

110TH CONGRESS
1ST SESSION

S. 1996

To reauthorize the Enhancing Education Through Technology Act of 2001,
and for other purposes.

IN THE SENATE OF THE UNITED STATES

AUGUST 3, 2007

Mr. BINGAMAN (for himself, Mr. BURR, and Mrs. MURRAY) introduced the following bill; which was read twice and referred to the Committee on Health, Education, Labor, and Pensions

A BILL

To reauthorize the Enhancing Education Through
Technology Act of 2001, 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. ACHIEVEMENT THROUGH TECHNOLOGY AND**
4 **INNOVATION.**

5 Part D of title II of the Elementary and Secondary
6 Education Act of 1965 (20 U.S.C. 6751 et seq.) is amend-
7 ed to read as follows:

1 **“PART D—ACHIEVEMENT THROUGH**
2 **TECHNOLOGY AND INNOVATION**

3 **“SEC. 2401. SHORT TITLE.**

4 “‘This part may be cited as the ‘Achievement Through
5 Technology and Innovation Act of 2007’ or the ‘ATTAIN
6 Act’.

7 **“SEC. 2402. FINDINGS, PURPOSES, AND GOALS.**

8 “(a) FINDINGS.—Congress makes the following find-
9 ings:

10 “(1) Learning technologies in our schools are
11 critical to meet the goals of the No Child Left Be-
12 hind Act of 2001 of raising student achievement,
13 closing the achievement gap, and ensuring high-qual-
14 ity teaching, and to ensure that our Nation’s stu-
15 dents are prepared to compete in the 21st century
16 knowledge-based global economy.

17 “(2) Increased professional development oppor-
18 tunities are needed if teachers are to be highly quali-
19 fied and effective in a 21st century classroom with
20 today’s digital native students, including in the use
21 of learning technologies to deliver innovative instruc-
22 tion and curriculum and to use data to inform in-
23 struction.

24 “(3) Scientifically based research, conducted
25 with Federal funding, demonstrates that systemic
26 redesign initiatives centered around technology have

1 shown great promise in improving teaching and
2 learning, including the following:

3 “(A) In Utah, Missouri, and Maine, the
4 eMINTS program provides schools and teachers
5 with educational technology tools, curriculum,
6 and more than 200 hours of professional devel-
7 opment to change how teachers teach and stu-
8 dents learn. In classrooms in the same school (1
9 with eMINTS and 1 without), the student
10 achievement of students in the eMINTS class-
11 room was repeatedly over 10 percent higher
12 than the control classroom.

13 “(B) In West Virginia, students receiving
14 access to online foreign language courses per-
15 formed at least as well as those in face-to-face
16 versions of the classes, providing comparable
17 high-quality instruction for those in rural areas
18 who otherwise would not have access to such
19 courses.

20 “(C) In Michigan’s Freedom to Learn
21 technology program, 8th grade mathematics
22 achievement increased from 31 percent in 2004
23 to 63 percent in 2005 in 1 middle school, and
24 science achievement increased from 68 percent

1 of students proficient in 2003 to 80 percent
2 2004.

3 “(D) In Texas, the Technology Immersion
4 Pilot (TIP), implemented in middle schools,
5 demonstrated that discipline referrals went
6 down by more than $\frac{1}{2}$ with the changes in
7 teaching and learning; while in 1 school, the
8 percentage of 6th graders who passed the read-
9 ing portion of the 2006 test was up 17 points
10 from 2004, and the percentage of 7th graders
11 who passed the mathematics portion rose 13
12 points. The students have become more respon-
13 sible for their learning, more engaged in the
14 classroom, and much more knowledgeable about
15 the role of technology in problem solving and
16 learning.

17 “(E) In Iowa, after connecting teachers
18 with sustainable professional development and
19 technology-based curriculum interventions, stu-
20 dent scores increased by 14 points in 8th grade
21 mathematics, 16 points in 4th grade mathe-
22 matics, and 13 points in 4th grade reading
23 compared with control groups.

24 “(4) Technology and e-learning in our schools
25 are necessary to meet our science, technology, engi-

1 neering, and mathematics (STEM) education needs
2 and provide students with 21st century skills, includ-
3 ing technology literacy, information literacy, commu-
4 nication, problem solving, and the ability for self-di-
5 rected lifelong learning.

6 “(5) A 2003 Department of Commerce report
7 credits United States industry’s investments in in-
8 formation technology between 1989-2001 with ‘pro-
9 ducing positive and probably lasting changes in the
10 nation’s economic potential’, but finds United States
11 education last in intensity of information technology
12 of 55 industry sectors.

13 “(6) Many of our Nation’s schools lack the re-
14 sources necessary for the 21st century classroom
15 and to meet the needs and expectations of today’s
16 digital native students, including software, digital
17 content, broadband, and other technologies.

18 “(7) According to the Department of Edu-
19 cation’s National Educational Technology Trends
20 Study (NETTS 2007), insufficient or outdated tech-
21 nology presented a substantial barrier to technology
22 use for teaching and learning for more than 40 per-
23 cent of students, while lack of support specialists
24 was a barrier to technology use for more than 50
25 percent of students.

1 “(8) Federal leadership and investment is need-
2 ed to serve as a catalyst for State and local edu-
3 cation initiatives aimed at school innovation and im-
4 proved student achievement through leveraging edu-
5 cational technologies. According to the Department
6 of Education’s National Educational Technology
7 Trends Study (NETTS 2007), ‘Because funds gen-
8 erated locally through bonds or taxes frequently have
9 legal restrictions requiring them to be spent on
10 hardware and connectivity purchases only, Federal
11 and State funds supporting the use of technology re-
12 sources fill a critical gap.’.

13 “(b) PURPOSES.—The purposes of this part are the
14 following:

15 “(1) To ensure that through technology every
16 student has access to individualized, rigorous, and
17 relevant learning to meet the goals of this Act, and
18 to prepare all students and the United States for the
19 21st century.

20 “(2) To evaluate, build upon, and increase the
21 use of evidence-based and innovative systemic school
22 redesigns that center on the use of technology that
23 lead to school improvement and increased student
24 achievement.

1 “(3) To increase ongoing, meaningful profes-
2 sional development around technology that leads to
3 changes in teaching and curriculum, improves stu-
4 dent achievement, including in core curricular sub-
5 jects, and student technology literacy, and is aligned
6 with professional development activities supported
7 under section 2123.

