

1 EDUCATION AND LABOR CABINET

2 Kentucky Board of Education

3 Kentucky Department of Education

4 (New Administrative Regulation)

5 704 KAR 8:120. Required Kentucky Academic Standards for Science.

6 RELATES TO: KRS 156.070, 156.160, 158.645, 158.6451, 158.6453, 160.290

7 STATUTORY AUTHORITY: 156.070, 156.160, 158.6453, 160.290

8 NECESSITY, FUNCTION, AND CONFORMITY: KRS 156.160 requires the Kentucky Board

9 of Education to establish courses of study for the different grades and kinds of common schools,

10 with the courses of study to comply with the expected goals, outcomes, and

11 assessment strategies developed under KRS 158.645, 158.6451, and 158.6453. KRS 156.070(1)

12 requires the Kentucky Board of Education to manage and control the common schools and all

13 programs operated in the schools. KRS 160.290 authorizes local boards of education to provide

14 for courses and other services for students consistent with the administrative regulations of the

15 Kentucky Board of Education. KRS 158.6453(2) requires the Kentucky Department of Education

16 to implement a comprehensive process for the review of academic standards and assessment with

17 the advice of standards and assessments review and development committees. This

18 administrative regulation incorporates by reference the Kentucky Academic Standards for

19 Science, which contain the general courses of study and academic content standards of science,

20 for use in Kentucky's common schools.

21 Section 1. Before graduating from a Kentucky public high school, a student shall meet the

22 minimum content requirements established in the Kentucky Academic Standards for Science.

1 Section 2. Incorporation by Reference. (1) The "Kentucky Academic Standards for Science"  
2 December 2022, is incorporated by reference.

3 (2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at  
4 the Department of Education, 5<sup>th</sup> floor, 300 Sower Boulevard, Frankfort, Kentucky 40601,  
5 Monday through Friday, 8 a.m. to 4:30 p.m. This material may be viewed at:

6 [https://education.ky.gov/curriculum/standards/kyacadstand/Documents/Kentucky\\_Academic\\_Sa](https://education.ky.gov/curriculum/standards/kyacadstand/Documents/Kentucky_Academic_Sa)  
7 [dards\\_for\\_Science\\_2022.pdf.](https://education.ky.gov/curriculum/standards/kyacadstand/Documents/Kentucky_Academic_Standards_for_Science_2022.pdf)

This is to certify that the chief state school officer has reviewed and recommended this administrative regulation prior to its adoption by the Kentucky Board of Education, as required by KRS 156.070(5).

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
Jason E, Glass, Ed.D.  
Commissioner of Education

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
Lu S. Young  
Chairperson, Kentucky Board of Education

PUBLIC HEARING AND PUBLIC COMMENT PERIOD: A public hearing on this administrative regulation shall be held on XXXX at 10:00 am, in the State Board Room, Fifth Floor, 300 Sower Boulevard, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify this agency in writing by 5 workdays prior to the hearing, of their intent to attend. If no notification of intent to attend the hearing is received by that date, the hearing may be cancelled. This hearing is open to the public. Any person who wishes to be heard will be given an opportunity to comment on the proposed administrative regulation. A transcript of the public hearing will not be made unless a written request for a transcript is made. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed administrative regulation. Written comments shall be accepted through XXXX. Send written notification of intent to be heard at the public hearing or written comments on the proposed administrative regulation to:

CONTACT PERSON: Todd G. Allen, General Counsel, Kentucky Department of Education, 300 Sower Boulevard, 5<sup>th</sup> Floor, Frankfort, KY 40601, phone 502-564-4474, fax 502-564-9321, email [regcomments@education.ky.gov](mailto:regcomments@education.ky.gov).

## REGULATORY IMPACT ANALYSIS AND TIERING STATEMENT

704 KAR 8:120

Contact Person: Todd G. Allen

Phone: 502-564-4474

Email: [todd.allen@education.ky.gov](mailto:todd.allen@education.ky.gov)

(1) Provide a brief summary of:

(a) What this administrative regulation does: This regulation fulfills the requirements of KRS 158.6453 and sets forth the minimum content requirements to be met by a student per the *Kentucky Academic Standards for Science*.

(b) The necessity of this administrative regulation: KRS 156.160 requires the Kentucky Board of Education to establish courses of study for the different grades and kinds of common schools, with the courses of study to comply with the expected goals, outcomes, and assessment strategies developed under KRS 158.645, 158.6451, and 158.6453.

(c) How this administrative regulation conforms to the content of the authorizing statutes: This regulation conforms to KRS 158.6453 as it implements a process for the review of the Kentucky's academic standards and the alignment of corresponding assessments with the advice of a review and development committee assigned to focus on science.

