106TH CONGRESS 1ST SESSION

S. 491

To enable America's schools to use their computer hardware to increase student achievement and prepare students for the 21st century workplace.

IN THE SENATE OF THE UNITED STATES

March 2, 1999

Mr. Lautenberg introduced the following bill; which was read twice and referred to the Committee on Health, Education, Labor, and Pensions

A BILL

To enable America's schools to use their computer hardware to increase student achievement and prepare students for the 21st century workplace.

- 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.
- This Act may be cited as the "Education for the 21st
- 5 Century (e–21) Act".
- 6 SEC. 2. PURPOSE.
- 7 It is the purpose of this Act to enable America's
- 8 schools to use their computer hardware to increase student
- 9 achievement and prepare students for the 21st century
- 10 workplace.

1 SEC. 3. FINDINGS.

- 2 Congress makes the following findings:
- 3 (1) Establishing computer literacy for middle 4 school graduates will help ensure that students are 5 receiving the skills needed for advanced education 6 and for securing employment in the 21st century.
 - (2) Computer literacy skills, such as information gathering, critical analysis and communication with the latest technology, build upon the necessary basics of reading, writing, mathematics, and other core subject areas.
 - (3) According to a study conducted by the Educational Testing Service (ETS), eighth grade mathematics students whose teachers used computers for simulations and applications outperformed students whose teachers did not use such educational technology.
 - (4) Although an ever increasing amount of schools are obtaining the latest computer hardware, schools will not be able to take advantage of the benefits of computer-based learning unless teachers are effectively trained in the latest educational software applications.
 - (5) The Educational Testing Service (ETS) study showed that students whose teachers received training in computers performed better than other

- students. The study also found that schools that provide teachers with professional development in
- 3 computers enjoyed higher staff morale and lower ab-
- 4 senteeism rates.
- 6 (6) Some of the most exciting applications in educational technology are being developed not only by commercial software companies, but also by university faculty and secondary school and college students. The fruit of this academic talent should be
- 9 dents. The fruit of this academic talent should be
- 10 channeled more effectively to benefit our Nation's el-
- 11 ementary and secondary schools.
- 12 SEC. 4. MIDDLE SCHOOL COMPUTER LITERACY CHAL-
- 13 LENGE.
- 14 (a) Grants Authorized.—The Secretary of Edu-
- 15 cation is authorized to award grants to States that inte-
- 16 grate into the State curriculum the goal of making all mid-
- 17 dle school graduates in the State technology literate.
- 18 (b) Uses.—Grants awarded under this section shall
- 19 be used for teacher training in technology, with an empha-
- 20 sis on programs that prepare 1 or more teachers in each
- 21 middle school in the State to become technology leaders
- 22 who then serve as experts and train other teachers.
- 23 (c) Matching Funds.—Each State shall encourage
- 24 schools that receive assistance under this section to pro-
- 25 vide matching funds, with respect to the cost of teacher

- 1 training in technology to be assisted under this section,
- 2 in order to enhance the impact of the teacher training and
- 3 to help ensure that all middle school graduates in the
- 4 State are computer literate.
- 5 (d) AUTHORIZATION OF APPROPRIATIONS.—There
- 6 are authorized to be appropriated to carry out this section
- 7 \$30,000,000 for each of the fiscal years 2000 through
- 8 2004.

9 SEC. 5. HIGH-QUALITY EDUCATIONAL SOFTWARE FOR ALL

- 10 schools.
- 11 (a) Competition Authorized.—The Secretary of
- 12 Education is authorized to award grants, on a competitive
- 13 basis, to secondary school and college students working
- 14 with university faculty, software developers, and experts
- 15 in educational technology for the development of high-
- 16 quality educational software and Internet web sites by
- 17 such students, faculty, developers, and experts.
- 18 (b) Recognition.—
- 19 (1) In General.—The Secretary of Education
- shall recognize outstanding educational software and
- Internet web sites developed with assistance provided
- 22 under this section.
- 23 (2) Certificates.—The President is requested
- 24 to, and the Secretary shall, issue an official certifi-
- cate signed by the President and Secretary, to each

- 1 student and faculty member who develops outstand-
- 2 ing educational software or Internet web sites recog-
- 3 nized under this section.
- 4 (c) Focus.—The educational software or Internet
- 5 web sites that are recognized under this section shall focus
- 6 on core curriculum areas.
- 7 (d) Priority.—
- 8 (1) First year.—For the first year that the
- 9 Secretary awards grants under this section, the Sec-
- retary shall give priority to awarding grants for the
- development of educational software or Internet web
- sites in the areas of mathematics, science, and read-
- ing. 13
- 14 (2) SECOND AND THIRD YEARS.—For the sec-
- ond and third years that the Secretary awards
- 16 grants under this section, the Secretary shall give
- priority to awarding grants for the development of
- educational software or Internet web sites in the
- areas described in paragraph (1) and in social stud-
- ies, the humanities, and the arts.
- 21 (e) Judges.—The Secretary shall designate official
- 22 judges to recognize outstanding educational software or
- 23 Internet web sites assisted under this section.
- 24 (f) Downloading.—Educational software recog-
- 25 nized under this section shall be made available to local

- 1 educational agencies for free downloading from the De-
- 2 partment of Education's Internet web site. Internet web
- 3 sites recognized under this section shall be accessible to
- 4 any user of the World Wide Web.
- 5 (g) AUTHORIZATION OF APPROPRIATIONS.—There
- 6 are authorized to be appropriated to carry out this section
- 7 \$5,000,000 for each of the fiscal years 2000 through

8 2004.

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