



Students 2 Science, Inc.

A non-profit organization inspiring, motivating, and educating students to pursue careers in **Science, Technology, Engineering, and Math**

Creating Tomorrow's Technology Leaders - Today



The global economy is driven by technology, can we stay competitive?



The Global Economy is driven by Science, Technology, Engineering, and Math (STEM)



Successful companies like these depend on employees who are competent in STEM subject matter

- Science – Pharmaceuticals, Chemicals, Materials
- Technology – Computers, Electronics, Communications
- Engineering – Infrastructure, Transportation, Manufacturing, Capital Equipment
- Math - The language of Science and Technology



Using a multi-disciplinary approach, we inspire, educate, and motivate our students to prepare them for technical careers

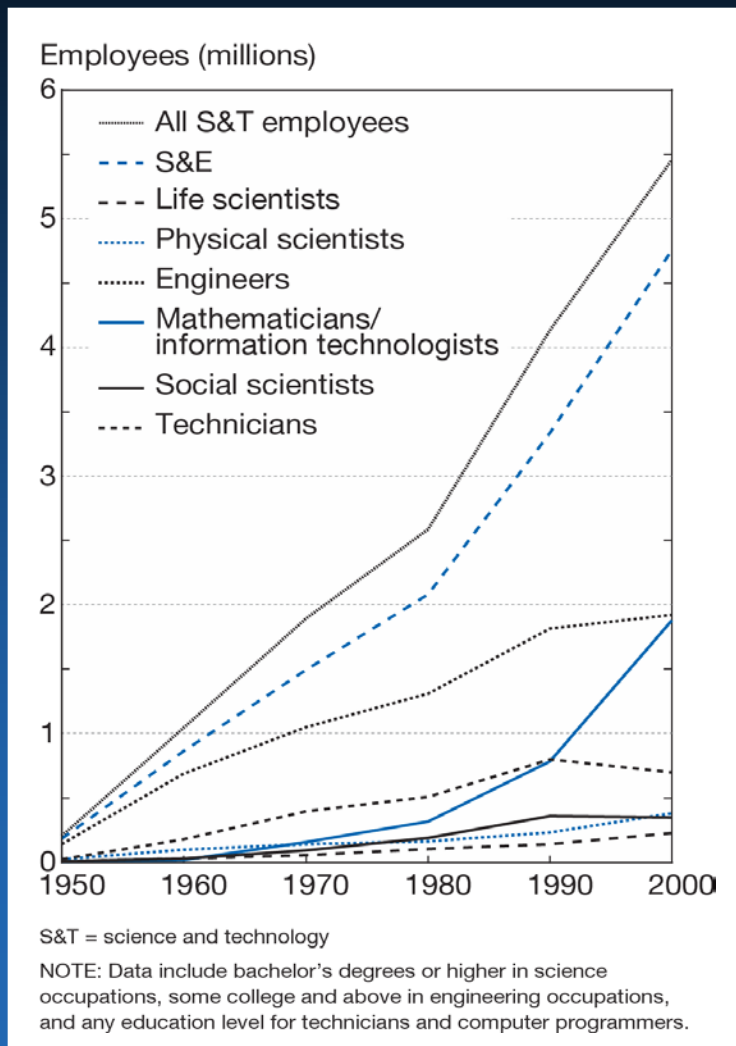




Science and Technology Employment: 1950–2000

Demand for scientifically literate workers continues to grow.

Can we stay competitive?

