



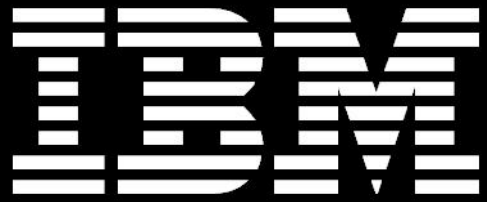
IBM Systems and Technology Group

# Kids Today ... Engineers Tomorrow ?

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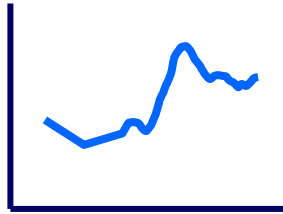
I want YOU  
to help ME  
get kids excited about  
Engineering Careers



IBM



# Engineering career trends



## Perceptions of Engineering



What do kids want ?



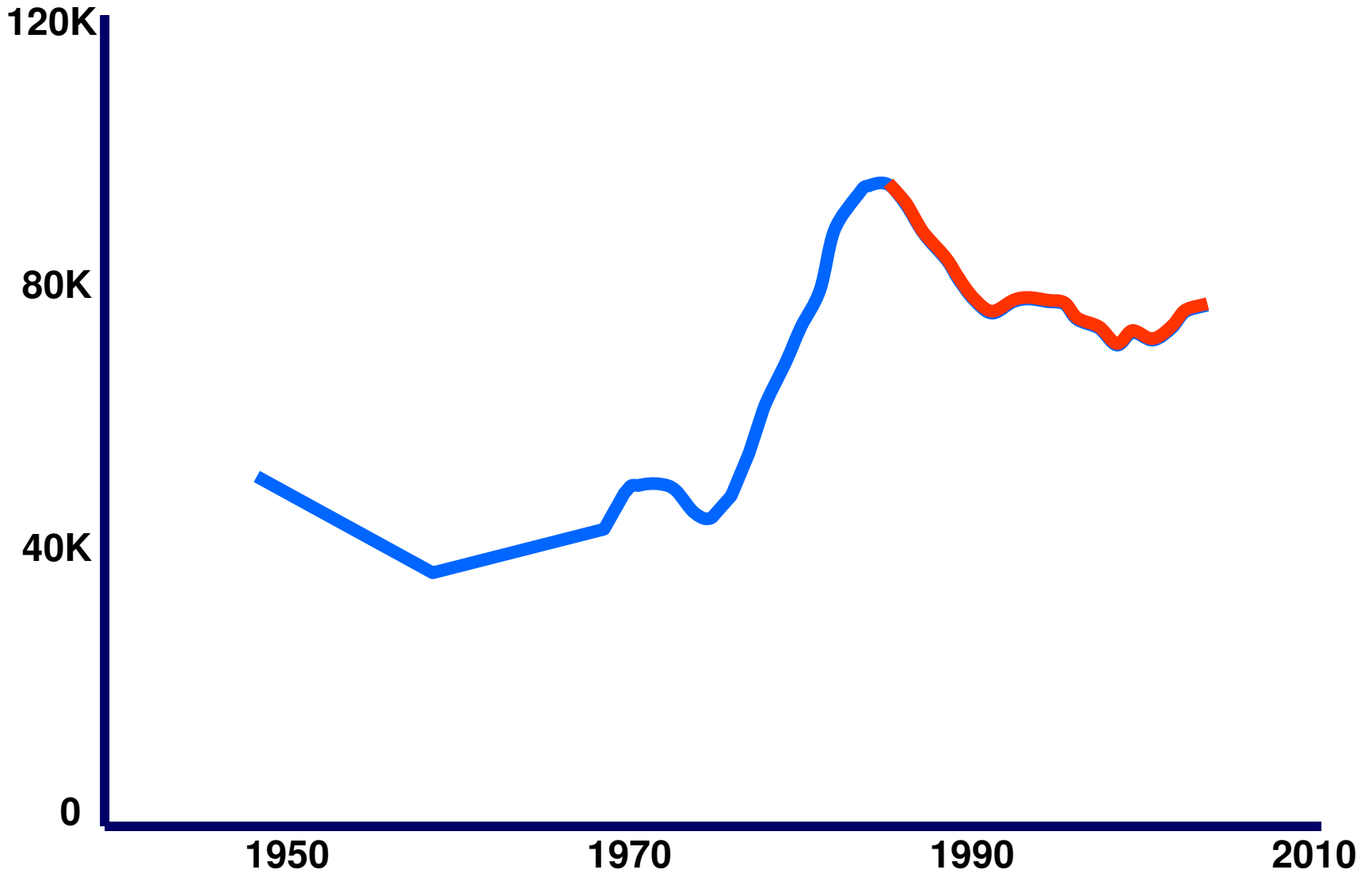
Changing the conversation



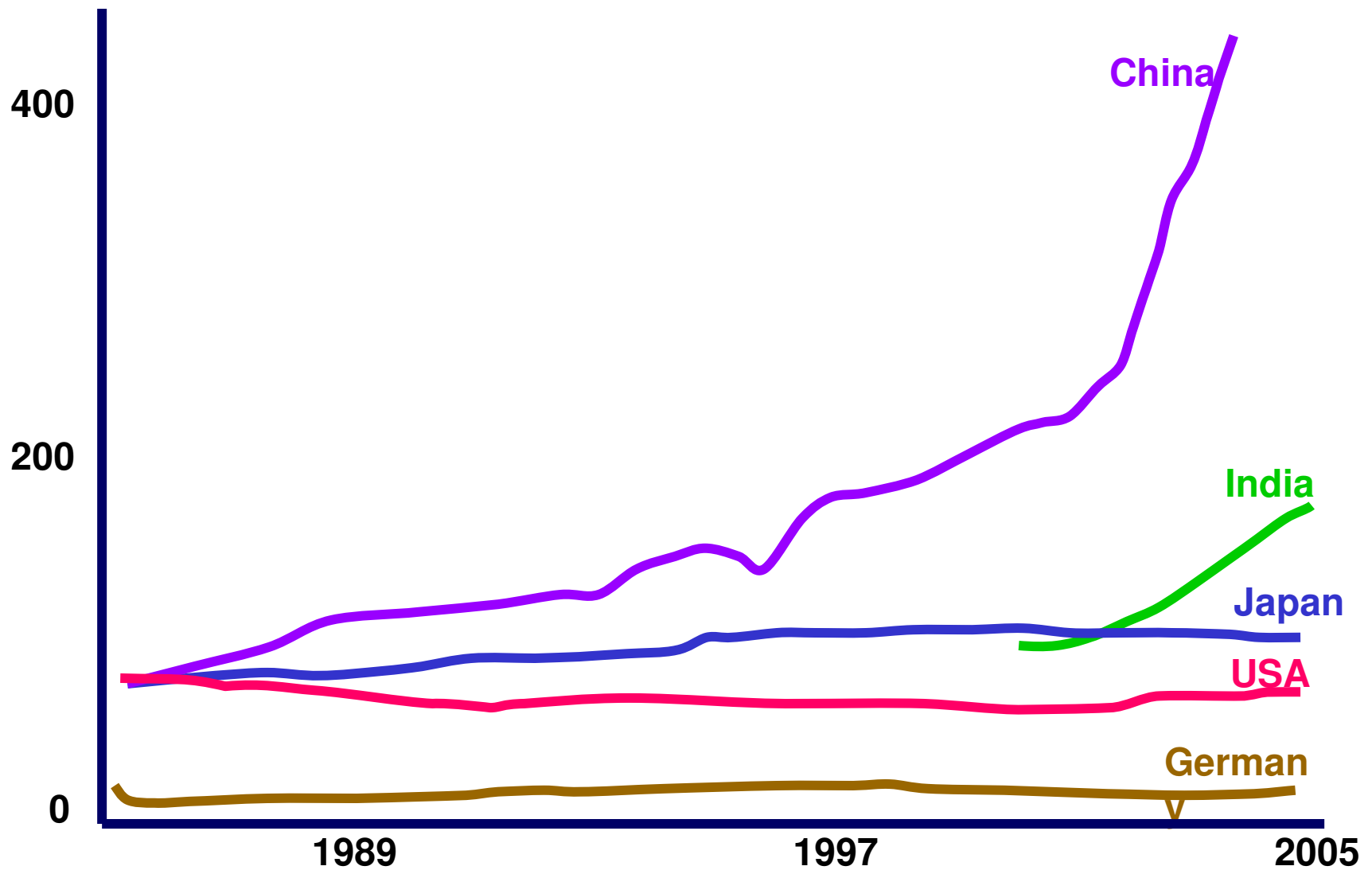
What can we do ?



