motor skills.</b></p> <ul style="list-style-type: none"> <li>• open and closed skills</li> <li>• short-term and long-term memory</li> <li>• aspects of good performance</li> </ul>

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<p>C. Know the function of practice.</p> <p>D. Identify and use principles of exercise to improve movement and fitness activities.</p> <ul style="list-style-type: none"> <li>• frequency/how often to exercise</li> <li>• intensity/how hard to exercise</li> <li>• time/how long to exercise</li> <li>• type/what kind of exercise</li> </ul> <p>E. Know and describe scientific principles that affect movement and skills using appropriate vocabulary.</p> <ul style="list-style-type: none"> <li>• gravity</li> <li>• force production/absorption</li> <li>• balance</li> <li>• rotation</li> </ul> <p>F. Recognize and describe game strategies using appropriate vocabulary.</p> <ul style="list-style-type: none"> <li>• faking/dodging</li> <li>• passing/receiving</li> <li>• <del>move</del> MOVING to be open</li> <li>• defending space</li> <li>• following rules of play</li> </ul>	<p>C. Describe the relationship between practice and skill development.</p> <p>D. Describe and apply the principles of exercise to the components of health-related and skill-related fitness.</p> <ul style="list-style-type: none"> <li>• cardiorespiratory endurance</li> <li>• muscular strength</li> <li>• muscular endurance</li> <li>• flexibility</li> <li>• body composition</li> </ul> <p>E. Identify and use scientific principles that affect basic movement and skills using appropriate vocabulary.</p> <ul style="list-style-type: none"> <li>• Newton's Laws of Motion</li> <li>• application of force</li> <li>• static/dynamic balance</li> <li>• levers</li> <li>• flight</li> </ul> <p>F. Identify and apply game strategies to basic games and physical activities.</p> <ul style="list-style-type: none"> <li>• give and go</li> <li>• one on one</li> <li>• peer communication</li> </ul>	<p>C. Identify and apply practice strategies for skill improvement.</p> <p>D. Identify and describe the principles of training using appropriate vocabulary.</p> <ul style="list-style-type: none"> <li>• specificity</li> <li>• overload</li> <li>• progression</li> <li>• aerobic/anaerobic</li> <li>• circuit/interval</li> <li>• repetition/set</li> </ul> <p>E. Analyze and apply scientific and biomechanical principles to complex movements.</p> <ul style="list-style-type: none"> <li>• centripetal/centrifugal force</li> <li>• linear motion</li> <li>• rotary motion</li> <li>• friction/resistance</li> <li>• equilibrium</li> <li>• number of moving segments</li> </ul> <p>F. Describe and apply game strategies to complex games and physical activities.</p> <ul style="list-style-type: none"> <li>• offensive strategies</li> <li>• defensive strategies</li> <li>• time management</li> </ul>	<p>C. Evaluate the impact of practice strategies on skill development and improvement.</p> <p>D. Incorporate and synthesize knowledge of exercise principles, training principles and health and skill-related fitness components to create a fitness program for personal use.</p> <p>E. Evaluate movement forms for appropriate application of scientific and biomechanical principles.</p> <ul style="list-style-type: none"> <li>• efficiency of movement</li> <li>• mechanical advantage</li> <li>• kinetic energy</li> <li>• potential energy</li> <li>• inertia</li> <li>• safety</li> </ul> <p>F. Analyze the application of game strategies for different categories of physical activities.</p> <ul style="list-style-type: none"> <li>• individual</li> <li>• team</li> <li>• lifetime</li> <li>• outdoor</li> </ul>
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# Proposed Academic Standards for Health, Safety and Physical Education

## XXX. GLOSSARY

<b>Abstinence:</b>	Choosing not to do something or completely giving something up in order to gain something.
<b>Acute illness:</b>	A health condition of sudden onset, sharp rises and short course.
<b>Adolescence:</b>	The period of life beginning with puberty and ending with completed growth.
<b>Aerobic:</b>	Physical activity or exercise done at a steady pace for an extended period of time so that the heart can supply as much oxygen as the body needs (e.g., walking, running, swimming, cycling).
<b>Agility:</b>	A component of physical fitness that relates to the ability to rapidly change the position of the entire body in space with speed and accuracy.
<b>AIDS</b>	Acquired Immune Deficiency Syndrome: a condition that results when infection with HIV causes a breakdown of the body's ability to fight other infections.
<b>Allergen:</b>	A substance that stimulates the production of antibodies and subsequently results in allergic reactions (e.g., mold spores, cat/dog dander, dust).
<b>Anaerobic:</b>	Physical activity or exercise done in short, fast bursts so that the heart cannot supply oxygen as fast as the body needs (e.g., <del>100-yard dash, basketball,</del> SPRINTING, WEIGHTLIFTING, football).
<b>Assertive:</b>	The expression of thoughts and feelings without experiencing anxiety or threatening others.
<b>Automatic Stage of Learning:</b>	Movement responses flow and the individual can focus on what to do without thinking about it.
<b>Balance:</b>	A skill-related component of physical fitness that relates to the maintenance of equilibrium while <del>stationery</del> STATIONARY or moving.