8 “(c) GOALS.—The goals of this part are the fol-
9 lowing:

10 “(1) To improve student academic achievement
11 on State academic standards through the use of pro-
12 fessional development and systemic school redesigns
13 that center on the use of technology and its applica-
14 tions.

15 “(2) To improve professional development to
16 ensure every school administrator possesses the lead-
17 ership skills necessary for effective technology inte-
18 gration and every teacher possesses the knowledge
19 and skills to use technology across the curriculum,
20 to use technology and curriculum redesign as key
21 components of changing teaching and learning and
22 improving student achievement, to use technology
23 for data analysis to enable individualized instruction,
24 and to use technology to improve student technology
25 literacy.

1 “(3) To ensure that every student is techno-
2 logically literate by the end of 8th grade, regardless
3 of the student’s race, ethnicity, gender, family in-
4 come, geographic location, or disability.

5 “(4) To improve student engagement, oppor-
6 tunity, attendance, graduation rates, and technology
7 access through enhanced or redesigned curriculum
8 or instruction.

9 “(5) To more effectively use data to inform in-
10 struction, address individualized student needs, and
11 support school decision making.

12 **“SEC. 2403. STUDENT TECHNOLOGY LITERACY.**

13 “In this part, the term ‘student technology literacy’
14 means student knowledge and skills in using contemporary
15 information, communication, and learning technologies in
16 a manner necessary for successful employment, life-long
17 learning and citizenship in the knowledge-based, digital
18 and global 21st century, which includes, at a minimum,
19 the ability—

20 “(1) to effectively communicate and collaborate;

21 “(2) to analyze and solve problems;

22 “(3) to access, evaluate, manage, and create in-
23 formation and otherwise gain information literacy;

1 “(4) to demonstrate creative thinking, construct
2 knowledge, and develop innovative products and
3 processes; and

4 “(5) to do so in a safe and ethical manner.

5 **“SEC. 2404. AUTHORIZATION OF APPROPRIATIONS.**

6 “(a) IN GENERAL.—There are authorized to be ap-
7 propriated to carry out this part, \$1,000,000,000 for fiscal
8 year 2008, and such sums as may be necessary for each
9 of the 5 succeeding fiscal years.

10 “(b) ALLOCATION OF FUNDS BETWEEN STATE AND
11 LOCAL AND NATIONAL INITIATIVES.—The amount of
12 funds made available under subsection (a) for a fiscal year
13 shall be allocated so that—

14 “(1) 3 percent of such funds or \$10,000,000,
15 whichever amount is less, is made available to carry
16 out subpart 2, of which amount—

17 “(A) \$2,000,000 is made available to carry
18 out section 2411(1); and

19 “(B) 1 1/2 percent of such amount or
20 \$4,000,000, whichever amount is less, is made
21 available to carry out section 2412; and

22 “(2) the remainder of such funds is made avail-
23 able to carry out subpart 1.

24 “(c) LIMITATION.—

1 “(1) LOCAL ADMINISTRATIVE COSTS.—Of the
2 amount of funds made available to a local edu-
3 cational agency under this part for a fiscal year, not
4 more than 3 percent may be used by the agency for
5 administrative costs.

6 “(2) STATE ADMINISTRATIVE COSTS.—Of the
7 amount of funds made available to a State edu-
8 cational agency under section 2406(a)(1) for admin-
9 istrative costs and technical assistance, not more
10 than 60 percent may be used by the agency for ad-
11 ministrative costs.

12 **“Subpart 1—State and Local Grants**

13 **“SEC. 2405. ALLOTMENT AND REALLOTMENT.**

14 “(a) RESERVATIONS AND ALLOTMENT.—From the
15 amount made available to carry out this subpart under
16 section 2404(b)(2) for a fiscal year—

17 “(1) the Secretary shall reserve—

18 “(A) $\frac{3}{4}$ of 1 percent for the Secretary of
19 the Interior for programs under this subpart
20 for schools operated or funded by the Bureau of
21 Indian Affairs; and

22 “(B) $\frac{1}{2}$ of 1 percent to provide assistance
23 under this subpart to the outlying areas; and

24 “(2) from the remainder of such amount and
25 subject to subsection (b), the Secretary shall make

1 grants by allotting to each eligible State educational
2 agency under this subpart an amount that bears the
3 same relationship to such remainder for such year as
4 the amount received under part A of title I for such
5 year by such State educational agency bears to the
6 amount received under such part for such year by all
7 State educational agencies.

8 “(b) MINIMUM ALLOTMENT.—The amount of any
9 State educational agency’s allotment under subsection
10 (a)(2) for any fiscal year may not be less than $\frac{1}{2}$ of 1
11 percent of the amount made available for allotments to
12 States under this part for such year.

13 “(c) REALLOTMENT OF UNUSED FUNDS.—If any
14 State educational agency does not apply for an allotment
15 under this subpart for a fiscal year, or does not use its
16 entire allotment under this subpart for that fiscal year,
17 the Secretary shall reallocate the amount of the State edu-
18 cational agency’s allotment, or the unused portion of the
19 allotment, to the remaining State educational agencies
20 that use their entire allotments under this subpart in ac-
21 cordance with this section.

22 “(d) STATE EDUCATIONAL AGENCY DEFINED.—In
23 this section, the term ‘State educational agency’ does not
24 include an agency of an outlying area or the Bureau of
25 Indian Affairs.

1 **“SEC. 2406. USE OF ALLOTMENT BY STATE.**

2 “(a) IN GENERAL.—Of the amount provided to a
3 State educational agency from the agency’s allotment
4 under section 2405(a)(2) for a fiscal year—

5 “(1) the State educational agency may use 5
6 percent of such amount or \$100,000, whichever
7 amount is greater, to carry out activities under sec-
8 tion 2408(a);

9 “(2) the State educational agency shall use 2.5
10 percent of such amount or \$50,000, whichever
11 amount is greater, to carry out activities under sec-
12 tion 2408(b); and

13 “(3) the State educational agency shall dis-
14 tribute the remainder as follows:

15 “(A) The State educational agency shall
16 distribute 60 percent to award subgrants to
17 local educational agencies for Improving Teach-
18 ing and Learning through Technology pursuant
19 to section 2409(e) by allocating to each eligible
20 local educational agency that has submitted an
21 application to the State educational agency
22 under section 2409(e), for the activities de-
23 scribed in section 2410(b), an amount that
24 bears the same relationship to 60 percent of the
25 remainder for such year as the amount received
26 under part A of title I for such year by such

1 local educational agency bears to the amount
2 received under such part for such year by all
3 local educational agencies within the State.