(d) How this administrative regulation currently assists or will assist in the effective administration of the statutes: This regulation conforms to KRS 158.6453 and will assist in its administration as it implements a process for the review of Kentucky's academic standards and the alignment of corresponding assessments with the advice of a review committee and advisory panels assigned to focus on science.

(2) If this is an amendment to an existing administrative regulation, provide a brief summary of:

(a) How the amendment will change this existing administrative regulation: N/A

(b) The necessity of the amendment to this administrative regulation: N/A

(c) How the amendment conforms to the content of the authorizing statutes: N/A

(d) How the amendment will assist in the effective administration of the statutes: N/A

(3) List the type and number of individuals, businesses, organizations, or state and local governments affected by this administrative regulation: Local schools and districts

(4) Provide an analysis of how the entities identified in question (3) will be impacted by either the implementation of this administrative regulation, if new, or by the change, if it is an amendment, including:

(a) List the actions that each of the regulated entities identified in question (3) will have to take to comply with this administrative regulation or amendment: The standards outlined in 704 KAR 8:120 are the standards for science. The regulated entities must use these outlined standards when making local choices regarding curriculum and instruction.

(b) In complying with this administrative regulation or amendment, how much will it cost each of the

entities identified in question (3): Schools and Districts: A 2008 study published by the Legislative Research Commission called *The Costs of College and High School Textbooks in Kentucky* indicated an average text cost of \$50 per textbook. While textbooks contain teacher materials, this cost does not account for additional expenses related to teacher training and/or local efforts to align curricula. An estimated cost per class for instructional materials: \$50 x 100 students per grade level. There also will be costs associated for local curricula development and teacher professional learning to support implementation of new curricula. Estimated teacher time for curriculum development/alignment (in a school with only 1 teacher per grade): \$4,000 (5 days for alignment work x 4 teachers x \$200/day). Estimated costs related to professional learning: \$25,000 x # grades = \$X per year.

(c) As a result of compliance, what benefits will accrue to the entities identified in question (3): The compliance of public schools, school districts and school councils will ensure that each student will be qualified for graduation as they will have met the minimum content requirements for science as provided in 704 KAR 3:305. Graduation rates are used as part of each school's accountability model and are reported on each school's report card.

(5) Provide an estimate of how much it will cost the administrative body to implement this administrative regulation:

(a) Initially: The Department spent approximately \$231,592.00 administrative costs for the development of the science standards that are incorporated by reference in 704 KAR 8:120, as well as staff time to oversee its administration

(b) On a continuing basis: Additional staff time will be needed to support schools and districts in the implementation of the revised *Kentucky Academic Standards (KAS) for Science*.

(6) What is the source of the funding to be used for the implementation and enforcement of this administrative regulation: State funds.

(7) Provide an assessment of whether an increase in fees or funding will be necessary to implement this administrative regulation, if new, or by the change if it is an amendment: The Kentucky Department of Education will not be able to use the research-based model of leadership networks to provide support to districts as they implement new standards without an increase in funding.

(8) State whether or not this administrative regulation establishes any fees or directly or indirectly increases any fees: This regulation does not establish any fees or directly or indirectly increase fees.

(9) TIERING: Is tiering applied? (Explain why or why not) Tiering was not appropriate in this administrative regulation because the administrative regulation applies equally to all schools and districts.

## FISCAL NOTE

704 KAR 8:120

Contact Person: Todd G. Allen

Phone Number: (502) 564-4474

- (1) What units, parts, or divisions of state or local government (including cities, counties, fire departments, or school districts) will be impacted by this administrative regulation? Public schools, school districts, school councils and the Kentucky Department of Education (KDE).
- (2) Identify each state or federal statute or federal regulation that requires or authorizes the action taken by the administrative regulation. KRS 156.160 requires the Kentucky Board of Education (KBE) to establish courses of study for the different grades and kinds of common schools, with the courses of study to comply with the expected goals, outcomes, and assessment strategies developed under KRS 158.645, 158.6451 and 158.6453. KRS 156.070(1) requires the KBE to manage and control the common schools and all programs operated in the schools. KRS 160.290 authorizes local boards of education to provide for courses and other services for students consistent with the administrative regulations of the Kentucky Board of Education.
- (3) Estimate the effect of this administrative regulation on the expenditures and revenues of a state or local government agency (including cities, counties, fire departments, or school districts) for the first full year the administrative regulation is to be in effect. A 2008 study published by the Legislative Research Commission called *The Costs of College and High School Textbooks in Kentucky* indicated an average text cost of \$50 per textbook. While textbooks contain teacher materials, this cost does not account for additional expenses related to teacher training and/or local efforts to align curricula. An estimated cost per class for instructional materials:  $\$50 \times 100$  students per grade level. There also will be costs associated for local curricula development and teacher professional learning to support implementation of new curricula. Estimated teacher time for curriculum development/alignment (in a school with only 1 teacher per grade): \$4,000 (5 days for alignment work  $\times$  4 teachers  $\times$  \$200/day). Estimated costs related to professional learning:  $\$25,000 \times \#$  grades = \$X per year.
  - (a) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for the first year? No revenue.
  - (b) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for subsequent years? No revenue.
  - (c) How much will it cost to administer this program for the first year? A 2008 study published by the Legislative Research Commission called *The Costs of College and High School Textbooks in Kentucky* indicated an average text cost of \$50 per textbook. While textbooks contain teacher materials, this cost does not account for additional expenses related to teacher training and/or local efforts to align curricula. An estimated cost per class for instructional materials:  $\$50 \times 100$  students per grade level. There also will be costs associated for local curricula

