

109TH CONGRESS
2D SESSION

S. 2423

To improve science, technology, engineering, and mathematics education.

IN THE SENATE OF THE UNITED STATES

MARCH 15, 2006

Mr. SANTORUM introduced the following bill; which was read twice and referred to the Committee on Finance

A BILL

To improve science, technology, engineering, and mathematics education.

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 “Securing Excellence
5 in Education for Our Kids in Math and Science Act of
6 2006” or the “SEEK Math and Science Act”.

7 **SEC. 2. TABLE OF CONTENTS.**

8 The table of contents for this Act is as follows:

Sec. 1. Short title.

Sec. 2. Table of contents.

TITLE I—EDUCATION

Sec. 101. Definitions.

- Sec. 102. Master's degrees.
- Sec. 103. Government Accountability Office Report.
- Sec. 104. Undergraduate scholarships.
- Sec. 105. Signing and retention bonuses.
- Sec. 106. Advanced placement.
- Sec. 107. Grants for performance incentive compensation systems.
- Sec. 108. Employee training and teaching in mathematics, science, and technology.
- Sec. 109. Public awareness campaign.

TITLE II—STUDENT LOAN INTEREST PAYMENTS

- Sec. 201. Establishment of program.
- Sec. 202. Definitions.
- Sec. 203. Authorization of appropriations.

1 **TITLE I—EDUCATION**

2 **SEC. 101. DEFINITIONS.**

3 The terms used in this title have the same meanings
 4 given the terms in section 9101 of the Elementary and
 5 Secondary Education Act of 1965 (20 U.S.C. 7801).

6 **SEC. 102. MASTER'S DEGREES.**

7 (a) GRANTS TO INSTITUTIONS OF HIGHER EDU-
 8 CATION.—The Secretary of Education is authorized to
 9 award grants to institutions of higher education to enable
 10 the institutions of higher education—

11 (1) to develop, for middle and secondary school
 12 teachers of science or mathematics, a master's de-
 13 gree program in science or mathematics, that can be
 14 completed on a part-time basis in not more than 2
 15 academic years; and

16 (2) to use such grant funds to pay the Federal
 17 share of the cost of awarding scholarships to the
 18 teachers to complete the master's degree program.

1 (b) FEDERAL SHARE; NON-FEDERAL SHARE.—The
 2 Federal share shall be 50 percent. The non-Federal share
 3 of the cost of tuition, fees, and books required to complete
 4 the master's degree program shall be provided from non-
 5 Federal sources.

6 (c) SCHOLARSHIP AMOUNT.—An institution of higher
 7 education that receives a grant under this section shall
 8 award a scholarship under subsection (a)(2) in an amount
 9 equal to the cost of tuition, fees, and books required to
 10 complete the master's degree program.

11 (d) AUTHORIZATION OF APPROPRIATIONS.—There
 12 are authorized to be appropriated to carry out this section
 13 \$10,000,000 for fiscal year 2007 and each of the 4 suc-
 14 ceeding fiscal years.

15 **SEC. 103. GOVERNMENT ACCOUNTABILITY OFFICE RE-**
 16 **PORT.**

17 The Comptroller General shall report to Congress,
 18 not later than 6 months after the date of enactment of
 19 this Act, on the effectiveness of Federal programs de-
 20 signed to achieve each of the following purposes:

- 21 (1) To increase the number of students study-
 22 ing science, technology, engineering, or mathematics.
- 23 (2) To increase the number of students grad-
 24 uating from college with a degree in science, tech-
 25 nology, engineering, or mathematics.

1 (3) To improve educational programs in
2 science, engineering, or mathematics.

3 **SEC. 104. UNDERGRADUATE SCHOLARSHIPS.**

4 (a) GRANTS AUTHORIZED.—The Secretary of Edu-
5 cation is authorized to award grants to States, on a com-
6 petitive basis, to enable the States to award scholarships
7 to eligible students to enable the eligible students to obtain
8 an undergraduate degree in the physical or life sciences,
9 technology, engineering, or mathematics concurrently with
10 certification to teach elementary school or secondary
11 school science or mathematics.