4 “(B) The State educational agency shall
5 distribute 40 percent to award Systemic School
6 Redesign through Technology Integration sub-
7 grants, through a State-determined competitive
8 process, to eligible local educational agencies
9 that have submitted applications to the State
10 educational agency pursuant to section 2409(b)
11 for the activities described in section 2410(a).

12 “(b) SUFFICIENT AMOUNTS.—

13 “(1) SPECIAL RULE.—In awarding subgrants
14 under subsection (a)(3)(B), the State educational
15 agency shall—

16 “(A) ensure subgrants are of sufficient size
17 and scope to be effective, consistent with the
18 purposes of this part;

19 “(B) ensure subgrants are of sufficient du-
20 ration to be effective, consistent with the pur-
21 poses of this part, including by awarding sub-
22 grants that will run for not less than 2 years
23 and may be renewed for not more than a total
24 of 5 years;

1 “(C) give preference in the awarding of
2 subgrants to eligible local educational agencies
3 that serve schools in need of improvement, as
4 identified under section 1116, including those
5 with high populations of students with limited
6 English proficiency or students with disabilities
7 or other subgroups of students who have not
8 met the State’s student academic achievement
9 standards; and

10 “(D) ensure an equitable distribution of
11 assistance under this subpart among urban and
12 rural areas of the State, according to the dem-
13 onstrated need of those local educational agen-
14 cies serving the areas.

15 “(2) MINIMUM ALLOTMENT.—The amount of
16 any local educational agency’s allotment under sub-
17 section (a)(3)(A) for any fiscal year shall be a min-
18 imum of \$3,000.

19 “(c) REALLOTMENT OF UNUSED FUNDS.—If any
20 local educational agency does not apply for an allotment
21 under subsection (a)(3)(A) for a fiscal year, or does not
22 use its entire allotment under this subpart for that fiscal
23 year, the State shall reallocate the amount of the local edu-
24 cational agency’s allotment, or the unused portion of the
25 allotment, to the remaining local educational agencies that

1 use their entire allotments under this subpart in accord-
2 ance with this section.

3 **“SEC. 2407. STATE APPLICATIONS.**

4 “(a) IN GENERAL.—To be eligible to receive a grant
5 under this subpart, a State educational agency shall sub-
6 mit to the Secretary, at such time and in such manner
7 as the Secretary may specify, an application containing
8 the contents described in subsection (b) and such other
9 information as the Secretary may reasonably require.

10 “(b) CONTENTS.—Each State application submitted
11 under subsection (a) shall include each of the following:

12 “(1) A description of how the State will support
13 local educational agencies that receive subgrants
14 under this subpart in meeting, and help improve
15 their capacity to meet, the purposes, goals, and re-
16 quirements of this part, including through technical
17 assistance.

18 “(2) A description of the State’s long-term
19 goals and strategies for improving student academic
20 achievement, including in core academic subjects and
21 technology literacy, through the effective use of tech-
22 nology in classrooms and schools throughout the
23 State.

24 “(3) A description of the priority area upon
25 which the State will focus its guidance, technical,

1 and other assistance under this part, and other local
2 support under this part, such that such priority area
3 shall be identified by the State from among the core
4 academic subjects, grade levels, and student sub-
5 group populations that may be causing the most
6 number of local educational agencies in the State to
7 not make adequate yearly progress, as defined in
8 section 1111(b)(2)(C).

9 “(4) A description of how the State will support
10 local educational agencies that receive subgrants
11 under this subpart in implementing, and help im-
12 prove their capacity to implement, professional de-
13 velopment programs pursuant to section
14 2410(b)(1)(A).

15 “(5) A description of how the State will ensure
16 that teachers, paraprofessionals, library and media
17 personnel, and administrators in a State receiving
18 funds under this part possess the knowledge and
19 skills to use technology across the curriculum, to use
20 technology and curriculum redesign as key compo-
21 nents of changing teaching and learning and improv-
22 ing student achievement, to use technology for data
23 analysis to enable individualized instruction, and to
24 use technology to improve student technology lit-
25 eracy.

1 “(6) A description of the process, activities, and
2 performance measures that the State educational
3 agency will use to evaluate the impact and effective-
4 ness of activities funded under this part as required
5 under section 2408(b).

6 “(7) Identification of the State challenging aca-
7 demic content standards and challenging student
8 academic achievement standards that the State will
9 use to ensure that each student is technology literate
10 by the end of the 8th grade consistent with the defi-
11 nition of student technology literacy, and a descrip-
12 tion of how the State will assess, not less than once
13 by the end of 8th grade, student performance in
14 gaining technology literacy only for the purpose of
15 tracking progress towards achieving the 8th grade
16 technology literacy goal but not for meeting ade-
17 quate yearly progress goals, including through em-
18 bedding such assessment items in other State tests,
19 performance-based assessments portfolios, or
20 through other valid and reliable means, such that
21 nothing in this part shall be construed to require
22 that States are required to develop a separate test
23 to assess student technology literacy.

1 “(8) An assurance that financial assistance pro-
2 vided under this subpart will supplement, and not
3 supplant, State and local funds.

4 “(9) A description of how the State educational
5 agency will, in providing technical and other assist-
6 ance to local educational agencies, give priority to
7 those local educational agencies identified by the
8 State with the highest need of assistance, including
9 those with the highest percentage or number of stu-
10 dents from families with incomes below the poverty
11 line, students not achieving at the State proficiency
12 level with student populations identified under sec-
13 tion 2406(b)(1)(C), or schools identified as in need
14 of improvement under section 1116.

15 “(10) A description of how the State edu-
16 cational agency will ensure that each subgrant
17 awarded under section 2406(a)(3)(B) is of sufficient
18 size, scope, and duration to be effective as required
19 under section 2406(b), and that such subgrants are
20 appropriately targeted and equitably distributed as
21 required under section 2406(b) to carry out the pur-
22 poses of this part effectively.

