

KENTUCKY DEPARTMENT OF EDUCATION STAFF NOTE

Topic: 704 KAR 8:120, Kentucky Academic Standards for Science

Date: December 6-7, 2022

Action Requested: Review Action/Consent Action/Discussion

Held In: Full Board Curriculum, Instruction and Assessment Operations

SUMMARY OF ISSUE BEFORE THE BOARD:

The issue before the board is to take action on the adoption of the proposed new administrative regulation 704 KAR 8:120, Kentucky Academic Standards (KAS) for Science. This regulation conforms to KRS 158.6453 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 (RC) and Advisory Panels (APs) assigned to focus on science.

COMMISSIONER'S RECOMMENDATION:

This regulation fulfills the requirements of KRS 158.6453 and sets forth the minimum content requirements to be met by a student per the KAS for Science.

The Commissioner recommends the adoption of required KAS for Science, as incorporated by reference into 704 KAR 8:120.

APPLICABLE STATUTE OR REGULATION:

KRS 156.070, 156.160, 158.645, 158.6451, 158.6453, 160.290, 704 KAR 3:305

BACKGROUND:

Existing Policy:

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 KBE. This administrative regulation incorporates by reference the required academic standards for science, which contain the general courses of study and academic content standards for use in Kentucky's common schools.

The current schedule provided in KRS 158.6453 calls for one or two content areas to be reviewed each year and every six years after that on a rotating basis. A process for reviewing and revising the standards and assessments for language arts and writing standards, mathematics standards, science standards and social studies standards. Statute further requires that revisions to the content standards shall:

1. Focus on critical knowledge, skills, and capacities needed for success in the global economy;

2. Result in fewer but more in-depth standards to facilitate mastery learning;
3. Communicate expectations more clearly and concisely to teachers, parents, students, and citizens;
4. Be based on evidence-based research;
5. Consider international benchmarks; and
6. Ensure that the standards are aligned from elementary to high school to postsecondary education so that students can be successful at each education level.

Summary of Issue:

The standards outlined in 704 KAR 8:120 are the revised standards for science and is a requirement for graduation as stated in 704 KAR 3:305. Kentucky's common schools are required to follow the Kentucky Academic Standards for Science provided in 704 KAR 8:120 and the document incorporated by reference. Curriculum and content decisions are made at the local level and local schools and districts are expected to follow the regulatory requirements named above.

The writers of the revised KAS for Science envisioned standards that afford students the opportunity to engage in becoming empowered as a learner, constructing new meaning and new knowledge, computational thinking, problem-solving, communication, and collaboration through demonstrated student skills.

To achieve this, the team focused on standards that:

- initiate cross-curricular connections to enhance the understanding of learning through scientific skills and concepts;
- establish a continuum of science competencies for K-12 ;
- provide opportunities for all students to engage in learning through science-based experiences and promote advanced demonstration of science competencies to prepare them for future success; and
- prepare students to address a critical workforce needs related to science knowledge, skills and application. The standards framework consists of Each concept within the standards outlines what a student should know and be able to do independently by the end of each grade band (K-2, 3-5, 6-8 and 9-12), which provides a K-12 continuum and sequential framework for instruction.

Budget Impact:

To date, the administrative costs spent for developing the revised KAS for Science as required in KRS 158.6453 is \$231,592.00. Additional staff time will be needed in addition to the costs accrued thus far to oversee the policy as it proceeds through the regulatory process. State funds have been used to develop the KAS for Science.

GROUPS CONSULTED AND BRIEF SUMMARY OF RESPONSES:

Focus Groups

The development of the standards relied heavily on consultation with a wide variety of stakeholders in order to receive ample feedback through a series of focus groups. Those consulted include both local and national experts from the field,

administrators/district leaders, higher education representatives, students, and local organizations that support implementation of the revised KAS for Science.

Interim Joint Committee on Education (IJCE)

KRS 158.6453 requires the Commissioner of Education to “present the recommendations and the public feedback to the IJCE,” (g)(4) with the purpose of providing an “open, transparent process that allows all Kentuckians an opportunity to participate.” The KDE presented on October 18, 2022 the data demonstrating the response from local stakeholders, including teachers, parents and community members. Additionally, the presentation outlined the changes that were considered and applied as a result of this feedback. In response to this presentation, the IJCE discussed the importance of increasing participation of community members in the standards review process.

Standards And Assessments Process Review Committee (SAPRC)

KRS 158.6453(g)(5) requires the commissioner to “provide a report to SAPRC summarizing the process” conducted by the KDE. The purpose of the committee is to review a comprehensive collection of evidence documenting the KDE’s adherence to facilitating the procedures required in statute with fidelity. However, the “review of the committee shall be limited to the procedural aspects of the review process undertaken prior to its consideration,” (f)(3).

The KDE provides SAPRC with a detailed report and a comprehensive collection of evidence to aid in its determination of the sufficiency or deficiency in the solicitation of public feedback that provides an “adequate opportunity to provide input on standards and the corresponding alignment of state assessments,” (g)(6). SAPRC is scheduled to meet on November 21, 2022.

LSAC

The regulation will go before the Local Superintendents Advisory Council (LSAC) at its November 22, 2022 meeting. A summary of the feedback received by the council will be provided to the KBE prior to its December 6-7, 2022 meeting.

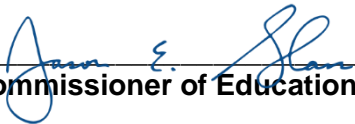
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