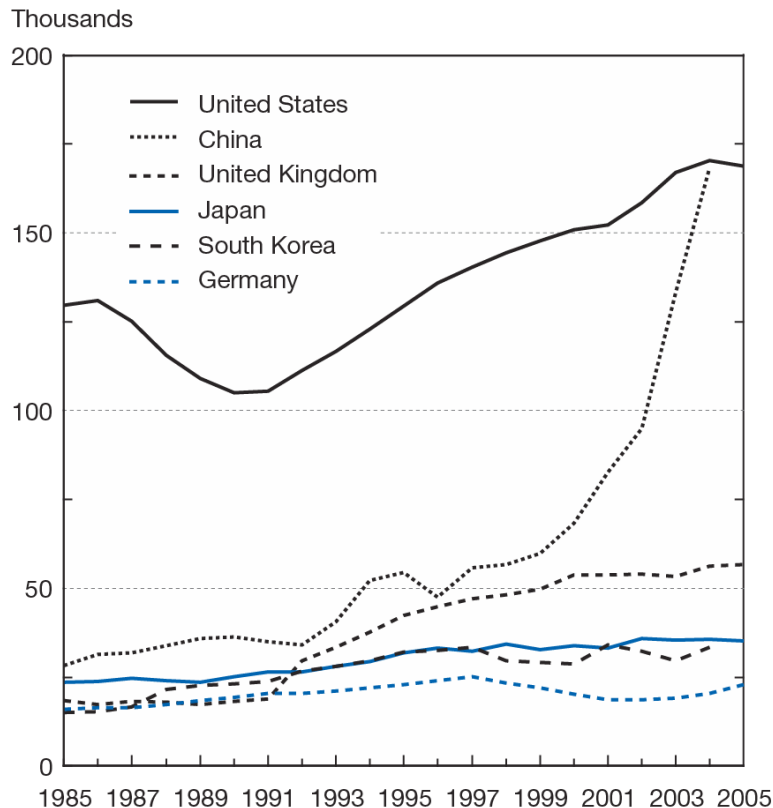


SOURCE: National Science Board, *Science and Engineering Indicators 2008*



Undergraduate Degrees in Science and Engineering: 1985 – 2005

Technological literacy in the United States is trending downward, while in other countries, especially China, it is heading upward.



NOTES: Natural sciences include physical, biological, earth, atmospheric, ocean, agricultural, and computer sciences and mathematics. German degrees include only long university degrees required for further study.

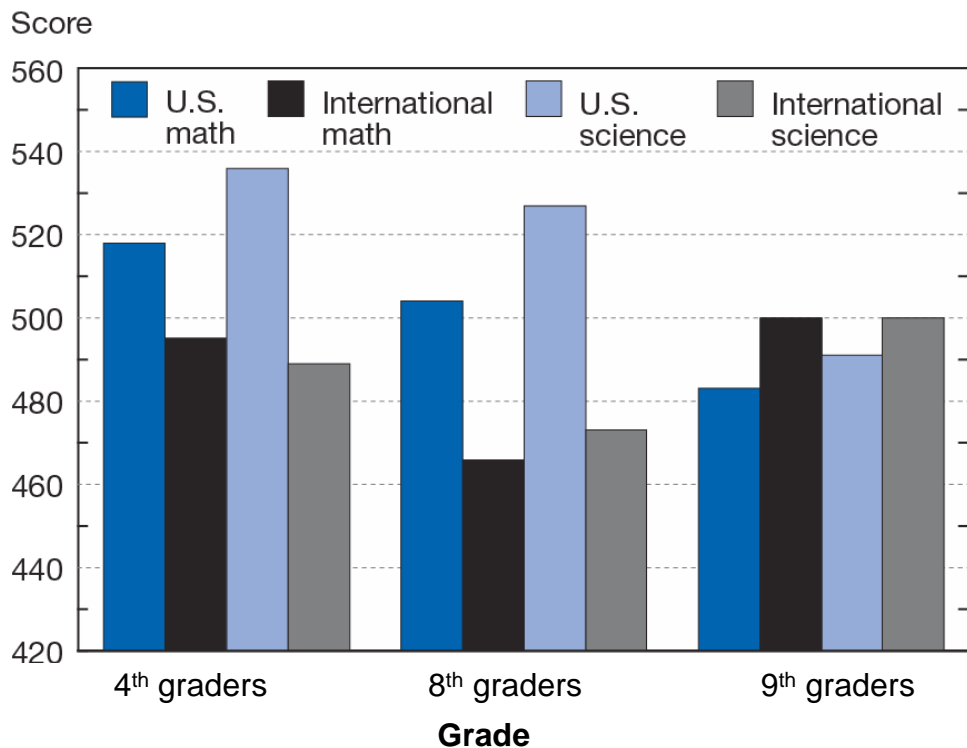
SOURCE: National Science Board, *Science and Engineering Indicators 2008*



U.S. and International Math and Science Scores

Studying these subjects becomes “uncool” between 8th and 10th grade.

We begin to fall behind other countries in these important capabilities.



NOTES: For fourth and eighth graders, results from the 2003 Trends in International Mathematics and Science Study. For ninth graders, results from Programme for International Student Assessment and Organization for Economic Co-operation and Development.

SOURCE: National Science Board, *Science and Engineering Indicators 2008*



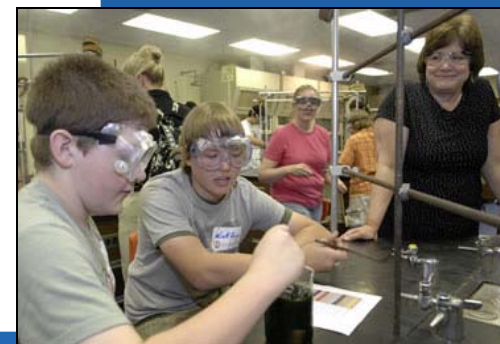
Students 2 Science, Inc.

We know how to help

Nurturing a
technologically
literate work force.

With your help, we
will remain a global
leader in technology.