23 “(11) A description of how the State edu-
24 cational agency consulted with local educational
25 agencies in the development of the State application.

1 **“SEC. 2408. STATE ACTIVITIES.**

2 “(a) IN GENERAL.—From funds made available
3 under section 2406(a)(1), a State educational agency—

4 “(1) shall carry out the following activities:

5 “(A) Identify the State challenging aca-
6 demic content standards and challenging stu-
7 dent academic achievement standards that the
8 State will use to ensure that each student is
9 technology literate by the end of the 8th grade
10 consistent with the definition of student tech-
11 nology literacy.

12 “(B) Assess not less than once by the end
13 of the 8th grade student performance in gain-
14 ing technology literacy consistent with subpara-
15 graph (A), including through embedding such
16 assessment items in other State tests, perform-
17 ance-based assessments, portfolios, or through
18 other means, but provided that such assess-
19 ments shall be used only to track student tech-
20 nology literacy and not in conjunction with
21 meeting adequate yearly progress goals.

22 “(C) Publish the results of their technology
23 literacy assessments administered under sub-
24 paragraph (B) not less than 3 months after the
25 assessment is administered such that the re-
26 sults are made widely available to local edu-

1 cational agencies, parents, and citizens, includ-
2 ing through presentation on the Internet, and
3 transmit such results to the Secretary.

4 “(D) Provide guidance, technical and other
5 assistance in the priority area identified by the
6 State pursuant to section 2407(b)(3) to local
7 educational agencies receiving grants of less
8 than \$10,000 under section 2406(a)(3)(A) with
9 a priority to those in highest need of assistance
10 pursuant to section 2407(b)(9).

11 “(E) Provide technical assistance to local
12 educational agencies, with a priority to those
13 identified by the State in the highest need of
14 assistance, including those with the highest per-
15 centage or number of students from families
16 with incomes below the poverty line, students
17 not achieving at the State proficiency level, with
18 student populations identified under section
19 2406(b)(1)(C), and serving schools identified as
20 in need of improvement under section 1116, in
21 the following ways:

22 “(i) Submitting applications for fund-
23 ing under this part.

24 “(ii) Carrying out activities authorized
25 under section 2410, including implementa-

1 tion of systemic school redesigns as de-
2 scribed in section 2409(b).

3 “(iii) Developing local educational
4 technology plans and integrating such
5 plans with their plans for improving stu-
6 dent achievement under sections 1111 and
7 1112, and, if applicable, section 1116.

8 “(F) Provide guidance, technical and other
9 assistance to local educational agencies on their
10 plans to assess, and, as needed, update the
11 computers, software, servers, and other tech-
12 nologies throughout the local educational agen-
13 cy in terms of their functional capabilities, age,
14 and other specifications, including to ensure
15 such technologies can process, at scale, new ap-
16 plications and online services such as video con-
17 ferencing, video streaming, virtual simulations,
18 and distance learning.

19 “(2) may carry out the following activities:

20 “(A) State leadership activities and tech-
21 nical assistance that assist recipients of funds
22 under this part in achieving the purposes and
23 goals of this part.

24 “(B) Assist recipients of funds under this
25 part in the development and utilization of re-

1 search-based or innovative strategies for the de-
2 livery of specialized or rigorous academic
3 courses and curricula through the use of tech-
4 nology, including distance learning technologies.

5 “(C) Assisting recipients of funds under
6 this subpart in providing sustained and inten-
7 sive, high-quality professional development pur-
8 suant to section 2410(b)(1)(A), including
9 through assistance in a review of relevant re-
10 search.

11 “(b) ACTIVITIES RELATING TO RESEARCH.—From
12 funds made available under section 2406(a)(2), a State
13 educational agency shall carry out 1 or more of the fol-
14 lowing activities:

15 “(1) Conduct scientifically-based or other rig-
16 orous research to evaluate the impact of 1 or more
17 programs or activities authorized under this part in
18 meeting the purposes and goals of this part.

19 “(2) Provide technical assistance to eligible
20 local educational agencies in carrying out evaluation
21 research activities as required under section
22 2410(a)(1).

23 “(3) Create 1 or more evaluation research pro-
24 tocols, designs, performance measurement systems,
25 or other tools to assist eligible local educational

1 agencies in carrying out evaluation activities as re-
2 quired under section 2410(a)(1).

3 “(4) Collect and disseminate the findings of the
4 evaluation research carried out by eligible local edu-
5 cational agencies under section 2410(a)(1).

6 **“SEC. 2409. LOCAL APPLICATIONS.**

7 “(a) IN GENERAL.—To be eligible to receive a
8 subgrant from a State educational agency under this sub-
9 part, a local educational agency, or consortium of local
10 educational agencies, shall submit to the State educational
11 agency an application containing a new or updated local
12 long-range strategic educational technology plan, and such
13 other information as the State educational agency may
14 reasonably require, at such time and in such manner as
15 the State educational agency may require, which shall in-
16 clude each of the following:

17 “(1) A description of how the applicant will
18 align and coordinate its use of funds under this part
19 to the district technology plan, to the district plans
20 and activities for improving student achievement, in-
21 cluding under sections 1111 and 1112 and sections
22 1116 and 2123, as applicable, and to funds available
23 from other Federal, State, and local sources.

1 “(2) An assurance that financial assistance pro-
2 vided under this subpart will supplement, and not
3 supplant other existing funds.

4 “(3) A description of the process used to assess
5 and, as needed, update the computers, software,
6 servers, and other technologies throughout the local
7 educational agency in terms of their functional capa-
8 bilities, age, and other specifications, including to
9 ensure such technologies can process, at scale, new
10 applications, and online services such as video con-
11 ferencing, video streaming, virtual simulations, and
12 distance learning courses.

13 “(4) Such other information as the State edu-
14 cational agency may reasonably require.

