

Stricken language would be deleted from and underlined language would be added to the law as it existed prior to this session of the General Assembly.

1 State of Arkansas  
2 84th General Assembly  
3 Regular Session, 2003

# A Bill

HOUSE BILL 2454

4  
5 By: Representative Bright  
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7

## For An Act To Be Entitled

8  
9 AN ACT TO ESTABLISH THE STATE SCIENCE,  
10 TECHNOLOGY, ENGINEERING, AND MATHEMATICS  
11 EDUCATION COMPETITIVENESS ACT, AND FOR OTHER  
12 PURPOSES.  
13

## Subtitle

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15 TO ESTABLISH THE STATE SCIENCE,  
16 TECHNOLOGY, ENGINEERING, AND MATHEMATICS  
17 EDUCATION COMPETITIVENESS ACT.  
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20 BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF ARKANSAS:  
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### SECTION 1. Title.

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23 This act shall be known and may be cited as the state "Science,  
24 Technology, Engineering, and Mathematics Education Competitiveness Act".  
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### SECTION 2. Legislative findings.

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27 The General Assembly finds that:

28 (a) Educating tomorrow's scientists, technologists, engineers, and  
29 mathematicians is of critical importance to the state's economy and that  
30 public policy is needed to address effective science, technology,  
31 engineering, and mathematics education at all levels. Science, technology,  
32 engineering, and mathematics education, in concert with scientific research,  
33 entrepreneurship, and business formation is the foundation for economic  
34 growth and development;

35 (b) There appears to be a logical educational continuum within which  
36 the knowledge of science, technology, engineering, and mathematics is



1 cumulative. This implies that without a strong and vibrant K-12 educational  
 2 system, the potential educational and economic impact of universities is  
 3 severely diminished. Yet the strands of middle and high school mathematics  
 4 and science education do not weave seamlessly into college and university  
 5 degree programs and the cumulative benefits of science, technology,  
 6 engineering, and mathematics are less than they could be;

7 (c) The American Society of Mechanical Engineers sponsored a state  
 8 action program: "Educating Tomorrow's Engineers," in Little Rock, Arkansas on  
 9 May 29, 2002. The participants identified the following nineteen (19)  
 10 critical issues for the science, technology, engineering, and mathematics  
 11 (STEM) education community to address:

- 12 (1) Financing student internships at universities;
- 13 (2) Establishing high expectations for student performance;
- 14 (3) Developing a relevant curriculum;
- 15 (4) Connecting and integrating strategies for collaboration;
- 16 (5) Establishing a statewide STEM organization;
- 17 (6) Providing good mentoring;
- 18 (7) Developing enthusiastic, energetic, and skilled teachers;
- 19 (8) Fostering cooperation among the many stakeholders interested  
 20 in improving STEM education;
- 21 (9) Encouraging industry involvement, including internships and  
 22 co-operative education experiences;
- 23 (10) Urging parental support for high achievement in STEM;
- 24 (11) Encouraging peer mentoring (i.e., kid-to-kid);
- 25 (12) Overcoming stereotypes;
- 26 (13) Preparing a common language throughout the STEM community;
- 27 (14) Establishing vertical teaming relationships among STEM  
 28 educators at all educational levels;
- 29 (15) Putting technology in classrooms requiring computer  
 30 training for teachers in pre-service;
- 31 (16) Establishing a one-stop resource place;
- 32 (17) Demonstrating and encouraging committed leadership;
- 33 (18) Setting clear goals for STEM education; and
- 34 (19) Adopting outcome measures and using them for  
 35 accountability;