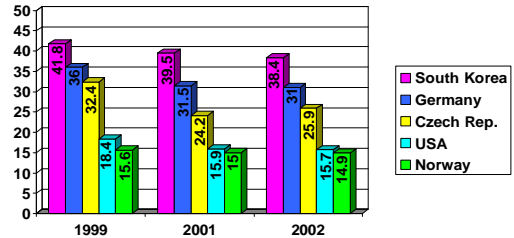


What is the Problem?

- **Flat or declining engineering enrollments** in North America, Western Europe, Australia
 - In the face of strong projected demand
- **Disappointing performance** of youth in Mathematics
- Women & minority students conspicuously **under-represented**
- **Public perception** of engineers/ engineering/ technology is largely misinformed
 - Resulting in early decisions that block the path of children to Engineering



Percentage of Science Degrees Awarded

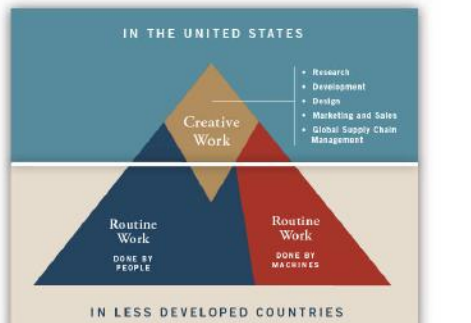


Science degrees include life sciences, physical sciences, mathematics, statistics, computer sciences, engineering, manufacturing, and building

Source: Organization of Economic Cooperation and Development



PROTOTYPICAL U.S. INDUSTRY *in 10 years if all goes well*



http://www.skillscommission.org/pdf/exec_sum/ToughChoices_EXECSUM.pdf



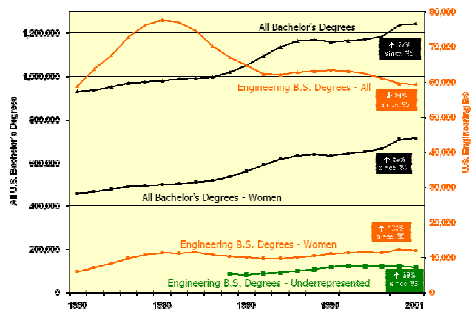
Tough Choices or Tough Times

Thirty years ago, the United States could lay claim to having **30 percent** of the world's population of college students.

Today that proportion has fallen to **14 percent** and is continuing to fall.



BS Degrees Awarded (US)

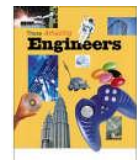


Source: U.S. Department of Education, National Center for Education Statistics



What groups are doing...

- **IEEE, IBM and Others** launched www.TryEngineering.org in 2006
- **ASME** started a new line of services to teachers and engineers in Pre-University education
- **ACM** started **CSTA** – the **Computer Science Teachers Association**
 - a membership organization... supports and promotes the teaching of computer science... by providing opportunities for K-12 teachers and students
- **ASCE** has a new portal and a new magazine for children 8-12
- The New York Hall of Science and IBM launched www.TryScience.org
- The NSF, Columbia, Cornell and others launched the Teach Engineering Digital Library
- **Others:** usFIRST, DI-TechEffects, Infinity Project, BESTINC



IEEE EAB

Educational Activities Board


...implements programs specifically intended to serve and benefit IEEE members in educational pursuits, the engineering and scientific community and the general public.

Source: www.ieee.org



What IEEE EAB Wants To Do

- **Increase the propensity of young people worldwide to select Engineering as a career path**
- **Build a sustained public awareness program, led by IEEE, with broad support of corporations and professional associations**



ENGINEERING ...

**Engineers make a world of difference.
Engineers are creative problem-solvers.
Engineers help shape the future.
Engineering is essential to our health, happiness and safety.**

No profession unleashes the spirit of innovation like engineering.

From research to real-world applications, engineers constantly discover how to improve our lives by creating bold new solutions that connect science to life in unexpected, forward-thinking ways.


Few professions turn so many ideas into so many realities.

Few have such a direct and positive effect on people's everyday lives.


We are counting on engineers and their imaginations to help us meet the needs of the 21st century.

www.nae.edu/nae/pubundcom.nsf/weblinks/MKEZ-6WFSKJ70OpenDocument


BBMG Final Report – February 2007




<http://www.tryengineering.org/home.php>

<http://www.tryengineering.org/lesson.php?&showall=1>



Our Partners

- IEEE FOUNDATION
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- American School Counselor Association (ASCA)
- IBM and the New York Hall of Science