15 “(b) COMPETITIVE GRANTS; SYSTEMIC SCHOOL RE-
16 DESIGN THROUGH TECHNOLOGY INTEGRATION.—In addi-
17 tion to components included in subsection (a), eligible local
18 educational agencies or consortia of local educational
19 agencies submitting applications for a grants under sec-
20 tion 2406(a)(3)(B) shall submit to the State educational
21 agency an application containing the following:

22 “(1) A description of how the applicant will use
23 grant funds to implement systemic school redesign,
24 which is a comprehensive set of programs, practices,
25 and technologies that collectively lead to school or

1 district change and improvement, including in the
2 use of technology, and in improved student achieve-
3 ment and that incorporate all of the following ele-
4 ments:

5 “(A) Reform or redesign of curriculum, in-
6 struction, assessment, use of data, or other
7 standards-based school or classroom practices
8 through the use of technology, including to in-
9 crease student learning opportunity, student
10 technology literacy, access, and engagement.

11 “(B) Improve educator quality, knowledge
12 and skills through on-going, sustainable, timely,
13 and contextual professional development pursu-
14 ant to section 2410(b)(1)(A).

15 “(C) Development of student technology
16 literacy and other skills necessary for 21st cen-
17 tury learning and success.

18 “(D) Ongoing use of formative assess-
19 ments and other timely data sources and data
20 systems to more effectively identify individual
21 student learning needs and guide personalized
22 instruction, learning, and appropriate interven-
23 tions that address those personalized student
24 learning needs.

1 “(E) Engagement of district and school
2 leaders as well as classroom educators.

3 “(F) Are either research-based or innova-
4 tive, or both, such that research-based systemic
5 redesigns are based on a review of the best
6 available research evidence, and innovative sys-
7 temic redesigns are based on development and
8 use of new redesigns, programs, practices, and
9 technologies.

10 “(2) An assurance that the applicant will use
11 not less than 25 percent of funds to implement a
12 program of professional development pursuant to
13 section 2410(b)(1)(A).

14 “(3) A description of how the applicant will
15 evaluate the impact of 1 or more programs or activi-
16 ties authorized under this part in meeting 1 or more
17 of the purposes and goals of this part.

18 “(c) FORMULA GRANTS; IMPROVING TEACHING AND
19 LEARNING THROUGH TECHNOLOGY.—In addition to com-
20 ponents included in subsection (a), eligible local edu-
21 cational agencies or consortia of local educational agencies
22 that submit an application for a grant under section
23 2406(a)(3)(A) shall submit to the State educational agen-
24 cy an application containing the following:

1 “(1) An assurance that the applicant will use
2 not less than 40 percent of funds for professional
3 development pursuant to section 2410(b)(1)(A) and
4 for technology tools, applications, and other re-
5 sources related specifically to such professional de-
6 velopment activities.

7 “(2) A description of how the applicant will im-
8 plement a program of professional development as
9 required under paragraph (1).

10 “(3) A description of how the local educational
11 agency will employ technology tools, applications,
12 and other resources in professional development and
13 to improve student learning and achievement in the
14 area of priority identified by the local educational
15 agency pursuant to paragraph (4).

16 “(4) A description of the priority area upon
17 which the local educational agency will focus its
18 grant funds under this part, such that such priority
19 area shall be identified from among the core content
20 areas, grade levels, and student subgroup popu-
21 lations in which the most number of students are
22 not proficient.

23 “(d) COMBINED APPLICATIONS.—An eligible local
24 educational agency that submits an application to the
25 State educational agency for funds awarded under section

1 2406(a)(3)(B) may, upon notice to the State educational
 2 agency, submit a single application that will also be con-
 3 sidered by the State educational agency as an application
 4 for funds awarded under section 2406(a)(3)(A), provided
 5 its application addresses each application requirement.

6 “(e) CONSORTIUM APPLICATIONS.—For any fiscal
 7 year, a local educational agency applying for financial as-
 8 sistance described in section 2406(a)(3) may apply as part
 9 of a consortium in which more than 1 local educational
 10 agency jointly submits a grant application under this part,
 11 except that no local educational agency may receive more
 12 than 1 grant under this part.

13 **“SEC. 2410. LOCAL ACTIVITIES.**

14 “(a) COMPETITIVE GRANTS; SYSTEMIC SCHOOL RE-
 15 DESIGN THROUGH TECHNOLOGY INTEGRATION.—From
 16 funds made available to a local educational agency under
 17 section 2406(a)(3)(B), the local educational agency—

18 “(1) shall use not less than 5 percent of such
 19 funds to evaluate the impact of 1 or more programs
 20 or activities carried out under the subgrant in meet-
 21 ing 1 or more of the purposes and goals of this part
 22 as approved by the State educational agency as part
 23 of the local application as described under section
 24 2409(b)(3); and

1 “(2) shall use the remaining funds to imple-
2 ment a plan for systemic school redesign, which may
3 take place in 1 or more schools or across the entire
4 local educational agency, pursuant to section
5 2409(b)(1), including each of the following:

6 “(A) Using not less than 25 percent of
7 funds to improve teacher quality and skills
8 through support for the following:

9 “(i) Professional development activi-
10 ties, as described under subsection
11 (b)(1)(A).

12 “(ii) The acquisition and implementa-
13 tion of technology tools, applications, and
14 other resources to be employed in the pro-
15 fessional development activities described
16 in clause (i).

17 “(B) Acquiring and effectively imple-
18 menting technology tools, applications, and
19 other resources in conjunction with enhancing
20 or redesigning the curriculum or instruction in
21 order to—

22 “(i) increase student learning oppor-
23 tunity or access, student engagement in
24 learning, or student attendance or gradua-
25 tion rates;

1 “(ii) improve student achievement in
2 1 or more of the core academic subject
3 areas; and

4 “(iii) improve student technology lit-
5 eracy.

6 “(C) Acquiring and effectively imple-
7 menting technology tools, applications, and
8 other resources to—

9 “(i) conduct ongoing formative assess-
10 ments and use other timely data sources
11 and data systems to more effectively iden-
12 tify individual student learning needs and
13 guide personalized instruction, learning,
14 and appropriate interventions that address
15 those personalized student learning needs;

16 “(ii) support individualized student
17 learning, including through instructional
18 software and digital content that supports
19 the learning needs of each student, or
20 through providing access to high-quality
21 courses and instructors, including mathe-
22 matics, science, and foreign language
23 courses, often not available except through
24 technology and online learning, especially
25 in rural and high-poverty schools; and

1 “(iii) conduct such other activities as
2 appropriate consistent with the goals and
3 purposes of research-based and innovative
4 systemic school redesign, including to in-
5 crease parental involvement through im-
6 proved communication with teachers and
7 access to student assignments and grades.