- Inspire and motivate middle school students to pursue careers in Science, Technology, Engineering, and Math
- Educate middle schools students to the vast career opportunities and the potential financial benefits of STEM related careers
- Improve student proficiency in STEM subjects
- Provide continuing education to middle school teachers and career opportunity information to guidance counselors
- Develop and evaluate metrics on program effectiveness

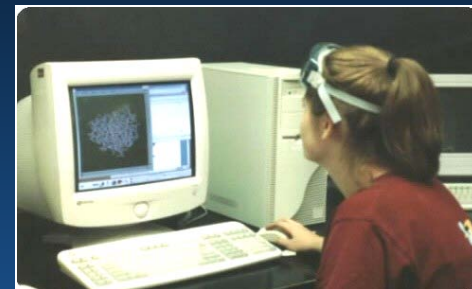




Ignite the Scientific Spark



- Students engage in a unique, real life work experience at our state of the art technical learning center
- S2S provides an encouraging atmosphere for women and underrepresented students
- Students perform “hands on” experiments with sophisticated laboratory instrumentation
- Program generates excitement and instills confidence for subjects that are traditionally viewed as difficult
- Successful scientists and technical entrepreneurs promote STEM career opportunities.





Our Programs

- A Day in the Life of a Scientist
- Supercharged Science
- V-Lab
- Continuing Education
- Community Outreach
 - Boy Scout/Girl Scout Merit Badges
 - Classroom Assistance
 - Independent Research
 - Science Camps





Rave Reviews!



“I have never had so much scientific fun before!”

Ms. S. Viebragz, 8th Grade

“Everything I learned today I will take with me as I continue my scientific career”

Ms. G. Daidone, 8th Grade

“I am really thankful that we were given the opportunity to do something so extraordinary and fun”

Ms. A. Dolan, 8th Grade

“The students (and their teachers) found our day in the laboratory to be one of the most exciting and worthwhile field trips we have been privileged to attend!”

Ms. Jane Martin, Teacher
Far Hills Country Day School





Accomplishments

Pilot Program Results: *Test Scores Improved*



On May 26th, we conducted our second pilot program. 28 students took “before” and “after” science day proficiency tests. The results are impressive.

71% of students had improved scores

For the total group of 28 students:

- average “before” score = 54%
- average “after” score = 69%

20 students had a better grade after:

- average “before” score = 50%
- average “after” score = 73%

7 students scored 83% or higher on the “after” test (2 scored 100%)



Accomplishments

Pilot Program Results: *Attitudes Changed*

Of the 28 participating students:

- 23 wrote reflections on the visit
- 18 of these 23 students said their experience linked the classroom to the real world
- All commented on the effectiveness of the “hands-on” learning style
- 21 rated the day as an excellent experience and recommended it for other students
- 7 specifically said they will now consider careers in STEM related fields as a result of the visit

Conclusion – 25% of the students are now considering a STEM related career as a result of participating in our program.





Objectives

Phase 1

- **Raise \$150,000 from private donors, corporations, and foundations**
- **Select 3-5 sponsor schools**
- **Obtain approximately 10,000 sq. ft. of laboratory space**
- **Develop programs**
 - A Day in the Life of a Scientist
 - Supercharged Science
 - V-Lab
 - Science for Scouts
- **To be completed by September 1, 2010**

Phase 2

- **Raise \$500,000 from private donors, corporations, and foundations**
- **Obtain funding to support student visits**
- **Roll to programs out to organizations in central/north NJ**
- **Develop programs**
 - Teacher Training
 - V-Lab
 - Science Camps
 - Independent Research
- **Open second facility central/north NJ**
- **To be completed by September 1, 2012**

Phase 3

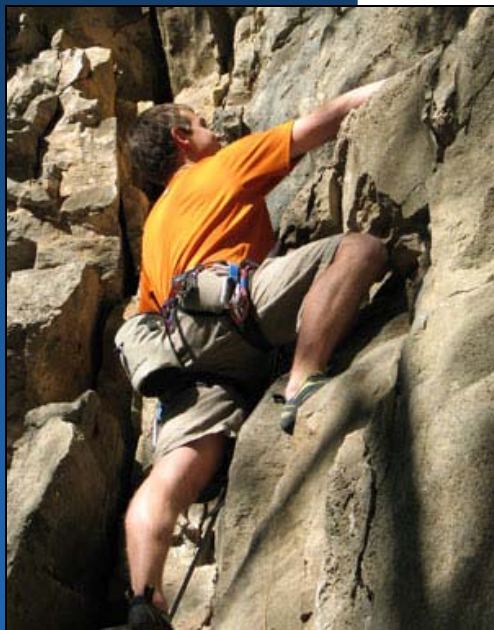
- **Raise additional funding to support statewide implementation**
- **Open third facility in south NJ**
- **To be completed by September 1, 2015**



Will You Help?

Our Challenges

- Raise Funds
- Recruit Board Members
- Develop Programs
- Select Schools
- Build Technology Centers





How



Publication – Articles in:

- C&E News
- Local Publications

Exhibit - Table Space at Symposiums

- EAS, National ACS Meeting, etc.

Membership Email List

- Recruit Volunteers
- Fundraising

Grants - Financial Support

- Program Development
- Access for under represented schools





Building Tomorrow's Leaders, Today!