# Proposed Academic Standards for Health, Safety and Physical Education

- Biomechanics BIOMECHANICAL PRINCIPLES:** The science concerned with the action of forces, internal or external, on the living body.
- Body composition:** A health-related component of physical fitness that relates to the percentage of fat tissue and lean tissue in the body.
- Body systems:** Anatomically or functionally related parts of the body (e.g., skeletal, nervous, immune, circulatory systems).
- Caloric content:** The amount of energy supplied by food. The more calories in the food, the more fattening.
- CARDIORESPIRATORY FITNESS:** A HEALTH RELATED COMPONENT OF PHYSICAL FITNESS RELATING TO THE ABILITY OF THE CIRCULATORY AND RESPIRATORY SYSTEMS TO SUPPLY OXYGEN DURING SUSTAINED PHYSICAL ACTIVITY.
- Centrifugal:** The force that seems to pull an object away from the center as it moves in a circle.
- Centripetal:** The force that is required to keep an object moving around a circular path.
- Chronic illness:** A health condition of long duration or frequent recurrence.
- Circuit training:** Exercise program, similar to an obstacle course, in which the person goes from one place to another doing a different exercise at each place.
- Closed:** Skills that are performed in an environment that does not change or that changes very little, such as archery or the foul shot in basketball.
- Communicable:** Illness caused by pathogens that enter the body through direct or indirect contact and can be transmitted from one host to another.
- COMMUNITY HELPERS:** ANY GROUP OR INDIVIDUAL WHO PLAYS A ROLE IN HEALTH PROMOTION OR DISEASE PREVENTION SUCH AS DOCTORS, NURSES, DENTISTS, TEACHERS, PARENTS, FIREMEN, POLICEMEN, TRASH COLLECTORS, ANIMAL CONTROL OFFICERS.

## Proposed Academic Standards for Health, Safety and Physical Education

<b>Continuous:</b>	Two or more repetitions of the same skill such as dribbling in basketball or soccer.
<b>Cool-down:</b>	Brief, mild exercise done after vigorous exercise to help the body safely return to a resting state.
<b>Coordination:</b>	A skill-related component of physical fitness that relates to the ability to use the senses together with body parts in performing motor tasks smoothly and accurately.
<b>CPR:</b>	A first aid technique, which involves rescue breathing and chest (heart) compressions, that is used to revive a person whose heart has stopped beating.
<b>Critical elements:</b>	The important parts of a skill.
<b>Decision-making process:</b>	An organized approach to making choices.
<b>Developmental differences:</b>	Learners are at different levels in their motor, cognitive, emotional, social and physical development. The learners LEARNERS' developmental status will affect their ability to learn or improve.
<b>Developmentally appropriate:</b>	Motor skill development and change THAT occur in an orderly, sequential fashion and is ARE age and experience related.
<b>Directions:</b>	Forward, backward, left, right, up, down.
<b>Discrete:</b>	Single skill performed in isolation from other motor skills such as the soccer penalty kick and golf stroke.
<b>Dynamic balance:</b>	Equilibrium used when in motion, starting and stopping.
<b>Eating disorders:</b>	Food-related dysfunction in which a person changes eating habits in a way that is harmful to the mind or body (e.g., bulimia, anorexia nervosa).
<b>Efficiency of movement:</b>	The state or quality of competence in performance with minimum expenditure of time and effort.

## Proposed Academic Standards for Health, Safety and Physical Education

<b>Equilibrium:</b>	State in which there is no change in the motion of a body.
<b>Feedback:</b>	Information given to the learner about how to improve or correct a movement.
<b>Flexibility:</b>	A health-related component of physical fitness that relates to the range of motion available at a joint.
<b>Food guide pyramid:</b>	A visual tool used to help people plan healthy diet DIETS according to the Dietary Guidelines for America.
<b>Force:</b>	Any external agent that causes a change in the motion of a body.
<b>Form:</b>	Manner or style of performing a movement according to recognized standards of technique.
<b>Good performance:</b>	The ability to correctly select what to do and the ability to execute the selection appropriately.
<b>Health:</b>	A state of complete physical, mental and social well-being; not merely the absence of disease and infirmity.
<b>Health education:</b>	Planned, sequential K-12 program of curricula and instruction that helps students develop knowledge, attitudes and skills related to the physical, mental, emotional and social dimensions of health.
<b>Health-related fitness:</b>	Components of physical fitness that have a relationship with good health. Components are cardiorespiratory endurance, muscular strength and endurance, flexibility and body composition.
<b>Heimlich maneuver:</b>	A first aid technique that is used to relieve complete airway obstruction.
<b>HIV:</b>	Human immunodeficiency virus that infects cells of the immune system and other tissues and causes acquired immunodeficiency syndrome (AIDS).
<b>I-statement</b>	A statement describing a specific behavior or event and the effect that behavior or event has on a person and the feelings that result.
<b>Inertia:</b>	A body at rest will remain at rest and a body in motion will remain in motion unless acted upon by a force.