8 “(b) FORMULA GRANTS; IMPROVING TEACHING AND
9 LEARNING THROUGH TECHNOLOGY.—From funds made
10 available to a local educational agency under section
11 2406(a)(3)(A), the local educational agency shall carry out
12 activities to improve student learning, student technology
13 literacy, and achievement in the area of priority identified
14 by the local educational agency as required under section
15 2409(c)(4), including that such local educational agency
16 shall comply with the following:

17 “(1) The local educational agency shall use not
18 less than 40 percent of funds for professional devel-
19 opment activities that are aligned with activities sup-
20 ported under section 2123 to improve teacher qual-
21 ity and skills through support for the following:

22 “(A) Training of teachers, paraprofes-
23 sionals, library and media personnel, and ad-
24 ministrators, which—

1 “(i) shall include the development, ac-
2 quisition, or delivery of—

3 “(I) training that is ongoing, sus-
4 tainable, timely, and directly related
5 to current teaching content areas;

6 “(II) training in strategies and
7 pedagogy in the core curriculum areas
8 that involve use of technology and
9 curriculum redesign as key compo-
10 nents of changing teaching and learn-
11 ing and improving student achieve-
12 ment;

13 “(III) training in the use of tech-
14 nology to ensure every educator is
15 technologically literate, including pos-
16 sessing the knowledge and skills to
17 use technology across the curriculum,
18 to use technology and curriculum re-
19 design as key components of inno-
20 vating teaching and learning and im-
21 proving student achievement, to use
22 technology for data analysis to enable
23 individualized instruction, and to use
24 technology to improve student tech-
25 nology literacy; and

1 “(IV) training that includes on-
2 going communication and follow-up
3 with instructors, facilitators, and
4 peers; and

5 “(ii) may include—

6 “(I) use of instructional tech-
7 nology specialists, mentors, or coaches
8 to work directly with teachers, includ-
9 ing through the preparation of 1 or
10 more teachers as technology leaders or
11 master teachers who are provided with
12 the means to serve as experts and
13 train other teachers in the effective
14 use of technology; and

15 “(II) use of technology such as
16 distance learning and online virtual
17 educator-to-educator peer commu-
18 nities as a means for delivering pro-
19 fessional development.

20 “(B) The acquisition and implementation
21 of technology tools, applications, and other re-
22 sources to be employed in the professional de-
23 velopment activities described under subpara-
24 graph (A).

1 “(2) The local educational agency shall use the
2 remaining funds to acquire or implement technology
3 tools, applications, and other resources to improve
4 student learning, student technology literacy, and
5 achievement in the area of priority identified by the
6 local educational agency, including through 1 or
7 more of the following:

8 “(A) Conducting on-going formative as-
9 sessment and using other timely data sources
10 and data systems to more effectively identify in-
11 dividual student learning needs and guide per-
12 sonalized instruction, learning, and appropriate
13 interventions that address those personalized
14 student learning needs.

15 “(B) Supporting individualized student
16 learning, including through instructional soft-
17 ware and digital content that supports the
18 learning needs of each student, or through pro-
19 viding access to high-quality courses and in-
20 structors, including mathematics, science, and
21 foreign language courses, often not available ex-
22 cept through technology and online learning, es-
23 pecially in rural and high-poverty schools.

1 “(C) Increasing parental involvement
2 through improved communication with teachers
3 and access to student assignments and grades.

4 “(D) Enhancing accountability, instruc-
5 tion, and data-driven decision making through
6 data systems that allow for management, anal-
7 ysis, and disaggregating of student, teacher,
8 and school data.

9 “(E) Such other activities as appropriate
10 consistent with the goals and purposes of this
11 part.

12 “(c) MULTIPLE GRANTS.—A local educational agency
13 that receives a grant under both subparagraph (A) and
14 subparagraph (B) of section 2406(a)(3) may use all such
15 grant funds for activities authorized under subsection (a).

16 **“Subpart 2—National Activities**

17 **“SEC. 2411. NATIONAL ACTIVITIES.**

18 “From the amount made available to carry out na-
19 tional activities under section 2404(b)(1), the Secretary,
20 working through and in coordination with the Director of
21 the Office of Educational Technology and collaborating,
22 as appropriate, with the National Center for Achievement
23 Through Technology authorized under section 2412, shall
24 carry out the following activities:

1 “(1) NATIONAL REPORT.—The Secretary shall
2 annually conduct and publish a national report on
3 student technology literacy to determine the extent
4 to which students have gained student technology
5 literacy by the end of the 8th grade. In conducting
6 the study, the Secretary shall—

7 “(A) consult first with experts and stake-
8 holders, including educators and education lead-
9 ers, education technology experts from edu-
10 cation and industry, and the business and high-
11 er education communities seeking high school
12 graduates with these skills; and

13 “(B) employ a random stratified sample
14 methodology of student technology literacy per-
15 formance using a cost-effective assessment that
16 is a readily available, valid, and reliable assess-
17 ment instrument.

18 “(2) STUDENT TECHNOLOGY LITERACY.—The
19 Secretary shall publish each year the results of the
20 State technology literacy assessments pursuant to
21 section 2408(a)(1)(C).

22 “(3) NATIONAL EDUCATION TECHNOLOGY
23 PLAN.—The Secretary shall update not less often
24 than once every 5 years the National Education
25 Technology Plan to promote understanding and

1 awareness of the role of technology and e-learning in
2 meeting the Nation’s education goals and needs, and
3 shall implement such a plan.

4 “(4) OTHER NATIONAL ACTIVITIES.—From the
5 funds remaining after carrying out paragraphs (1),
6 (2), and (3), the Secretary shall carry out 1 or more
7 of the following activities:

8 “(A) Support efforts to increase student
9 technology literacy, including through outreach
10 to education, business, and elected leaders
11 aimed at building understanding of the knowl-
12 edge and skills students need to succeed in the
13 21st century through use of technology for life-
14 long learning, citizenship, and workplace suc-
15 cess.

16 “(B) Support the work of the National
17 Center for Achievement Through Technology in
18 serving as a national resource for the improve-
19 ment of technology implementation in education
20 through identification and dissemination of
21 promising practices and exemplary programs
22 that effectively use educational technologies.

