A Look Ahead in STEM Education

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Aviation Technician Education Council
Part One: Public Images
General Public’s Image
Hollywood’s Historical Image
What (Many) Students Think
Actual STEM Careers
The Images are Starting to Change
Part Two: Four Education Issues
#1: “College is too expense… and my kid can’t find a job.”
How Big is Student Loan Debt?

TOTAL STUDENT LOAN DEBT OUTSTANDING IN THE UNITED STATES
$1,011,654,459,649

STUDENT LOAN DEBT IN AMERICA

37 MILLION
AMERICANS HAVE STUDENT LOANS

27 PERCENT
STUDENT LOAN DELINQUENCY RATE

$23,200
AVERAGE STUDENT LOAN DEBT PER BORROWER IN USA

PRESENTED BY CLASSESANDCAREERS.COM
In a few short years, student loan debt in the United States has nearly doubled, fueled by an unrelenting recession and hopes for the future. As of June 2013, student debt has exceeded credit card debt and auto loan debt in size. Unless Congress acts to bring student loan interest rates back down, the amount of student loan debt could explode again. Student loan debt now equals almost $1 trillion, but how much is that exactly?

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YoBucko is a free personal finance website that equips the next generation with the knowledge and tools needed for financial success. It's your online personal finance guide. Sign up for our free monthly newsletter packed with money-saving tips and valuable advice to help you navigate your never-ending college costs.

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Sources: http://www.bizjournals.com/detroit/blog/2013/04/08/student-loan-debt-surpasses-auto.html
STEM Majors Do Very Well

TOP-PAYING MAJORS FOR 2012-13
BACHELOR’S DEGREE GRADUATES

MAJOR
- Petroleum Engineering: $93,500
- Computer Engineering: $71,700
- Chemical Engineering: $67,600
- Computer Science: $64,800
- Aerospace / Aeronautical / Astronautical Engineering: $64,400
- Mechanical Engineering: $64,000
- Electrical / Electronics and Communications Engineering: $63,400
- Management Information Systems / Business: $63,100
- Engineering Technology: $62,200
- Finance: $57,400

SOURCE: APRIL 2013 SALARY SURVEY, NATIONAL ASSOCIATION OF COLLEGES AND EMPLOYERS
So do STEM Technicians

1/2 of all STEM jobs don't require a four-year degree and pay an average of $53,000, which is 10 percent higher than non-STEM jobs with similar education requirements.
#2: “There is too much testing.”
Every Student Succeeds Act
Every student should have access to a high-quality education

The Every Student Succeeds Act:

1. Reduces reliance on high-stakes testing & increases flexibility for states and school districts
2. Provides schools & teachers with new resources and support
3. Helps ensure the next generation will be able to compete and lead in the 21st century global economy

#ESSA
“Common Core” Math Standards

[Map showing states that have adopted or not adopted the Common Core standards, with color coding for states that adopted the Common Core, states that did not adopt it, states that adopted it in only one subject, and states that reversed their adoption.]

*New standards take effect in 2015-2016*
#3: Strengthening the STEM Pipeline

A Leaking STEM Pipeline

2001
4.01 million 9th Graders

2005
2.8 million High School Graduates

Fall 2005
1.9 million College Plans

Fall 2005
Only 1.3 million College Ready

2009-2011
278,000 Majoring in STEM

167,000 STEM Graduates

www.businessandeducation.org
STEM Competitions and Hands on Learning
Afterschool STEM Programs
STEM Teacher Education

IN 2014, NMSI PROGRAMS IMPACTED...

44
536
8,622

UNIVERSITIES
SCHOOLS
TEACHERS
Through the UTeach Expansion Program
Through the Critical Awareness Program
Through the Launch the Foundation Program

UTEACH NATIONAL PROGRAM ENROLLMENT
SPRING 2015 — 6,892 STUDENTS
#4: Policy Challenges for the Next Presidential Administration
Pending Legislation and New $ Initiatives

Higher Education Act
Reauthorization

Carl D. Perkins
Vocational and Technical Education Act of 2006

House Appropriations Committee

"The White House needs $765 billion — we'll explain later."
Thank You!