## Proposed Academic Standards for Health, Safety and Physical Education

<b>Inhalant:</b>	Chemicals that produce vapors that act on the central nervous system and alter a user's moods, perceptions, feelings, personality and behavior such as airplane glue and aerosols.
<b>Integumentary system:</b>	Body system composed of the skin, hair, nails and glands.
<b>Intensity:</b>	How hard a person should exercise to improve fitness.
<b>Interval training:</b>	An anaerobic exercise program that consists of runs of short distance followed by rest.
<b>Kinetic:</b>	Energy that an object possesses because it is moving, such as a pitched baseball or a person running.
<b>Levels:</b>	Positions of the body (e.g., high, medium, low).
<b>Linear motion:</b>	Movement which occurs in a straight path.
<b>Locomotor movement:</b>	Movements producing physical displacement of the body, usually identified by weight transference via the feet. Basic locomotor steps are the walk, run, hop and jump as well as the irregular rhythmic combinations of the skip, slide and gallop.
<b>Long-term memory:</b>	Ability to recall information that was learned days or even years ago.
<b>Manipulative movements:</b>	Control of objects with body parts and implements. Action causes an object to move from one place to another.
<b>Mechanical advantage:</b>	The ratio between the force put into a machine and the force that comes out of the same machine.
<b>MEDIA SOURCES:</b>	VARIOUS FORMS OF MASS COMMUNICATION SUCH AS TELEVISION, RADIO, MAGAZINES, NEWSPAPERS AND INTERNET.
<b>Moderate physical activity:</b>	Sustained, repetitive, large muscle movements (e.g., walking, running, cycling) done at less than 60% of maximum heart rate for age. Maximum heart rate is 220 beats per minute minus participant's age.

## Proposed Academic Standards for Health, Safety and Physical Education

<b>Motor skills:</b>	Non-fitness abilities that improve with practice and relate to one's ability to perform specific sports and other motor tasks (e.g., tennis serve, shooting a basketball).
<b>Motor stage of learning:</b>	Individual is working to perfect the motor skill and makes conscious adjustments to the environment.
<b>Movement skills:</b>	Proficiency in performing nonlocomotor, locomotor and manipulative movements that are the foundation for participation in physical activities.
<b>Muscular endurance:</b>	A health-related component of physical fitness that relates to the ability of a muscle to continue to perform without fatigue.
<b>Muscular strength:</b>	A health-related component of physical fitness that relates to the ability of the muscle to exert force.
<b>Newton's Laws of Motion:</b>	Three laws by Sir Isaac Newton that explain the relations between force and the motions produced by them: The Law of Inertia, Force and Acceleration, Reacting Forces.
<b>Noncommunicable:</b>	Illness that is not caused by a pathogen that is not transmitted from one host to another.
<b>Nonlocomotor movement:</b>	Movements that do not produce physical displacement of the body.
<b>Nutrient:</b>	A basic component of food that nourishes the body.
<b>Open:</b>	Skill is performed in an environment that varies or is unpredictable such as the tennis forehand or the soccer pass.
<b>Overload:</b>	A principle of exercise that states that the only way to improve fitness is to exercise more than the normal.
<b>Pathways:</b>	Patterns of travel while performing locomotor movements (e.g., straight, curved, zigzag).
<b>Physical activity:</b>	Bodily movement that is produced by the contraction of skeletal muscle and which substantially increases energy expenditure.

## Proposed Academic Standards for Health, Safety and Physical Education

<b>Physical education:</b>	Planned, sequential, movement-based program of curricula and instruction that helps students develop knowledge, attitudes, motor skills, self-management skills and confidence needed to adapt and maintain a physically active life.
<b>Physical fitness:</b>	A set of attributes that people have or achieve and that relate to their ability to perform physical activity. Generally accepted to consist of health-related fitness and skill-related fitness.
<b>Potential:</b>	Energy stored in a body because of its position such as the crouch position prior to a jump.
<b>Power:</b>	A skill-related component of physical fitness that relates to the rate at which one can perform work.
<b>Principles of exercise:</b>	Guidelines to follow to obtain the maximum benefits from physical activity and exercise.
<b>Principles of training:</b>	Guidelines to follow to obtain the maximum benefits from an exercise plan.
<b>Progression:</b>	A principle of exercise that states that a person should start slowly and increase exercise gradually.
<b>Reaction time:</b>	A skill-related component of physical fitness that relates to the time elapsed between stimulation and the beginning of the response to it.
<b>Reflective listening:</b>	An active listening skill in which the individual lets others know he/she has heard and understands what has been said.
<b>Refusal strategies SKILLS:</b>	Systematic ways to handle situations in which a person wants to say no to an action and/or leave an environment that threatens health or safety, breaks laws, results in lack of respect for self and others or disobeys guidelines set by responsible adults.
<b>Repetitions:</b>	Number of times an exercise is repeated.
<b>Rescue breathing:</b>	Technique used to supply air to an individual who is not breathing.
<b>Rotary motion:</b>	Force that produces movement that occurs around an axis or center point such as a somersault.