23 “(C) Support efforts to increase the capac-
24 ity of State and local education officials to
25 budget for technology acquisition and imple-

1 mentation, including taking into account the
2 long-term costs, how technology investments
3 could increase effectiveness and efficiencies that
4 ultimately save other educational costs or pro-
5 vide improved outcomes, and how spending for
6 technology in education should be considered in
7 a comprehensive cost-benefit analysis and not
8 simply as a supplemental expense.

9 “(D) Support staff at the Department of
10 Education and other Federal agencies in their
11 understanding of education technology, its role
12 in Federal education programs, and how Fed-
13 eral grantees can be supported in integrating
14 education technologies into their programs as
15 appropriate.

16 “(E) Convene stakeholders in an effort to
17 outline and support a national research and de-
18 velopment agenda aimed at supporting public-
19 private partnerships to leverage evolving tech-
20 nologies to meet evolving educational needs.

21 “(F) Convene practitioners and leaders
22 from local and State education, business and in-
23 dustry, higher education, and other stakeholder
24 communities to carry out the activities under
25 this section, including convening an annual

1 forum on leadership to integrate technology,
2 classroom technology best practices, and to oth-
3 erwise address challenges and opportunities in
4 the use of technology to improve teaching,
5 learning, teacher quality, student achievement,
6 student technology literacy, the efficiency and
7 productivity of the education enterprise, and to
8 otherwise support school innovation and the
9 Nation’s competitiveness.

10 “(G) Support efforts to ensure teachers
11 and other educators have the knowledge and
12 skills to teach in the 21st century through the
13 use of technology, including by providing assist-
14 ance to and sharing information with State ac-
15 crediting agencies, colleges of teacher education,
16 and other educational institutions and govern-
17 ment entities involved in the preparation and
18 certification of teachers, to ensure such teach-
19 ers possess these skills prior to entering the
20 teaching force.

21 “(H) Support efforts to assist principals,
22 superintendents, and other senior school and
23 district administrators in adapting to, and lead-
24 ing their schools with, 21st century technology

1 tools and 21st century skills, including the fol-
2 lowing:

3 “(i) Developing a blueprint for both
4 the job skills required and the coursework
5 and experience necessary to be prepared
6 for school leadership.

7 “(ii) Supporting the development of
8 professional development and training pro-
9 grams that help education leaders obtain
10 these skills, including through collaborative
11 efforts with existing programs and institu-
12 tions.

13 “(iii) Developing materials, resources,
14 self-assessments, and other tools to meet
15 these goals.

16 “(I) To undertake other activities that lead
17 to the improvement of the Nation’s educational
18 system in both using educational technologies to
19 improve teaching, learning, and student
20 achievement, as well as in improving student
21 technology literacy and related 21st century col-
22 lege preparedness and workforce competitive-
23 ness and that complement other such efforts
24 being undertaken by public and private agencies
25 and organizations.

1 **“SEC. 2412. NATIONAL CENTER FOR ACHIEVEMENT**
2 **THROUGH TECHNOLOGY.**

3 “(a) PURPOSE.—The purpose of this section is to es-
4 tablish a National Center for Achievement Through Tech-
5 nology, consistent with this part, that—

6 “(1) provides national leadership regarding im-
7 provement in the use of technology in education,
8 with a focus on elementary and secondary education,
9 including technology’s role in improving student
10 achievement and technology literacy as well as teach-
11 er quality;

12 “(2) serves as a national resource for the im-
13 provement of technology implementation in edu-
14 cation through identification and dissemination of
15 promising practices and exemplary programs that ef-
16 fectively use educational technologies to improve
17 teaching and learning, teacher quality, student en-
18 gagement and opportunity, student achievement and
19 technology literacy, and the efficiency and produc-
20 tivity of the education enterprise, including the re-
21 lated research and research on the conditions and
22 practices that support the effective use of technology
23 in education; and

24 “(3) provides an annual report to Congress syn-
25 thesizing the promising practices and exemplary pro-
26 grams that effectively use educational technologies

1 to improve teaching and learning, as described in
2 paragraph (2), including the related research and re-
3 search on the conditions and practices that support
4 the effective use of technology in education.

5 “(b) ESTABLISHMENT.—

6 “(1) IN GENERAL.—The Secretary, acting
7 through the Director of the Office of Educational
8 Technology, shall award a grant, on a competitive
9 basis, to an eligible entity to establish a National
10 Center for Achievement Through Technology (in this
11 section referred to as the ‘Center’).

12 “(2) COORDINATION WITH THE INSTITUTE.—

13 The Director of the Office of Educational Tech-
14 nology shall award the grant under paragraph (1) in
15 coordination with the Director of the Institute of
16 Education Sciences, but the Director of the Office of
17 Educational Technology shall administer the grant
18 program under this section.

19 “(3) CONDITIONS.—

20 “(A) ELIGIBLE ENTITIES.—An entity shall
21 be eligible to receive the grant under this sec-
22 tion if the entity is—

23 “(i) a research organization or re-
24 search institution with education tech-

1 nology as one of the organization or insti-
2 tution's primary areas of focus; or

3 “(ii) a partnership that consists of a
4 research organization or research institu-
5 tion described in clause (i) and 1 or more
6 education institutions or agencies, non-
7 profit organizations, or research organiza-
8 tions or institutions.

9 “(B) DURATION.—The grant awarded
10 under this section shall be 5 years in duration,
11 and shall be renewable at the discretion of the
12 Director of the Office of Educational Tech-
13 nology for not more than an additional 3 years.

14 “(C) PEER REVIEW.—In awarding the
15 grant under this section, the Director of the Of-
16 fice of Educational Technology shall consider
17 the recommendations of a peer review panel,
18 which shall be composed of representatives of
19 the following stakeholder communities:

20 “(i) Teachers and other educators
21 who use technologies.

22 “(ii) Local and State education lead-
23 ers who administer programs employing
24 technologies.

1 “(iii) Businesses that develop edu-
2 cational technologies.

3 “(iv) Researchers who study edu-
4 cational technologies.

5 “(v) Related education, educational
6 technology, and business organizations.

