

Education and Workforce Development Cabinet

Kentucky Board of Education

Department of Education

(Amendment)

705 KAR 4:250. Energy Technology Engineering Career Pathway.

RELATES TO: KRS 158.808

STATUTORY AUTHORITY: KRS 156.070, 158.808

NECESSITY, FUNCTION, AND CONFORMITY: KRS 158.808 requires the Kentucky Department of Education to establish an energy technology engineering career pathway. This administrative regulation establishes a process for the Kentucky Board of Education to administer the energy technology engineering career track program, approve grant recipients, and distribute funds to local school districts.

Section 1. Definition. "Career pathway" means a coherent, articulated sequence of rigorous academic and career and technical courses, including dual and articulated credit opportunities, leading to a postsecondary degree or industry-recognized certification or licensure, that is developed, implemented, and maintained in partnership with secondary and postsecondary institutions, businesses, and employers.

Section 2. Application Process. (1) A Kentucky public school district shall be eligible to apply for a grant through a request for proposal process.

(2) A local school district superintendent shall submit the application and have the approval of participating schools' school-based decision making councils and local board of education.

(3) A grant application shall indicate the fiscal agent as:

(a) a local board of education for all district comprehensive secondary schools and locally-operated Career and Technology Centers.

(b) the Kentucky Department of Education, Office of Career and Technical Education, for all state-operated Area Technology Centers.

(4) To be eligible for funding, an applicant school shall provide an energy career pathway which includes the following components:

~~[(a) The Project Lead the Way middle school program Gateway to Technology, with content to include energy-related activities and the following Project Lead the Way pre-engineering courses at the high school level:~~

~~1. Introduction to Engineering Design;~~

~~2. Principles of Engineering;~~

~~3. Digital Electronics;~~

~~4. A specialized course in Energy and Power Technology, or integration of energy-related content and applications in each of the Project Lead the way courses. The content shall include]~~

(a) Energy [energy]-related applications, including but not limited to, energy and power technology, engineering design and development, and energy-related research and applications

as developed by the Kentucky Department of Education, in consultation with representatives from the energy technology industry, the University of Kentucky Center for Applied Energy

Research, the Council on Postsecondary Education, the Kentucky Community and Technical

College System, Governor's Office of Energy Policy, local school districts; ~~and~~ ~~[Project Lead~~

~~the Way; and]~~

~~[5. Engineering Design and Development, with content to include energy-related research and applications;]~~

(b) The opportunity for students to participate in energy related internships or cooperative education with energy-related industries or postsecondary education;

(c) Matching funds that shall be allocated to directly support the implementation of the program, which may include other state, federal, local, or nonpublic sources, within the uses and conditions set forth by the source of those funds. Previously awarded ~~[Project Lead the Way]~~ state grants related to energy and engineering initiatives and local matches shall not be considered as matching funds for this program; and

~~[(d) Status as a registered Project Lead The Way site prior to disbursement of funds; and]~~

(d) ~~[(e)]~~ Submission of seven (7) complete copies of the application plus an electronic copy.

Section 3. Selection of Grants. (1) The criteria for selection of applications for funding shall be based on the appropriateness and quality of the following:

(a) Process for identifying potential students and estimated enrollment in the Energy Technology Engineering Career Pathway;

(b) An implementation plan, which includes:

1. Computer availability, including hardware and software commonly used in related fields;

2. Teacher availability and certification;

3. Elementary school integration;

4. Middle school and high school program;

5. Measures of student progress to be utilized;

6. Instructional space;

7. Student Recruitment Plan, including recruitment of traditionally underserved populations;

8. Business and postsecondary partners and other education partnerships; and

9. Narrative of budget and timeline, including the efficient and effective use of proposed grant funds and matching funds;

(c) Program evaluation to include annual graduate follow-up surveys; and

(d) Level of individual school and district commitment for teacher professional development; ~~[and~~

~~(e) Narrative of budget and timeline, including the efficient and effective use of proposed grant funds and matching funds.]~~

(2) An application shall be reviewed as follows:

(a) A team of evaluators shall review the application; and

~~(b) [1-]~~ The Kentucky Department of Education shall approve funding based upon the results of the review.

~~(c) [2-]~~ Consideration may be given to provide for geographic diversity and the number of students to be served in order to maximize the benefits of the program.

Section 4. Grant Allocations and Requirements. (1) The award size or range of grants shall be determined by the Kentucky Department of Education.

(2) Allowable expenditures include:

(a) Laboratory equipment and instructional materials necessary for ~~[Project Lead the Way]~~ instruction;

(b) Computers and computer upgrades;

(c) Computer software required by the curriculum ~~[Project Lead the Way]~~;

(d) A laptop computer for the instructor;

(e) Travel expenses and registration fees for teachers and school administrators, including school counselors, to attend ~~[the]~~ required ~~[Project Lead the Way counselors]~~ conferences and trainings;

~~[(f) Travel expenses and registration fees for teachers to attend the required Project Lead the Way summer teacher institutes;]~~

(f) [(g)] Resources and professional learning ~~[development]~~ for integrating energy activities in the curriculum; and

(g) [(h)] Energy related instructional materials and equipment.

(3) State grant funds shall not be used to maintain, renovate, or build facilities or pay teacher salaries, but local district expenditures for these purposes may be included as matching funds.

(4) Monitoring of awarded grants shall include the following:

(a) Fiscal reports submitted semi-annually ~~[quarterly]~~ to the Department of Education; and

(b) Annual program evaluation report on the implementation plan that outlines the project accomplishments related to the project need, objectives, and outcomes.