## Proposed Academic Standards for Health, Safety and Physical Education

<b>Safety education:</b>	Planned, sequential program of curricula and instruction that helps students develop the knowledge, attitudes and confidence needed to protect them from injury.
<b>Self-space:</b>	All the space that the body or its parts can reach without traveling from a starting location.
<b>Serial:</b>	Two or more different skills performed with each other such as fielding a ball and throwing it or dribbling a basketball and shooting it.
<b>Set:</b>	A group of several repetitions.
<b>Short-term memory:</b>	Ability to recall recently learned information, such as within the past few seconds or minutes.
<b>Skill-related fitness:</b>	Consists of components of physical fitness that have a relationship with enhanced performance in sports and motor skills. The components are agility, balance, coordination, power, reaction time and speed.
<b>Specificity:</b>	A principle of exercise that states that specific kinds of exercises must be done to develop specific aspects of the body and specific aspects of fitness.
<b>Speed:</b>	A skill-related component of physical fitness that relates to the ability to perform a movement or cover a distance in a short period of time.
<b>Static balance:</b>	Maintaining equilibrium while holding a pose or remaining motionless.
<b>STD:</b>	Sexually transmitted disease.
<b>Universal precautions:</b>	An approach to infection control. All human blood and body fluids are treated as if known to be infectious.
<b>Warm-up:</b>	Brief, mild exercise that is done to get ready for more vigorous exercise.
<b>Verbal cognitive stage of learning:</b>	The individual is attempting to move from verbal instruction to trying to figure out how to actually do the skill. The first attempts at the skill are generally mechanical and success is inconsistent. The individual thinks through each step of the movement.



## **Proposed Academic Standards for Health, Safety and Physical Education**

**Vigorous physical activity:** Sustained, repetitive, large muscle movements (e.g., running, swimming, soccer) done at 60% or more of maximum heart rate for age. Maximum heart rate is 220 beats per minute minus the participant's age. Activity makes person sweat and breathe hard.

~~Proposed~~  
**Academic Standards  
for  
Family and Consumer Sciences**



*Pennsylvania Department of Education*

# Proposed Academic Standards for Family and Consumer Sciences

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# **Proposed Academic Standards for Family and Consumer Sciences**

## **XXXII. INTRODUCTION**

This document includes proposed Academic Standards for Family and Consumer Sciences at four grade levels (third, sixth, ninth and twelfth) with the emphasis on what students will know and be able to do in the following areas:

- ◇ 11.1. Financial and Resource Management
- ◇ 11.2. Balancing Family, Work, and Community Responsibility
- ◇ 11.3. Food Science and Nutrition
- ◇ 11.4. Child Development.

The focus of the Academic Standards for Family and Consumer Sciences education is the individual, the family and the community. The economic, social and political well-being of our state depends on the well-being of Pennsylvania's families. The family is responsible for nurturing its members. Family experiences, to a great extent, determine who a person is and what a person becomes. Family and Consumer Sciences, working with Pennsylvania's families, supports the development of the knowledge and skills that students need as family members both now and in the future. The 21<sup>st</sup> Century requires students to develop the ability to transform information into knowledge by using standards to certify that this information is meaningful, categorizing it to a purpose and then transforming their knowledge into wisdom by applying it to real life.

Family and Consumer Sciences is a discipline composed of strong subject matter concentrations with a commitment to integration. Concepts form a framework for learning based on these tenets:

- Families are the fundamental unit of society.
- A life-span approach to individual and family development contributes to creating lifelong learners.
- Meeting individual and family needs inside and outside the home are shared responsibilities.
- Individual, family and community well-being is ~~strengthen~~ STRENGTHENED through an awareness of diversity.
- The use of diverse modes of inquiry strengthens intellectual development.
- The content learning in Family and Consumer Sciences classes enhances the mastery of academic standards.
- Standards-based learning within Family and Consumer Sciences classrooms can best be demonstrated through performance based assessment.

## **Proposed Academic Standards for Family and Consumer Sciences**

Learners in Family and Consumer Sciences nurture themselves and others, taking increased responsibility for improving their quality of living.