7 “(c) NATIONAL CENTER FOR ACHIEVEMENT
8 THROUGH TECHNOLOGY ACTIVITIES.—In order to pro-
9 vide leadership for the effective use of technology in edu-
10 cation, the eligible entity awarded the grant under this
11 section shall establish the Center, which shall carry out
12 the following activities:

13 “(1) PROMISING PRACTICES, EXEMPLARY PRO-
14 GRAMS AND RESEARCH.—The Center shall identify
15 and compile promising practices, exemplary pro-
16 grams, quantitative and qualitative research, and
17 other information and evidence demonstrating the
18 broad uses and positive impacts of technology in ele-
19 mentary and secondary education as well as the fac-
20 tors and steps important to its improvement and ef-
21 fective use—

22 “(A) on the following uses of technology,
23 such that specific technologies are considered in
24 the context of the comprehensive educational
25 program or practice in which they are used:

1 “(i) Across the curriculum to improve
2 teaching, learning and student achieve-
3 ment, including in the core academic sub-
4 ject areas of reading, mathematics, science,
5 and history or social studies.

6 “(ii) To support the teaching and
7 learning of student technology literacy as
8 student knowledge and skills in using con-
9 temporary information, communication,
10 and learning technologies in a manner nec-
11 essary for successful life-long learning and
12 citizenship in the knowledge-based, digital,
13 and global 21st century, which includes the
14 abilities to effectively communicate and
15 collaborate, to analyze and solve problems,
16 to access, evaluate, manage, and create in-
17 formation and otherwise gain information
18 literacy, and to do so in a safe and ethical
19 manner.

20 “(iii) For formative and summative
21 assessment, including to inform instruction
22 and data-driven decision making, to indi-
23 vidualize instruction, and for accountability
24 purposes.

1 “(iv) To improve student learning and
2 achievement, including through improving
3 student interest and engagement, student
4 access to courses and instructors through
5 distance learning, and student learning
6 time, and through individualizing cur-
7 riculum and instruction to meet unique
8 student learning needs, styles, and pace.

9 “(v) To improve teacher quality, in-
10 cluding for professional development and
11 for timely and ongoing training and sup-
12 port.

13 “(vi) To improve the efficiency and
14 productivity of the classroom and school
15 enterprise, including through data manage-
16 ment and analysis, resource management,
17 and communications.

18 “(B) on the policies, budgeting, technology
19 infrastructure, conditions, practices, teacher
20 training, school leadership, and other implemen-
21 tation factors important to improving the effec-
22 tiveness of technology in elementary and sec-
23 ondary education as outlined in subparagraph
24 (A), including in—

1 “(i) the knowledge and skills teachers
2 and other educators need to teach in the
3 21st century through the use of tech-
4 nology, including that necessary to use
5 technology and curriculum redesign as key
6 components of changing teaching and
7 learning, to use technology for data anal-
8 ysis to enable individualized instruction,
9 and to use technology to improve student
10 technology literacy;

11 “(ii) the knowledge and skills prin-
12 cipals, superintendents, and other senior
13 school and district administrators need to
14 effectively lead in 21st century schools
15 using technology, including the job skills
16 required and the coursework and experi-
17 ence necessary to be prepared for school
18 leadership; and

19 “(iii) the budgeting for technology ac-
20 quisition and implementation, including
21 taking into account the long-term costs,
22 how technology investments could increase
23 effectiveness and efficiencies that ulti-
24 mately save other educational costs or pro-
25 vide improved outcomes, and how spending

1 for technology in education should be con-
2 sidered in a comprehensive cost-benefit
3 analysis and not simply as a supplemental
4 expense.

5 “(2) ORIGINAL RESEARCH.—The Center may
6 conduct, directly or through grants and contracts,
7 original research as necessary to fill important gaps
8 in existing research necessary to address the areas
9 described in paragraph (1) with a focus on the poli-
10 cies, budgeting, technology infrastructure, condi-
11 tions, practices, teacher training, school leadership,
12 and other implementation factors important to im-
13 proving the effectiveness of technology in elementary
14 and secondary education.

15 “(3) OUTREACH.—The Center shall consult
16 with appropriate stakeholders, including at least
17 those described in subsection (b)(3)(C), in deter-
18 mining priorities pursuant to paragraph (1), in gath-
19 ering information pursuant to paragraph (1), and in
20 determining the need for original research pursuant
21 to paragraph (2). The Center shall establish 1 or
22 more informal advisory groups to provide this con-
23 sultation.

24 “(4) DISSEMINATION.—The Center shall dis-
25 seminate widely the information identified and com-

1 piled pursuant to paragraph (1) to teachers and
2 other educators, local, regional, State, and Federal
3 education leaders, public and elected officials, the ex-
4 isting network of federally funded educational re-
5 source centers and labs, businesses that develop edu-
6 cational technologies, colleges of teacher education
7 and teacher accrediting agencies, researchers who
8 study educational technologies, other interested
9 stakeholders, and related educator, education leader,
10 and business organizations, including through—

11 “(A) development and ongoing update of a
12 database accessed through the Internet;

13 “(B) development, distribution, and deliv-
14 ery of reports, tools, best practices, conference
15 presentations, and other publications; and

16 “(C) partnerships with organizations rep-
17 resenting stakeholders, including educators,
18 education leaders, and technology providers.

19 “(d) CENTER OPERATIONS.—

20 “(1) GRANTS, CONTRACTS, AND COOPERATIVE
21 AGREEMENTS.—As appropriate, the Center shall
22 award grants to, or enter into contracts or coopera-
23 tive agreements with, individuals, public or private
24 institutions, agencies, organizations, or consortia of
25 such institutions, agencies, or organizations to carry

1 out the activities of the Center, including that the
2 Center shall do so with regard to dissemination of
3 the Center's findings pursuant to subsection
4 (c)(4)(C).

5 “(2) REPORT.—The Center shall submit an an-
6 nual report on March 1 to the Committee on Edu-
7 cation and Labor of the House of Representatives
8 and the Committee on Health, Education, Labor,
9 and Pensions of the Senate that provides a summary
10 synthesis of the promising and exemplary practices
11 and programs, and related research, that effectively
12 use educational technologies to improve teaching and
13 learning as described in subsection (c)(1), including
14 the conditions and practices that support the effec-
15 tive use of technology in education, in order to in-
16 form Federal education policymaking and over-
17 sight.”.

○