12 (b) TEACHING REQUIREMENT.—In order to receive
13 a scholarship under this section an individual shall enter
14 into an agreement with the Secretary under which—

15 (1) the individual agrees to teach science or
16 mathematics in a public elementary school or sec-
17 ondary school for a period of 5 years after receiving
18 the degree for which the scholarship is awarded; and

19 (2) the individual agrees to repay all scholar-
20 ship payments received under this section if the indi-
21 vidual fails to complete the 5-year teaching require-
22 ment described in paragraph (1).

23 (c) STUDENT ELIGIBILITY.—A student is eligible for
24 a scholarship under this section if the student is a full-

1 time undergraduate student who has completed a rigorous
2 secondary school curriculum in science and mathematics.

3 (d) RIGOROUS CURRICULUM.—Each participating
4 State shall determine the requirements for a rigorous sec-
5 ondary school curriculum in science and mathematics de-
6 scribed in subsection (c). Such curriculum shall not serve
7 to exclude, explicitly or implicitly, students in private or
8 home school settings.

9 (e) DEFINITION OF STATE.—In this section the term
10 “State” means each of the several States of the United
11 States, the District of Columbia, and the Commonwealth
12 of Puerto Rico.

13 (f) DURATION.—Each State that receives a grant
14 under this section shall award a scholarship under this
15 section for not more than 4 years of undergraduate study.

16 (g) AMOUNT.—Each State that receives a grant
17 under this section shall award a scholarship under this
18 section to an eligible student in an amount that is equal
19 to the lesser of—

20 (1) the amount necessary to cover, for such stu-
21 dent, the cost of tuition, fees, and books required to
22 complete the undergraduate degree; or

23 (2) \$10,000 per academic year to complete the
24 undergraduate degree.

1 (h) NUMBER OF SCHOLARSHIPS.—The Secretary
 2 shall ensure that the aggregate number of scholarships
 3 awarded under this section by all the States equals—

4 (1) 5,000 for fiscal year 2007;

5 (2) 10,000 for fiscal year 2008; and

6 (3) 25,000 for each of the fiscal years 2009,
 7 2010, 2011.

8 (i) RELATION TO OTHER ASSISTANCE.—A scholar-
 9 ship provided under this section shall not be considered
 10 for purposes of awarding Federal grant assistance, except
 11 that in no case shall the total amount of Federal student
 12 assistance awarded to a scholarship recipient under this
 13 section exceed the student's total cost of attendance as
 14 determined under section 472 of the Higher Education
 15 Act of 1965 (20 U.S.C. 1087l).

16 (j) ADMINISTRATION AND IMPLEMENTATION LIMITA-
 17 TION.—The Secretary shall use not more than a total of
 18 1 percent of the amounts appropriated under subsection
 19 (k) for each fiscal year for administrative expenses and
 20 the costs of implementing this section.

21 (k) AUTHORIZATION OF APPROPRIATIONS.—There
 22 are authorized to be appropriated to carry out this sec-
 23 tion—

24 (1) \$50,000,000 for fiscal year 2007;

25 (2) \$100,000,000 for fiscal year 2008;

1 (3) \$250,000,000 for fiscal year 2009;

2 (4) \$250,000,000 for fiscal year 2010; and

3 (5) \$250,000,000 for fiscal year 2011.

4 **SEC. 105. SIGNING AND RETENTION BONUSES.**

5 (a) SIGNING BONUSES.—

6 (1) SIGNING BONUSES AUTHORIZED.—The Sec-
7 retary of Education is authorized to award signing
8 bonuses, in the amount of \$5,000, to individuals who
9 have an undergraduate or graduate degree in science
10 or mathematics and who, after the date of enact-
11 ment of this Act—

12 (A) first teach such subjects in a public el-
13 elementary school or secondary school with the
14 greatest need for teachers of such subjects, as
15 determined by the Secretary; and

16 (B) enter into an agreement with the Sec-
17 retary under which—

18 (i) the teacher agrees to teach science
19 or mathematics in a public elementary
20 school or secondary school with the great-
21 est need for teachers of such subjects, as
22 determined by the Secretary, for a period
23 of 5 consecutive academic years following
24 receipt of the signing bonus; and

1 (ii) the teacher agrees to repay to the
 2 Secretary a pro rata portion of the signing
 3 bonus received under this subsection if the
 4 teacher fails to comply with the teaching
 5 requirement described in clause (i).