The **Proposed Academic Standards for Family and Consumer Sciences** are written to empower individuals and families to manage the challenges of living and working in a diverse, global society. These **Proposed Academic Standards** address the functioning of families and their interrelationships with work, community and society. The focus is on the reoccurring, practical problems of individuals and families. An integrative approach is used to help individuals and families identify, create and evaluate goals and alternative solutions to significant problems of everyday life. Students are taught to take responsibility for the consequences of their actions. Comprehensive classroom experiences allow students to develop the knowledge and skills needed in making choices to meet their personal, family and work responsibilities.

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

## Proposed Academic Standards for Family and Consumer Sciences

<b>11.1. Financial and Resource Management</b>			
11.1.3. GRADE 3	11.1.6. GRADE 6	11.1.9. GRADE 9	11.1.12. GRADE 12
<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. Identify money denominations, services and material resources available as trade-offs within the home, school and community.</p> <p>B. Define the components of a spending plan (e.g., income, expenses, savings).</p> <p>C. Explain the need for shelter for the purpose of safety, warmth and comfort.</p> <p>D. Explain consumer rights and responsibilities.</p> <ul style="list-style-type: none"> <li>• To be safe</li> <li>• To be informed</li> <li>• To be heard</li> <li>• To choose</li> <li>• To redress</li> </ul>	<p>A. Justify the decision to use or not use resources based on scarcity.</p> <p>B. Know the relationship of the components of a simple spending plan and how that relationship allows for managing income, expenses and savings.</p> <p>C. Describe the adaptability to meet basic human needs of the different types of housing available (e.g., single home, apartment, mobile home, shelter, recreational vehicle, public housing).</p> <p>D. Analyze information in care instructions, safety precautions and the use of consumable goods as a demonstration of understanding of consumer rights and responsibilities.</p>	<p>A. Analyze current conservation practices and their effect on future renewable and non-renewable resources.</p> <ul style="list-style-type: none"> <li>• Refuse</li> <li>• Reduce</li> <li>• Reuse</li> <li>• Recycle</li> </ul> <p>B. Explain the responsibilities associated with managing personal finances (e.g., savings, checking, credit, non-cash systems, investments, INSURANCE).</p> <p>C. Delineate and assess the factors affecting the availability of housing (e.g., supply and demand, market factors, geographical location, community regulations).</p> <p>D. Explain how consumer rights and responsibilities are protected (e.g., government agencies, consumer protection agencies, consumer action groups).</p>	<p>A. Evaluate the impact of family resource management on the global community.</p> <p>B. Analyze the management of financial resources across the lifespan.</p> <p>C. Analyze the relationship among factors affecting consumer housing decisions (e.g., human needs, financial resources, location, legal agreements, maintenance responsibilities).</p> <p>D. Evaluate the role of consumer rights and responsibilities in the resolution of a consumer problem through the practical reasoning process.</p>

## Proposed Academic Standards for Family and Consumer Sciences

<p>E. Explain the relationship between work and income.</p> <p>F. Describe criteria needed to identify quality in consumer goods and services (e.g., food, clothing, furniture, home technology, health care, transportation, services).</p> <p>G. Identify the services that communities provide for individuals and families.</p>	<p>E. Explain the principles of child labor laws and the opportunity cost of working by evaluating the advantages and disadvantages of holding a job while a teenager.</p> <p>F. Explain practices to maintain and or repair consumer goods and services.</p> <p>G. Identify the public and nonpublic services that are available to serve families within the community.</p>	<p>E. Compare the influences of income and fringe benefits to make decisions about work.</p> <p>F. Evaluate different strategies to obtain consumer goods and services.</p> <p>G. Analyze how public, nonpublic and for-profit service providers serve the family.</p>	<p>E. Compare and contrast factors affecting annual gross and taxable income and reporting requirements (e.g., W-2 form, Income tax form).</p> <p>F. Compare and contrast the selection of goods and services by applying effective consumer strategies.</p> <p>G. Compare the availability, costs and benefits of accessing public, nonpublic and for-profit services to assist the family.</p>
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## Proposed Academic Standards for Family and Consumer Sciences

<b>11.2. Balancing Family, Work and Community Responsibility</b>			
11.2.4. GRADE 3	11.2.6. GRADE 6	11.2.9. GRADE 9	11.2.12. GRADE 12
<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. Examine consequences of family, work or career decisions.</p> <p>B. Identify the importance of routines and schedules while differentiating between short and long term goals.</p> <p>C. Indicate the benefits and costs of working as an individual or as a team member and of being a leader or follower.</p> <p>D. Explain the importance of organizing space for efficiency and a sense of comfort (e.g., desk space, classroom space).</p>	<p>A. Contrast the solutions reached through the use of a simple decision making process that includes analyzing consequences of alternative solutions against snap decision making methods.</p> <p>B. Deduce the importance of time management skills (e.g. home, school, recreational activities).</p> <p>C. Classify the components of effective teamwork and leadership.</p> <p>D. Identify the concepts and principles used in planning space for activities.</p>	<p>A. Solve dilemmas using a practical reasoning approach</p> <ul style="list-style-type: none"> <li>• Identify situation</li> <li>• Identify reliable information</li> <li>• List choices and examine the consequences of each</li> <li>• Develop a plan of action</li> <li>• Draw conclusions</li> <li>• Reflect on decisions.</li> </ul> <p>B. Know FCCLA action planning procedure and how to apply it to family, work and community decisions.</p> <p>C. Assess the effectiveness of the use of teamwork and leadership skills in accomplishing the work of the family.</p> <p>D. Analyze the space requirements for a specified activity to meet a given need (e.g., family room, home office, kitchen).</p>	<p>A. Justify solutions developed by using practical reasoning skills.</p> <p>B. Evaluate the effectiveness of action plans that integrate personal, work, family and community responsibilities.</p> <p>C. Analyze teamwork and leadership skills and their application in various family and work situations.</p> <p>D. Based on efficiency, aesthetics and psychology, evaluate space plans (e.g., home, office, work areas) for their ability to meet a variety of needs including those of individuals with special needs.</p>