development and teacher professional learning to support implementation of new curricula. Estimated teacher time for curriculum development/alignment (in a school with only 1 teacher per grade): \$4,000 (5 days for alignment work x 4 teachers x \$200/day). Estimated costs related to professional learning: \$25,000 x # grades = \$X per year. Additional staff time will be impacted through implementation.

- (d) How much will it cost to administer this program for subsequent years? Once curriculum documents are revised, implementation cost will decrease.

Note: If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-): N/A

Expenditures (+/-): A 2008 study published by the Legislative Research Commission called *The Costs of College and High School Textbooks in Kentucky* indicated an average text cost of \$50 per textbook. While textbooks contain teacher materials, this cost does not account for additional expenses related to teacher training and/or local efforts to align curricula. An estimated cost per class for instructional materials: \$50 x 100 students per grade level. There also will be costs associated for local curricula development and teacher professional learning to support implementation of new curricula. Estimated teacher time for curriculum development/alignment (in a school with only 1 teacher per grade): \$4,000 (5 days for alignment work x 4 teachers x \$200/day). Estimated costs related to professional learning: \$25,000 x # grades = \$X per year.

Other Explanation: N/A

- (4) Estimate the effect of this administrative regulation on the expenditures and cost savings of regulated entities for the first full year the administrative regulation is to be in effect.

(a) How much cost savings will this administrative regulation generate for the regulated entities for the first year? N/A

(b) How much cost savings will this administrative regulation generate for the regulated entities for subsequent years? N/A

(c) How much will it cost the regulated entities for the first year? A 2008 study published by LRC called *The Costs of College and High School Textbooks in Kentucky* indicated an average text cost of \$50 per textbook. While textbooks contain teacher materials, this cost does not account for additional expenses related to teacher training and/or local efforts to align curricula. An estimated cost per class for instructional materials: \$50 x 100 students per grade level. There also will be costs associated for local curricula development and teacher professional learning to support implementation of new curricula. Estimated teacher time for curriculum development/alignment (in a school with only 1 teacher per grade): \$4,000 (5 days for alignment work x 4 teachers x \$200/day). Estimated costs related to professional learning: \$25,000 x # grades = \$X per year.

(d) How much will it cost the regulated entities for subsequent years? Once curriculum documents are revised, implementation costs will decrease.

Note: If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Cost Savings (+/-): N/A



Expenditures (+/-): A 2008 study published by LRC called The Costs of College and High School Textbooks in Kentucky indicated an average text cost of \$50 per textbook. While textbooks contain teacher materials, this cost does not account for additional expenses related to teacher training and/or local efforts to align curricula. An estimated cost per class for instructional materials: \$50 x 100 students per grade level. There also will be costs associated for local curricula development and teacher professional learning to support implementation of new curricula. Estimated teacher time for curriculum development/alignment (in a school with only 1 teacher per grade): \$4,000 (5 days for alignment work x 4 teachers x \$200/day). Estimated costs related to professional learning: \$25,000 x # grades = \$X per year.

Other Explanation: N/A

(5) Explain whether this administrative regulation will have a major economic impact, as defined below. *"Major economic impact" means an overall negative or adverse economic impact from an administrative regulation of five hundred thousand dollars (\$500,000) or more on state or local government or regulated entities, in aggregate, as determined by the promulgating administrative bodies. [KRS 13A.010(13)]* N/A

## SUMMARY OF MATERIAL INCORPORATED BY REFERENCE

704 KAR 8:120 “Kentucky Academic Standards for Science” provided as the document incorporated by reference contains a total of 239 pages on the required academic standards for science. KRS 156.160 requires the Kentucky Board of Education to establish courses of study for the different grades and kinds of common schools, with the courses of study to comply with the expected goals, outcomes, and assessment strategies developed under KRS 158.645, 158.6451, and 158.6453.