6 (2) AUTHORIZATION OF APPROPRIATIONS.—

7 There are authorized to be appropriated to carry out
 8 this section such sums as may be necessary for fiscal
 9 year 2007 and each of the 4 succeeding fiscal years.

10 (b) RETENTION BONUSES.—

11 (1) RETENTION BONUSES AUTHORIZED.—The
 12 Secretary of Education is authorized to award reten-
 13 tion bonuses, in the amount of \$10,000, to elemen-
 14 tary school or secondary school teachers who—

15 (A) have an undergraduate or graduate de-
 16 gree in science or mathematics;

17 (B) have taught science or mathematics
 18 for a period of 5 school years in a public ele-
 19 mentary school or secondary school with the
 20 greatest need for teachers of such subjects, as
 21 determined by the Secretary; and

22 (C) enter into an agreement with the Sec-
 23 retary under which—

24 (i) the teacher agrees to teach science
 25 or mathematics in a public elementary

1 school or secondary school for an addi-
 2 tional period of 5 consecutive academic
 3 years following receipt of the retention
 4 bonus; and

5 (ii) the teacher agrees to repay to the
 6 Secretary a pro rata portion of the reten-
 7 tion bonus received under this subsection if
 8 the teacher fails to comply with the teach-
 9 ing requirement described in clause (i).

10 (2) AUTHORIZATION OF APPROPRIATIONS.—

11 There are authorized to be appropriated to carry out
 12 this section such sums as may be necessary for fiscal
 13 year 2007 and each of the 4 succeeding fiscal years.

14 **SEC. 106. ADVANCED PLACEMENT.**

15 (a) GRANTS AUTHORIZED.—The Secretary of Edu-
 16 cation is authorized to award grants, on a competitive
 17 basis, to local educational agencies and State educational
 18 agencies to enable the agencies—

19 (1) to increase the enrollment of secondary
 20 school students in Advanced Placement (AP) science
 21 and mathematics courses at their secondary schools,
 22 or if Advanced Placement courses in science or
 23 mathematics are not offered at their secondary
 24 schools, at an institution of higher education; and

1 (2) to facilitate distance learning for secondary
2 school students in rural school districts in order to
3 increase such students' access to Advanced Place-
4 ment (AP) science and mathematics courses.

5 (b) AUTHORIZATION OF APPROPRIATIONS.—There
6 are authorized to be appropriated to carry out this section
7 such sums as may be necessary for fiscal year 2007 and
8 each of the 4 succeeding fiscal years.

9 **SEC. 107. GRANTS FOR PERFORMANCE INCENTIVE COM-**
10 **PENSATION SYSTEMS.**

11 (a) GRANTS AUTHORIZED.—The Secretary of Edu-
12 cation is authorized to award grants, on an competitive
13 basis, to not less than 5 local educational agencies and
14 not more than 10 different States, to enable the local edu-
15 cational agencies and States to carry out pilot programs
16 that develop and implement a fair, differentiated com-
17 pensation system for middle and secondary school teachers
18 of science and mathematics that is based primarily on
19 measures of improvement in student academic achieve-
20 ment.

21 (b) DEFINITION OF STATE.—In this section the term
22 “State” means each of the several States of the United
23 States, the District of Columbia, and the Commonwealth
24 of Puerto Rico.

1 (c) IMPLEMENTATION LIMITATION.—The Secretary
 2 shall not use more than 5 percent of the total amount ap-
 3 propriated to carry out this section during the period be-
 4 ginning on October 1, 2006, and ending on September 30,
 5 2011, for the administration of the programs described in
 6 subsection (a).

7 (d) AUTHORIZATION OF APPROPRIATIONS.—There
 8 are authorized to be appropriated to carry out this section
 9 \$50,000,000 for fiscal year 2007 and each of the 4 suc-
 10 ceeding fiscal years.

