

SENATE NO. 285

AN ACT TO IMPROVE SCIENCE EDUCATION IN THE COMMONWEALTH

*Be it enacted by the Senate and House of Representatives in General Court assembled,
And by the authority of the same, as follows:*

1 SECTION 1.

2 MGL 15:1G is hereby amended by striking the paragraph beginning on line 32 in the 2004 edition of
3 the Massachusetts General Laws and inserting in place thereof the following:-

4 The Robert H. Goddard Council on Science, Technology, Engineering and Mathematics K-12
5 Education shall be composed of members who have demonstrated scholarship or creativity in, or
6 distinguished service to science, technology, engineering or mathematics, and shall be broadly
7 representative of those areas. The council shall be comprised of fifteen members. The board shall
8 appoint 14 members, six of whom shall be science and mathematics educators in public schools
9 throughout the Commonwealth. The six members shall include one science educator from a public
10 high school, one mathematics educator from a public high school, one science educator from a public
11 middle school, one mathematics educator from a public middle school and two curriculum
12 coordinators representing distinct STEM subject areas. The council shall also include three members
13 representative of business firms in the areas of science, technology, engineering or mathematics; one
14 member who is a public high school student between the ages of 16 to 18 who has demonstrated
15 excellence in the areas of science and mathematics through academic coursework and has shown
16 leadership in community service activities or relevant employment; two of whom shall represent non-
17 profit science or math education research organizations, two of whom shall represent higher education
18 institutions in the Commonwealth. The Robert H. Goddard Council on Science, Technology,
19 Engineering and Mathematics Education shall appoint a representative to serve on the council. The

20 council shall further investigate and study science education in the Commonwealth, including but not
21 limited to the following: a study of current laboratory facilities and equipment, a review of curricula
22 used for science education in grades six through twelve, and a comprehensive review of current
23 professional development programs in the STEM areas throughout the Commonwealth. The council
24 shall develop a list of recommended curricula for science education in grades six through twelve by
25 June 30, 2007.

26 Section 2.

27 Chapter 71 of the General Laws is hereby amended by inserting the following section:-

28 SECTION 3E: (a) The School Building Authority shall develop science education facilities standards
29 and regulations for grades six through eight and grades nine through twelve. These standards and
30 regulations shall apply to all new school construction projects for grades six through eight and grades
31 nine through twelve for the approval of school building construction and applicable school renovation
32 projects.

33 (b) In the development of these standards and regulations, the authority shall consult with the advisory
34 council on science education by June 30, 2007. The regulations and standards shall include, but need
35 not be limited to:

36 (1) the establishment of rigorous safety standards for the use of all laboratory equipment;

37 (2) facilities and equipment requirements consistent with inquiry-based scientific teaching and
38 learning methods and designed for multi-disciplinary use;

39 (3) the establishment of minimum requirements for facilities and related equipment for grades
40 9-12 in the areas of general science, biology, chemistry, physics, and technology and
41 engineering;

- 42 (4) the establishment of limits for cost per square foot of laboratory space for general science,
43 biology, chemistry, physics, technology and engineering;
44 (5) guidelines for design standards for combination classroom and laboratory facilities;
45 (6) minimum requirements for length of use.