

111TH CONGRESS
1ST SESSION

H. R. 1464

To require Federal agencies to collaborate in the development of freely-available open source educational materials in college-level physics, chemistry, and math, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

MARCH 12, 2009

Mr. FOSTER introduced the following bill; which was referred to the Committee on Science and Technology, and in addition to the Committee on Education and Labor, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To require Federal agencies to collaborate in the development of freely-available open source educational materials in college-level physics, chemistry, and math, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Learning Opportuni-
5 ties With Creation of Open Source Textbooks (LOW
6 COST) Act of 2009”.

1 **SEC. 2. FINDINGS.**

2 Congress finds the following:

3 (1) The College Board reported that for the
4 2007 through 2008 academic years each student
5 spent an estimated \$805 to \$1,229 on college books
6 and supplies depending on the type of institution of
7 higher education a student attended.

8 (2) The gross margin on new college textbooks
9 is currently 22.7 percent according to the National
10 Association of College Stores.

11 (3) In a recent study, the Government Account-
12 ability Office found that college textbook prices have
13 risen at twice the rate of annual inflation over the
14 last two decades.

15 (4) An open source material project that would
16 make high quality educational materials freely avail-
17 able to the general public would drop college text-
18 book costs and increase accessibility to such edu-
19 cation materials.

20 (5) College-level open source course work mate-
21 rials in math, physics, and chemistry represent a
22 high-priority first step in this area.

23 (6) The scientific and technical workforce at
24 Federal agencies, national laboratories, and federally
25 supported university-based research programs could
26 make a valuable contribution to this effort.

1 (7) A Federal oversight role in the creation and
2 maintenance of standard, publicly vetted textbooks is
3 desirable to ensure that intellectual property is re-
4 spected and that public standards for quality, edu-
5 cational effectiveness, and scientific accuracy are
6 maintained.

7 **SEC. 3. OPEN SOURCE MATERIAL REQUIREMENT FOR FED-**
8 **ERAL AGENCIES.**

9 (a) IN GENERAL.—Not later than 1 year after the
10 date of the enactment of this Act, the head of each agency
11 that expends more than \$10,000,000 in a fiscal year on
12 scientific education and outreach shall use at least 2 per-
13 cent of such funds for the collaboration on the develop-
14 ment and implementation of open source materials as an
15 educational outreach effort in accordance with subsection
16 (b).

17 (b) REQUIREMENTS.—The head of each agency de-
18 scribed in subsection (a) shall, under the joint guidance
19 of the Director of the National Science Foundation and
20 the Secretary of Energy, collaborate with the heads of any
21 of the agencies described in such subsection or any feder-
22 ally supported laboratory or university-based research pro-
23 gram to develop, implement, and establish procedures for
24 checking the veracity, accuracy, and educational effective-
25 ness of open source materials that—

1 (1) contain, at minimum, a comprehensive set
2 of textbooks or other educational materials covering
3 topics in college-level physics, chemistry, or math;

4 (2) are posted on the Federal Open Source Ma-
5 terial Website;

6 (3) are updated prior to each academic year
7 with the latest research and information on the top-
8 ics covered in the textbooks or other educational ma-
9 terials available on the Federal Open Source Mate-
10 rial Website; and

11 (4) are free of copyright violations.

12 **SEC. 4. GRANT PROGRAM.**

13 (a) GRANTS AUTHORIZED.—From the amounts ap-
14 propriated under subsection (d), the Director and the Sec-
15 retary shall jointly award grants to eligible entities to
16 produce open source materials in accordance with sub-
17 section (c).

18 (b) APPLICATION.—To receive a grant under this sec-
19 tion, an eligible entity shall submit an application to the
20 Director and the Secretary at such time, in such manner,
21 and containing such information as the Director and Sec-
22 retary may require.

23 (c) USES OF GRANT.—An eligible entity that receives
24 a grant under this section shall use such funds—

1 (1) to develop and implement open source mate-
2 rials that contain educational materials covering top-
3 ics in college-level physics, chemistry, or math; and

4 (2) to evaluate the open sources materials pro-
5 duced with the grant funds awarded under this sec-
6 tion and to submit a report containing such evalua-
7 tion to the Director and Secretary.

8 (d) AUTHORIZATION OF APPROPRIATIONS.—There
9 are authorized to be appropriated \$15,000,000 to carry
10 out this section for fiscal year 2010 and such sums as
11 necessary for each succeeding fiscal year.

12 **SEC. 5. REGULATIONS.**

13 The Director and the Secretary shall jointly prescribe
14 regulations necessary to implement this Act, including re-
15 distribution and attribution standards for open source ma-
16 terials produced under this Act.

17 **SEC. 6. DEFINITIONS.**

18 In this Act:

19 (1) DIRECTOR.—The term “Director” means
20 the Director of the National Science Foundation.

21 (2) ELIGIBLE ENTITY.—The term “eligible enti-
22 ty” means an institution of higher education, non-
23 profit or for-profit organization, Federal agency, or
24 any other organization that produces the open
25 source materials described in section 4(c).

1 (3) FEDERAL OPEN SOURCE MATERIAL
2 WEBSITE.—The phrase “Federal Open Source Mate-
3 rial Website” means the website where the head of
4 each agency described in section 3 shall post the
5 open source materials pursuant to such section,
6 which shall be made available free of charge to, and
7 may be downloaded, redistributed, changed, revised
8 or otherwise altered by, any member of the general
9 public.

10 (4) INSTITUTION OF HIGHER EDUCATION.—The
11 term “institution of higher education” means an in-
12 stitution of higher education as defined in section
13 101 of the Higher Education Act of 1965 (20
14 U.S.C. 1001).

15 (5) OPEN SOURCE MATERIALS.—The term
16 “open source materials” means materials that are
17 posted on a website that is available free of charge
18 to, and may be downloaded, redistributed changed,
19 revised or otherwise altered by, any member of the
20 general public.

21 (6) SECRETARY.—The term “Secretary” means
22 the Secretary of Energy.

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