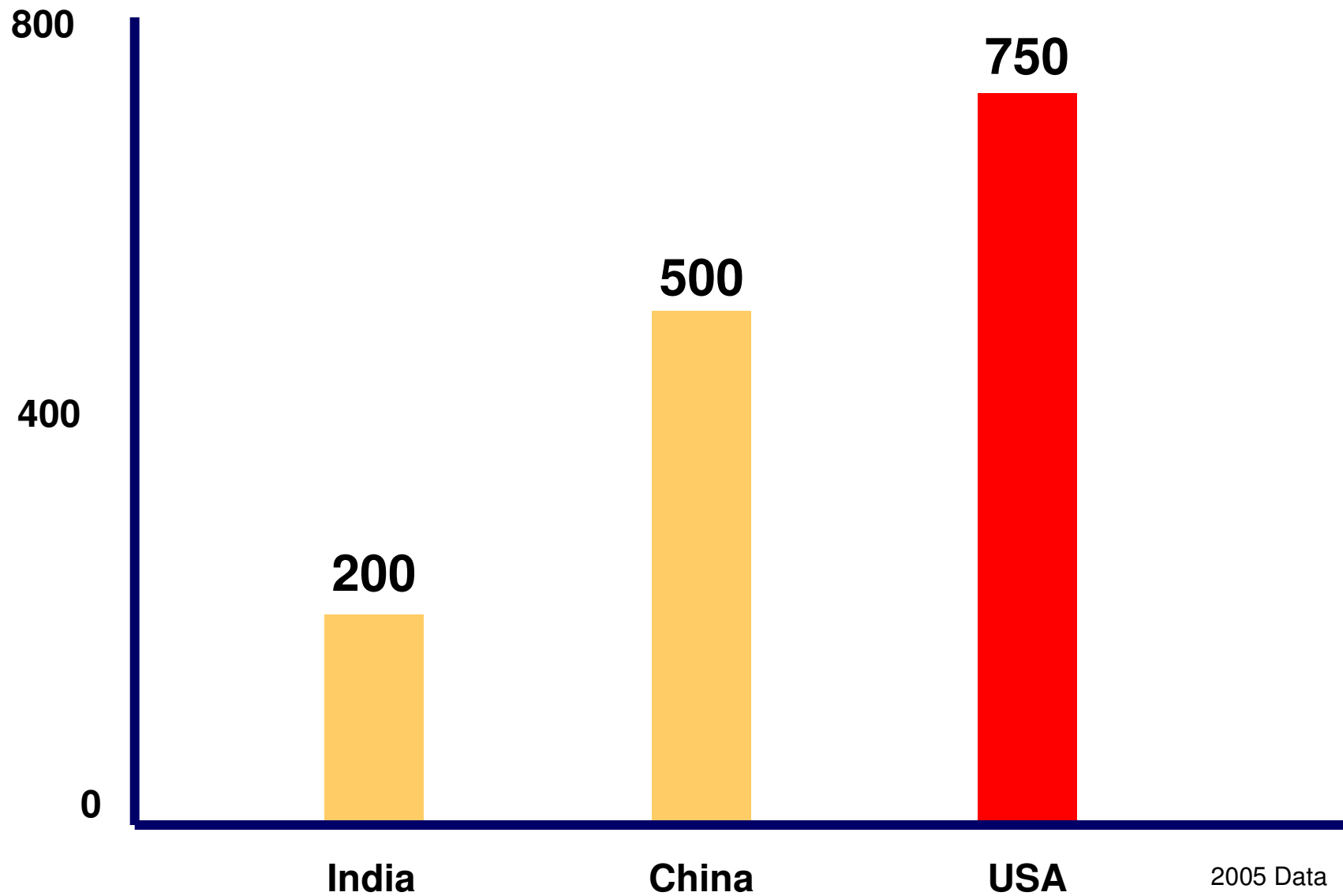
# US Engineering Degrees



# Science and Engineering Degrees by Country



# Engineering Graduates per Million



22%

of the world's engineers  
are women





# Crisis?



80%

of kids worldwide would  
**not** consider a technical  
career



# Public Perception of Engineering

<u>Attributes</u>	<u>Engineers</u>	<u>Scientists</u>
Creates economic growth	69%	25%
Would make a strong leader	56%	32%
Cares about the community	37%	51%
Sensitive to societal concerns	28%	61%
Improves the quality of life	22%	77%
Protects the environment	17%	71%
Saves lives	14%	82%