11 **SEC. 108. EMPLOYEE TRAINING AND TEACHING IN MATHE-**
 12 **MATICS, SCIENCE, AND TECHNOLOGY.**

13 (a) IN GENERAL.—Subpart D of part IV of sub-
 14 chapter A of chapter 1 of the Internal Revenue Code of
 15 1986 (relating to business related credits) is amended by
 16 adding at the end the following new section:

17 **“SEC. 45N. CREDIT FOR EMPLOYEE TRAINING AND TEACH-**
 18 **ING IN MATHEMATICS, SCIENCE, AND TECH-**
 19 **NOLOGY.**

20 “(a) AMOUNT OF CREDIT.—For purposes of section
 21 38, the employee training and teaching credit determined
 22 under this section with respect to any employer for any
 23 taxable year is equal to the sum of—

24 “(1) 25 percent of the qualified employee train-
 25 ing costs paid or incurred by the employer during

1 the calendar year ending with or within such taxable
2 year, and

3 “(2) 50 percent of the qualified employee teach-
4 ing costs paid or incurred by the employer during
5 such calendar year.

6 “(b) LIMITATION.—The credit allowable under sub-
7 section (a) for any taxable year shall not exceed the lesser
8 of—

9 “(1) 5 percent of the net income of the tax-
10 payer for such taxable year, or

11 “(2) \$10,000.

12 “(c) QUALIFIED EMPLOYEE TRAINING COSTS.—For
13 purposes of this section, the term ‘qualified employee
14 training costs’ means costs paid or incurred by an em-
15 ployer for post-secondary education or training to main-
16 tain or improve knowledge or skills in mathematics,
17 science, or technology of any employee whose specific posi-
18 tion requires greater knowledge or skills in mathematics,
19 science, or technology.

20 “(d) QUALIFIED EMPLOYEE TEACHING COSTS.—For
21 purposes of this section, the term ‘qualified employee
22 teaching costs’ means costs (including wages) paid or in-
23 curred by an employer to allow any employee, who is a
24 highly qualified (as defined in section 9101 of the Elemen-
25 tary and Secondary Education Act of 1965) teacher, to

1 teach 1 or more courses of instruction in the core aca-
 2 demic subjects of mathematics or science.

3 “(e) APPLICABLE RULES.—For purposes of this sec-
 4 tion, rules similar to the rules under section 45F(e) shall
 5 apply.

6 “(f) REGULATIONS.—The Secretary may prescribe
 7 such regulations as may be necessary or appropriate to
 8 carry out the purposes of this section consistent with regu-
 9 lations established by the Department of Education re-
 10 garding post-secondary education and training and teach-
 11 ing of the core academic subjects of mathematics and
 12 science.”.

13 (b) CREDIT ALLOWED AGAINST THE ALTERNATIVE
 14 MINIMUM TAX.—Section 38(c)(4)(B) of the Internal Rev-
 15 enue Code of 1986 (defining specified credits) is amended
 16 by striking the period at the end of clause (ii)(II) and in-
 17 serting “, and”, and by adding at the end the following
 18 new clause:

19 “(iii) the credit determined under sec-
 20 tion 45N.”.

21 (c) CREDIT MADE PART OF GENERAL BUSINESS
 22 CREDIT.—Section 38(b) of the Internal Revenue Code of
 23 1986 is amended by striking “and” at the end of para-
 24 graph (29), by striking the period at the end of paragraph

1 (30) and inserting “, plus”, and by adding at the end the
 2 following new paragraph:

3 “(31) the employee training and teaching credit
 4 determined under section 45N(a).”.

5 (d) DENIAL OF DOUBLE BENEFIT.—Section 280C of
 6 the Internal Revenue Code of 1986 is amended by adding
 7 at the end the following new subsection:

8 “(e) EMPLOYEE TRAINING AND TEACHING CRED-
 9 IT.—No deduction shall be allowed for that portion of the
 10 expenses otherwise allowable as a deduction for the taxable
 11 year which is equal to the amount of the credit determined
 12 under section 45N(a).”.

13 (e) CLERICAL AMENDMENT.—The table of sections
 14 for subpart D of part IV of subchapter A of chapter 1
 15 of the Internal Revenue Code of 1986 is amended by add-
 16 ing at the end the following new item:

“Sec. 45N. Employee training and teaching credit.”.

17 (f) EFFECTIVE DATE.—The amendments made by
 18 this section shall apply to costs paid or incurred in taxable
 19 years beginning after December 31, 2006.

20 **SEC. 109. PUBLIC AWARENESS CAMPAIGN.**

21 (a) IN GENERAL.—The Secretary of Education, in
 22 consultation with the Secretary of Energy and the Direc-
 23 tor of the National Science Foundation, is authorized to
 24 develop and carry out a public awareness campaign in
 25 public elementary schools and secondary schools to en-

1 courage the students attending such schools to pursue ca-
 2 reers in science, technology, engineering, and mathe-
 3 matics.