## Proposed Academic Standards for Family and Consumer Sciences

<p>E. Analyze the effectiveness of technology used for school and home in accomplishing the work of the family (e.g., security, entertainment, communication, education).</p> <p>F. Explain daily activities that fulfill family functions in meeting responsibilities (e.g., economic, emotional support, childcare and guidance, housekeeping, maintaining kinship, providing recreation).</p> <p>G. Identify the life stages by identifying their developmental task (e.g., infant, pre-schooler, school age, teen-age, adult, senior citizen).</p> <p>H. Identify how to resolve conflict using interpersonal communications skills.</p> <ul style="list-style-type: none"> <li>• Speaking and listening</li> <li>• I messages</li> <li>• Active listening</li> <li>• Checking for understanding</li> <li>• Following directions</li> <li>• Empathy</li> <li>• Feedback</li> </ul>	<p>E. Describe the role of technology within a community in maintaining a safe and healthy living environment (e.g., safety, hospitals, waste treatment, water quality, schools).</p> <p>F. Compare and contrast how different cultures meet family responsibilities within differing configurations (e.g., new parent, just married, single adult living alone, "empty nest", retired, senior citizen).</p> <p>G. Identify the characteristics of the stages of the family life cycle (e.g., beginning, expanding, developing, launching, middle years, retirement, variations).</p> <p>H. Describe positive and negative interactions within patterns of interpersonal communications.</p> <ul style="list-style-type: none"> <li>• Placating</li> <li>• Blaming</li> <li>• Distracting</li> <li>• Intellectualizing</li> <li>• Asserting</li> </ul>	<p>E. Evaluate the impact of technology and justify the use or nonuse of it (e.g., safety, cost/budget, appearance, efficiency).</p> <p>F. Contrast past and present family functions and predict their probable impact on the future of the family.</p> <p>G. Explain the influences of family life cycle stages on the needs of families and communities (e.g., a large number of young families needing day care, fixed income senior citizens, school age children).</p> <p>H. Justify the significance of interpersonal communication skills in the practical reasoning method of decision making.</p>	<p>E. Assess the availability of emerging technology that is designed to do the work of the family and evaluate the impact of its use on individuals, families and communities.</p> <p>F. Assess the relationship of family functions to human developmental stages.</p> <p>G. Hypothesize the impact of present family life-cycle trends on the global community (e.g., over population, increase in an aging population, economic base).</p> <p>H. Evaluate the effectiveness of using interpersonal communication skills to resolve conflict.</p>
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## Proposed Academic Standards for Family and Consumer Sciences

<b>11.3. Food Science and Nutrition</b>			
11.3.3. GRADE 3	11.3.6. GRADE 6	11.3.9. GRADE 9	11.3.12. GRADE 12
<p><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>			
<p>A. Know the production steps that a food travels from the farm to the consumer.</p> <p>B. Describe personal hygiene techniques in food handling (e.g., handwashing, sneeze control, signs of food spoilage).</p> <p>C. Explain the importance of eating a varied diet in maintaining health.</p> <p>D. Classify foods by food group within the food guide pyramid including the serving size and nutrient function within the body.</p> <p>E. Define energy-yielding nutrients and calories.</p>	<p>A. Demonstrate knowledge of techniques used to evaluate food in various forms (e.g., canned, frozen, dried, irradiated).</p> <p>B. Describe safe food handling techniques (e.g., storage, temperature control, food preparation, conditions that create a safe working environment for food production).</p> <p>C. Analyze factors that effect food choices.</p> <p>D. Describe a well-balanced daily menu using the dietary guidelines and the food guide pyramid.</p> <p>E. Explain the relationship between calories, nutrient and food input versus energy output; describe digestion.</p>	<p>A. Explain how scientific and technological developments enhance our food supply (e.g., food preservation techniques, packaging, nutrient fortification).</p> <p>B. Identify the cause, effect and prevention of microbial contamination, parasites and toxic chemicals in food.</p> <p>C. Analyze the impact of food addictions and eating disorders on health.</p> <p>D. Analyze relationship between diet and disease and risk factors (e.g., calcium and osteoporosis; fat, cholesterol and heart disease; folate and birth defects; sodium and hypertension).</p> <p>E. Analyze the energy requirements, nutrient requirements and body composition for individuals at various stages of the life cycle.</p>	<p>A. Analyze how food engineering and technology trends will influence the food supply.</p> <p>B. Evaluate the role of Government agencies in safeguarding our food supply (e.g., USDA, FDA, EPA and CDC).</p> <p>C. Evaluate sources of food and nutrition information.</p> <p>D. Critique diet modifications for their ability to improve nutritionally-related health conditions (e.g., diabetes, lactose-intolerance, iron deficiency).</p> <p>E. Analyze the breakdown of foods, absorption of nutrients and their conversion to energy by the body.</p>

