

1 SYNOPSIS:

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3 This bill would provide for the Alabama Mathematics, Science, and Technology
4 Education Act.

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6 This bill would define relevant terms; state legislative findings concerning math,
7 science, and technology education; and establish the Alabama Mathematics,
8 Science, and Technology Education Coalition and state its function, membership
9 qualifications, and method of governance.

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12 A BILL
13 TO BE ENTITLED
14 AN ACT
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16 Providing for the Alabama Mathematics, Science, and Technology Act;
17 providing for certain findings related to mathematics, science, and technology
18 education; and establishing the Alabama Mathematics, Science, and Technology
19 Education Coalition and its function, membership qualifications, and method of
20 governance.

21 BE IT ENACTED BY THE LEGISLATURE OF ALABAMA:

22 Section 1. This act shall be known and may be cited as the "Alabama
23 Mathematics, Science, and Technology Education Act."

24 Section 2. As used in this act, the following terms shall have the following
25 meanings:

26 (1) AMSTEC. The Alabama Mathematics, Science, and Technology
27 Education Coalition.

28 (2) AMSTI. Alabama Math, Science, and Technology Initiative.

29 (3) DEPARTMENT. The Alabama Department of Education.

30 (4) K-12. Kindergarten through the twelfth grade.

31 (5) PUBLIC EDUCATION. Education in public schools in grades
32 kindergarten through twelfth grade (K-12).

33 (6) TECHNOLOGY. The processes and mechanisms used to modify and
34 control our environment; technology includes chemical, structural, mechanical,

1 electrical, and electronic systems of which computers and information technology
2 are only a small segment.

3 Section 3. The Legislature of the State of Alabama finds all of the
4 following:

5 (1) Providing a citizenry that is mathematically, scientifically, and
6 technologically literate is of critical importance to the economy of the state and its
7 competitiveness. Such literacy is needed to effectively deal with life issues and to
8 fulfill requirements of the current and future workplace. Mathematics, science,
9 and technology (MST) education, in concert with scientific research,
10 entrepreneurship, and business formation, is the foundation for economic growth
11 and development. Public policy is needed to assure that effective MST education
12 occurs at all levels of education.

13 (2) Through collaborations between the department and AMSTEC, a
14 statewide organization devoted to improving MST education, the AMSTI was
15 created to address needed improvements in MST education in grades K-12.

16 (3) It is important to focus on providing support for AMSTI such that all
17 students receive quality MST education from well-trained teachers who are
18 supported with adequate resources; to increase the number and quality of MST
19 teachers; to establish and coordinate partnerships that strengthen and promote
20 the MST continuum and encourage students to consider MST careers; and to
21 build up-to-date educational infrastructure, organizations, and communities.

22 (4) Research indicates that the most important factor for student
23 achievement is having a well-supported and well-equipped classroom led by a
24 teacher with high quality professional development experiences. Plans to
25 significantly improve MST education must address increasing the number and
26 quality of those teaching these subjects and supporting the teachers with the
27 resources needed for effective MST instruction. The department, in collaboration
28 with AMSTEC, has developed AMSTI to address these needs. Fully
29 implemented, AMSTI will provide regional Math, Science, and Technology
30 Education Resource (MASTER) sites across the state that provide appropriate
31 materials, supplies, and technology; math and science professional development;

1 a web site; mentoring programs; and business and industry partnerships.

2 (5) Schools must have access to up-to-date math, science, and
3 technology infrastructure. AMSTI provides effective infrastructure needed to
4 support quality MST education in grades K-12. Specifically, AMSTI MASTER
5 sites should provide teachers with teaching materials and equipment needed for
6 effective inquiry-based, hands-on activities, high quality MST professional
7 development, technical assistance, including on-site support, and mentoring by
8 math and science specialists.

9 (6) Partnerships are crucial to public education. Partnerships foster
10 support and provide direction needed by the education community to empower
11 students with the knowledge and skills for success in the workforce. Partnerships
12 should include public and private sector businesses, state and federal agencies,
13 institutions of higher education, science centers, museums, organizations, and
14 associations. With the broad diversity of partnerships possible, there is a need for
15 a statewide, nonprofit organization to facilitate, support, coordinate, and
16 recognize partnerships supporting MST public education.

17 Section 4. (a) AMSTEC is established to work in support of the
18 Department of Education and AMSTI. AMSTEC shall foster, facilitate, and
19 coordinate partnerships to enhance AMSTI and the MST education of all
20 students including the next generation of scientists, technologists, and
21 mathematicians.

22 (b) Membership in the AMSTEC shall be open to any individual or group of
23 individuals, including, but not limited to, firms, corporations, associations, and
24 organizations, who are concerned about the improvement of MST education in
25 the State of Alabama.

26 (c) The department shall continue to collaborate with AMSTEC in order to
27 deliver high quality math, science, and technology related instruction to
28 Alabama's public schools.

29 Section 5. AMSTEC shall be administered by a governing board
30 composed of 16 members who shall serve without compensation. The board
31 shall consist of eight members appointed in the following manner: One by the

1 Governor, one by the Lieutenant Governor, one by the Speaker of the House of
2 Representatives, one by the President Pro Tem of the Senate, and four members
3 by the State Superintendent of Education. Eight additional members shall be
4 elected to the board from the members of AMSTEC. The membership of the
5 board shall be inclusive and reflect the racial, gender, geographic, urban/rural,
6 and economic diversity of the state.

7 Section 6. Members of the board shall serve three-year terms subject to
8 replacement, reappointment, or reelection, if applicable, at the end of the term.

9 Section 7. This act shall become effective on the first day of the third
10 month following its passage and approval by the Governor, or its otherwise
11 becoming law.