4 (b) AUTHORIZATION OF APPROPRIATIONS.—There
 5 are authorized to be appropriated to carry out this section
 6 \$500,000 for fiscal year 2007 and each of the 4 suc-
 7 ceeding fiscal years.

8 **TITLE II—STUDENT LOAN** 9 **INTEREST PAYMENTS**

10 **SEC. 201. ESTABLISHMENT OF PROGRAM.**

11 (a) PROGRAM.—

12 (1) IN GENERAL.—The Secretary shall carry
 13 out a program of assuming the obligation to pay,
 14 pursuant to the provisions of this title, the interest
 15 on a loan made, insured, or guaranteed under part
 16 B or D of title IV of the Higher Education Act of
 17 1965 (20 U.S.C. 1071 et seq., 1087a et seq.).

18 (2) ELIGIBILITY.—The Secretary may assume
 19 interest payments under paragraph (1) only for a
 20 borrower who—

21 (A) has submitted an application in com-
 22 pliance with subsection (d);

23 (B) obtained 1 or more loans described in
 24 paragraph (1) as an undergraduate student;

1 (C) is a new borrower (within the meaning
2 of section 103(7) of the Higher Education Act
3 of 1965 (20 U.S.C. 1003(7)) on or after the
4 date of enactment of this Act;

5 (D) is a teacher of science or mathematics
6 at an elementary school or secondary school, or
7 is a mathematics, science, or engineering pro-
8 fessional;

9 (E) maintains eligibility as described in
10 paragraph (5); and

11 (F) enters into an agreement with the Sec-
12 retary to complete 5 consecutive years of service
13 in a position described in subparagraph (D),
14 starting on the date of the agreement.

15 (3) PRIOR INTEREST LIMITATIONS.—The Sec-
16 retary shall not make any payments for interest
17 that—

18 (A) accrues prior to the beginning of the
19 repayment period on a loan in the case of a
20 loan made under section 428H of the Higher
21 Education Act of 1965 (20 U.S.C. 1078–8) or
22 a Federal Direct Unsubsidized Stafford Loan;
23 or

24 (B) has accrued prior to the signing of an
25 agreement under paragraph (2)(E).

1 (4) INITIAL SELECTION.—In selecting partici-
2 pants for the program under this title, the Sec-
3 retary—

4 (A) shall choose among eligible applicants
5 on the basis of—

6 (i) the areas of national need des-
7 ignated pursuant to section 712 of the
8 Higher Education Act of 1965 (20 U.S.C.
9 1135a), especially those designated areas
10 of national need related to math and
11 science; and

12 (ii) the academic record or job per-
13 formance of the applicant; and

14 (B) may choose among eligible applicants
15 on the basis of—

16 (i) the likelihood of the applicant to
17 complete the 5-year service obligation;

18 (ii) the likelihood of the applicant to
19 remain in science, mathematics, or engi-
20 neering after the completion of the service
21 requirement; or

22 (iii) other relevant criteria determined
23 by the Secretary.

24 (5) MAINTAINING ELIGIBILITY.—To remain eli-
25 gible to receive loan interest payments under this

1 title, a borrower shall maintain academic progress in
2 the same manner as a student receiving an award
3 under section 714 of the Higher Education Act of
4 1965 (20 U.S.C. 1135c) shall maintain academic
5 progress under subsection (d)(1) of such Act.

6 (6) AVAILABILITY SUBJECT TO APPROPRIA-
7 TIONS.—Loan interest payments under this title
8 shall be subject to the availability of appropriations.
9 If the amount appropriated for any fiscal year is not
10 sufficient to provide interest payments on behalf of
11 all qualified applicants, the Secretary shall give pri-
12 ority to those individuals on whose behalf interest
13 payments were made during the preceding fiscal
14 year.

15 (7) REGULATIONS.—The Secretary is author-
16 ized to prescribe such regulations as may be nec-
17 essary to carry out the provisions of this section.