## Proposed Academic Standards for Family and Consumer Sciences

<p>F. Identify components of a basic recipe (e.g., volume, weight, fractions, recipe ingredients, recipe directions, safety techniques).</p> <p>G. Classify foods according to senses (e.g., taste, touch, smell, mouth feel, sight, sound).</p>	<p>F. Analyze basic food preparation techniques and food-handling procedures.</p> <p>G. Describe the physical, biological, and chemical changes that take place in food preparation.</p>	<p>F. Hypothesize the effectiveness of the use of meal management principles (e.g., time management, budgetary considerations, sensory appeal, balanced nutrition, safety, sanitation).</p> <p>G. Analyze the application of physical and chemical changes that occur in food during preparation and preservation.</p>	<p>F. Evaluate the application of nutrition and meal planning principles in the selection, planning, preparation and serving of meals that meet the specific nutritional needs of individuals across their lifespan.</p> <p>G. Analyze the relevance of scientific principles to food processing, preparation and packaging.</p>
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## Proposed Academic Standards for Family and Consumer Sciences

<b>11.4. Child Development</b>			
11.4.3. GRADE 3	11.4.6. GRADE 6	11.4.9. GRADE 9	11.4.12. GRADE 12
<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. Identify characteristics in each stage of child development.</p> <ul style="list-style-type: none"> <li>• Infancy/BIRTH TO ONE YEAR</li> <li>• Early childhood/ONE TO SIX YEARS</li> <li>• Middle childhood/SIX TO NINE YEARS</li> <li>• Late childhood/NINE – 13 YEARS</li> <li>• Adolescence/13 – 18 YEARS</li> </ul> <p>B. Identify health and safety needs for children at each stage of child development.</p> <p>C. Identify the characteristics of a learning environment.</p> <p>D. Identify community resources provided for children.</p> <p>E. Explain how the home and community help a person learn to read, write and compute.</p>	<p>A. Compare and contrast child development guided practices according to the stage of child developmental DEVELOPMENT.</p> <p>B. Identify ways to keep children healthy and safe at each stage of child development.</p> <p>C. Identify the role of the caregiver in providing a learning environment (e.g., <del>baby-sitting</del> BABYSITTING, daycare, preschool).</p> <p>D. Identify <del>considerations prior to selecting childcare providers</del> CHILD-CARE PROVIDER CONSIDERATIONS.</p> <p>E. Identify characteristics of quality literature for children and other literacy enhancing activities.</p>	<p>A. Analyze physical, intellectual and social/emotional development in relation to theories of child development.</p> <p>B. Evaluate health and safety hazards relating to children at each stage of child development.</p> <p>C. Evaluate various environments to determine if they provide the characteristics of a proper learning environment.</p> <p>D. Analyze the roles, responsibilities and opportunity for family involvement in schools.</p> <p>E. Explain how storytelling, story reading and writing enhance literacy development in children.</p>	<p>A. Analyze current research on existing theories in child development and its impact on parenting (e.g., Piaget, Erikson and prior findings versus new brain development research).</p> <p>B. Analyze current issues in health and safety affecting children at each stage of child development.</p> <p>C. Analyze practices that optimize child development (e.g., stimulation, safe environment, nurturing caregivers, reading to children).</p> <p>D. Analyze plans and methods to blend work and family responsibilities to meet the needs of children.</p> <p>E. Identify practices that develop the child's imagination, creativity and reading and writing skills through literature.</p>

# Proposed Academic Standards for Family and Consumer Sciences

## XXXIII. GLOSSARY

<b>Aesthetics:</b>	Appreciation of and responsive to beauty.
<b>CDC:</b>	Center for Disease Control
<b>Child-care provider considerations:</b>	Criteria to use in evaluating child care facilities. These include well-trained and highly motivated staff, pleasant sanitary surroundings, variety in toys and supplies, ratio of staff to children.
<b>Child development stage:</b>	An age range with similar growth characteristics: <del>infancy, toddler, pre-schooler, school-age, adolescent</del> INFANCY, EARLY CHILDHOOD, MIDDLE CHILDHOOD, LATE CHILDHOOD, ADOLESCENCE.
<b>Consumer responsibilities:</b>	The need to interpret information in care instructions, safety precautions and proper use of consumable goods as a user of goods and services.
<b>Consumer rights:</b>	The guarantee to be safe, the right to be informed, to be heard, to choose consumer education and to redress as a user of goods and services.
<b>Dietary guidelines:</b>	A set of seven recommendations developed by the United States Department of Agriculture and Health and Human Services to help healthy people over age two know what to eat to stay healthy.
<b>Developmental tasks:</b>	Changes in the thinking and behavior of individuals over time.
<b>Empathy:</b>	The action of understanding another's thoughts, feelings and behaviors.
<b>EPA:</b>	Environmental Protection Agency

# Proposed Academic Standards for Family and Consumer Sciences

<b>FCCLA Action planning procedure:</b>	The decision making process endorsed by the Family, Career and Community Leaders of America, involving five steps: <ol style="list-style-type: none"><li>1. Identify concerns - brainstorm and evaluate, narrow choices to workable ideas.</li><li>2. Set your goals - write what you want to accomplish as an achievable objective.</li><li>3. Form a plan - who, what, when, where and how.</li><li>4. Act - carry out the plan.</li><li>5. Follow up - determine if your goal was met and create an improvement plan.</li></ol>
<b>FDA:</b>	Food and Drug Administration
<b>Family, Career and: Community Leaders Of America:</b>	Vocational student organization sponsored by Family and Consumer Sciences SCIENCES' classrooms.
<b>Food guide pyramid:</b>	A visual tool used to help people plan healthy diets according to the Dietary Guidelines for America.
<b>Guided practices:</b>	Interaction with a child based on age appropriate developmental principles.
<b>I message:</b>	A statement containing three parts: <ol style="list-style-type: none"><li>1. The situation</li><li>2. How it makes the speaker feel</li><li>3. What will happen if it continues.</li></ol>
<b>Kinship:</b>	Relationships or relatives.
<b>Leadership skills:</b>	The ability to: <ul style="list-style-type: none"><li>• Use resources</li><li>• Delegate authority</li><li>• Communicate effectively</li><li>• Assess composition of group</li><li>• Determine and rank goals</li></ul>

## Proposed Academic Standards for Family and Consumer Sciences

- Evaluate consequences.

<b>Microbial contamination:</b>	Most common food contaminants causing foodborne illnesses.
<b>Nutrient:</b>	A basic component of food that nourishes the body.
<b>Opportunity cost:</b>	The tangible and non-tangible trade-off necessary to procure a good or service or to take an action.
<b>Practical reasoning:</b>	A decision making process unique because of its <del>emphasize</del> EMPHASIS on relationships and involving six steps: <ol style="list-style-type: none"><li>1. Identify situation to be solved</li><li>2. Identify reliable information</li><li>3. List choices and examine consequences</li><li>4. Develop plan of action</li><li>5. Draw conclusions</li><li>6. Reflect on decisions.</li></ol>
<b>Redress:</b>	To set right or remedy.
<b>Toxic chemical:</b>	Contaminants found in natural, environmental and pesticide residue forms that are poisonous to the body.
<b>Scarcity:</b>	The lack of provisions for the support of life.
<b>Team work skills:</b>	The ability to: <ul style="list-style-type: none"><li>• Collaborate</li><li>• Cooperate</li><li>• Set community goals</li><li>• Reach consensus.</li></ul>
<b>Trade-off:</b>	Exchange of goods, services or monies.
<b>USDA:</b>	United States Department of Agriculture

**TRANSMITTAL SHEET FOR REGULATIONS SUBJECT TO THE  
REGULATORY REVIEW ACT**

I.D. NUMBER: 006-276

SUBJECT: Academic Standards for Arts & Humanities, Health, Safety, & Physical Education  
and Family and Consumer Sciences

AGENCY: DEPARTMENT OF EDUCATION

**TYPE OF REGULATION**

- Proposed Regulation
- X Final Regulation
- Final Regulation with Notice of Proposed Rulemaking Omitted
- 120-day Emergency Certification of the Attorney General
- 120-day Emergency Certification of the Governor
- Delivery of Tolled Regulation
  - a. With Revisions
  - b. Without Revisions

**FILING OF REGULATION**

DATE	SIGNATURE	DESIGNATION
10/12	<i>M. J. [Signature]</i>	HOUSE COMMITTEE ON EDUCATION
10/18	<i>V. O'Leary</i>	
	<i>J. [Signature]</i>	SENATE COMMITTEE ON EDUCATION
10/18	<i>Oct Hook</i>	
		INDEPENDENT REGULATORY REVIEW COMMISSION
		ATTORNEY GENERAL
		LEGISLATIVE REFERENCE BUREAU

October 18, 2002