18 (b) DURATION AND AMOUNT OF INTEREST PAY-
19 MENTS.—The period during which the Secretary shall pay
20 interest on behalf of a student borrower who is selected
21 under subsection (a) is the period that begins on the effec-
22 tive date of the agreement under subsection (a)(2)(F),
23 continues after successful completion of the service obliga-
24 tion, and ends on the earlier of—

1 (1) the completion of the repayment period of
2 the loan;

3 (2) payment by the Secretary of a total of
4 \$10,000 on behalf of the borrower;

5 (3) if the borrower ceases to fulfill the service
6 obligation under such agreement prior to the end of
7 the 5-year period, as soon as the borrower is deter-
8 mined to have ceased to fulfill such obligation in ac-
9 cordance with regulations of the Secretary; or

10 (4) 6 months after the end of any calendar year
11 in which the borrower's gross income equals or ex-
12 ceeds 4 times the national per capita disposable per-
13 sonal income (current dollars) for such calendar
14 year, as determined on the basis of the National In-
15 come and Product Accounts Tables of the Bureau of
16 Economic Analysis of the Department of Commerce,
17 as determined in accordance with regulations pre-
18 scribed by the Secretary.

19 (c) REPAYMENT TO ELIGIBLE LENDERS.—Subject to
20 the regulations prescribed by the Secretary pursuant to
21 subsection (a)(7), the Secretary shall pay to each eligible
22 lender or holder for each payment period the amount of
23 the interest that accrues on a loan of a student borrower
24 who is selected under subsection (a) under the same terms
25 as such borrower would pay.

1 (d) APPLICATION FOR REPAYMENT.—

2 (1) IN GENERAL.—Each eligible individual de-
3 siring loan interest payment under this section shall
4 submit a complete and accurate application to the
5 Secretary at such time, in such manner, and con-
6 taining such information as the Secretary may re-
7 quire.

8 (2) FAILURE TO COMPLETE SERVICE AGREE-
9 MENT.—Such application shall contain an agreement
10 by the individual that, if the individual fails to com-
11 plete the 5 consecutive years of service required by
12 subsection (a)(2)(F), the individual agrees to repay
13 the Secretary the amount of any interest paid by the
14 Secretary on behalf of the individual.

15 (e) TREATMENT OF CONSOLIDATION LOANS.—A con-
16 solidation loan made under section 428C of the Higher
17 Education Act of 1965 (20 U.S.C. 1078–3), or a Federal
18 Direct Consolidation Loan made under part D of title IV
19 of such Act (20 U.S.C. 1087a et seq.), may be a loan for
20 which interest is paid pursuant to this section only to the
21 extent that such loan amount was used by a borrower who
22 otherwise meets the requirements of this section to
23 repay—

24 (1) a loan made under section 428 or 428H of
25 such Act (20 U.S.C. 1078, 1078–8); or

1 (2) a Federal Direct Stafford Loan, or a Fed-
 2 eral Direct Unsubsidized Stafford Loan, made under
 3 part D of title IV of such Act (20 U.S.C. 1087a et
 4 seq.).

5 (f) PREVENTION OF DOUBLE BENEFITS.—No bor-
 6 rower may, for the same service, receive a benefit under
 7 both this section and—

8 (1) any loan forgiveness program under title IV
 9 of the Higher Education Act of 1965 (20 U.S.C.
 10 1070 et seq.); or

11 (2) subtitle D of title I of the National and
 12 Community Service Act of 1990 (42 U.S.C. 12601
 13 et seq.).

14 **SEC. 202. DEFINITIONS.**

15 As used in this title:

16 (1) SECRETARY.—The term “Secretary” means
 17 the Secretary of Education.

18 (2) MATHEMATICS, SCIENCE, OR ENGINEERING
 19 PROFESSIONAL.—the term “mathematics, science, or
 20 engineering professional” means a person who—

21 (A) holds a baccalaureate, masters, or doc-
 22 toral degree (or a combination thereof) in
 23 science, mathematics, or engineering; and

24 (B) works in a field the Secretary deter-
 25 mines is closely related to that degree, which

1 shall include working as a professor at a 2- or
2 4-year institution of higher education.

3 **SEC. 203. AUTHORIZATION OF APPROPRIATIONS.**

4 There are authorized to be appropriated to carry out
5 this title such sums as may be necessary for fiscal year
6 2007 and for each of the 4 succeeding fiscal years.

○