## What they hear:

1. “Engineering is hard”
2. “Must be good at math and science”
3. “It’s not for everyone”



## What they *don't* hear:

1. Creativity

2. Collaboration

3. Value to society



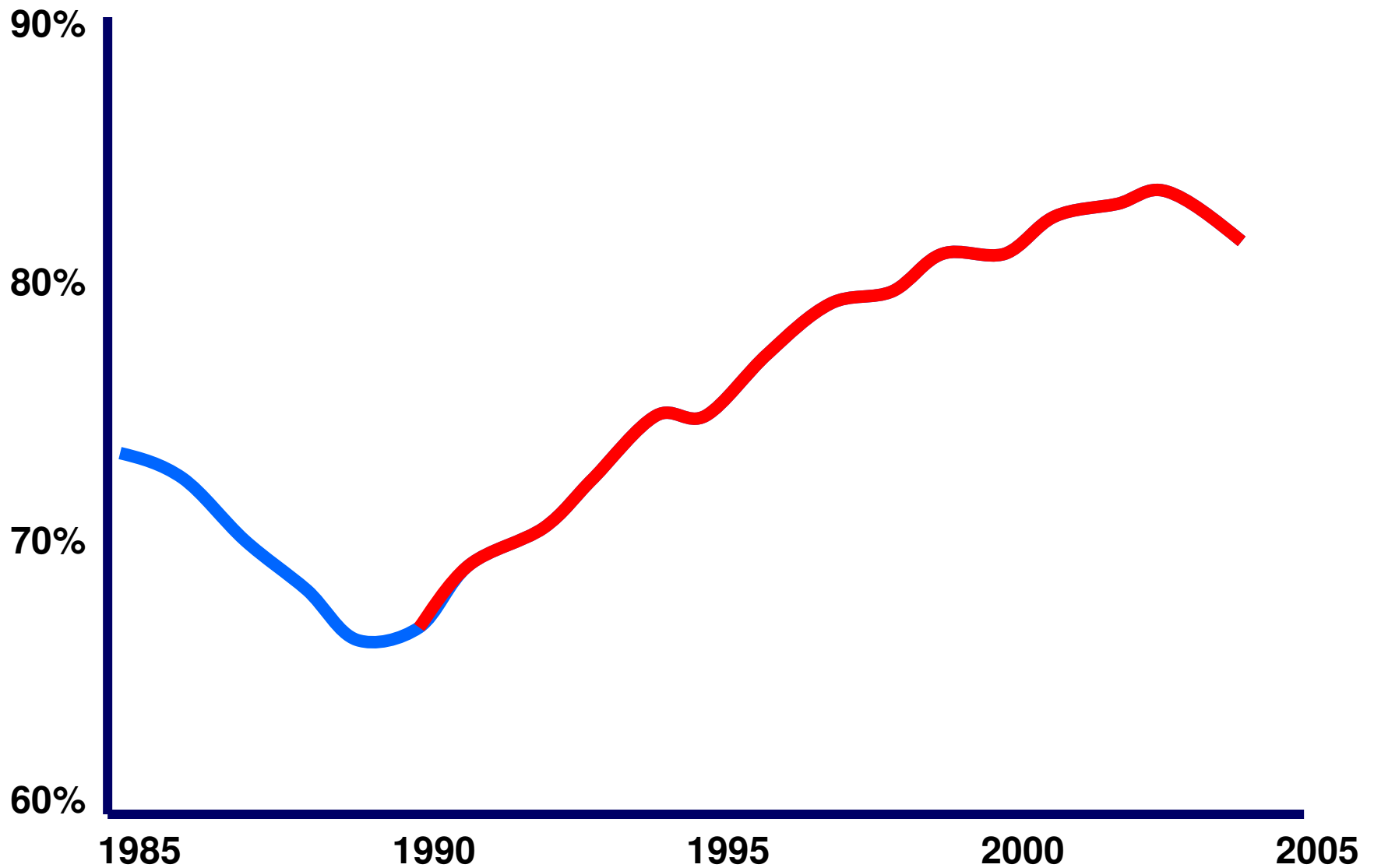


85%

of kids worldwide  
want work that is  
**meaningful** and  
**important**

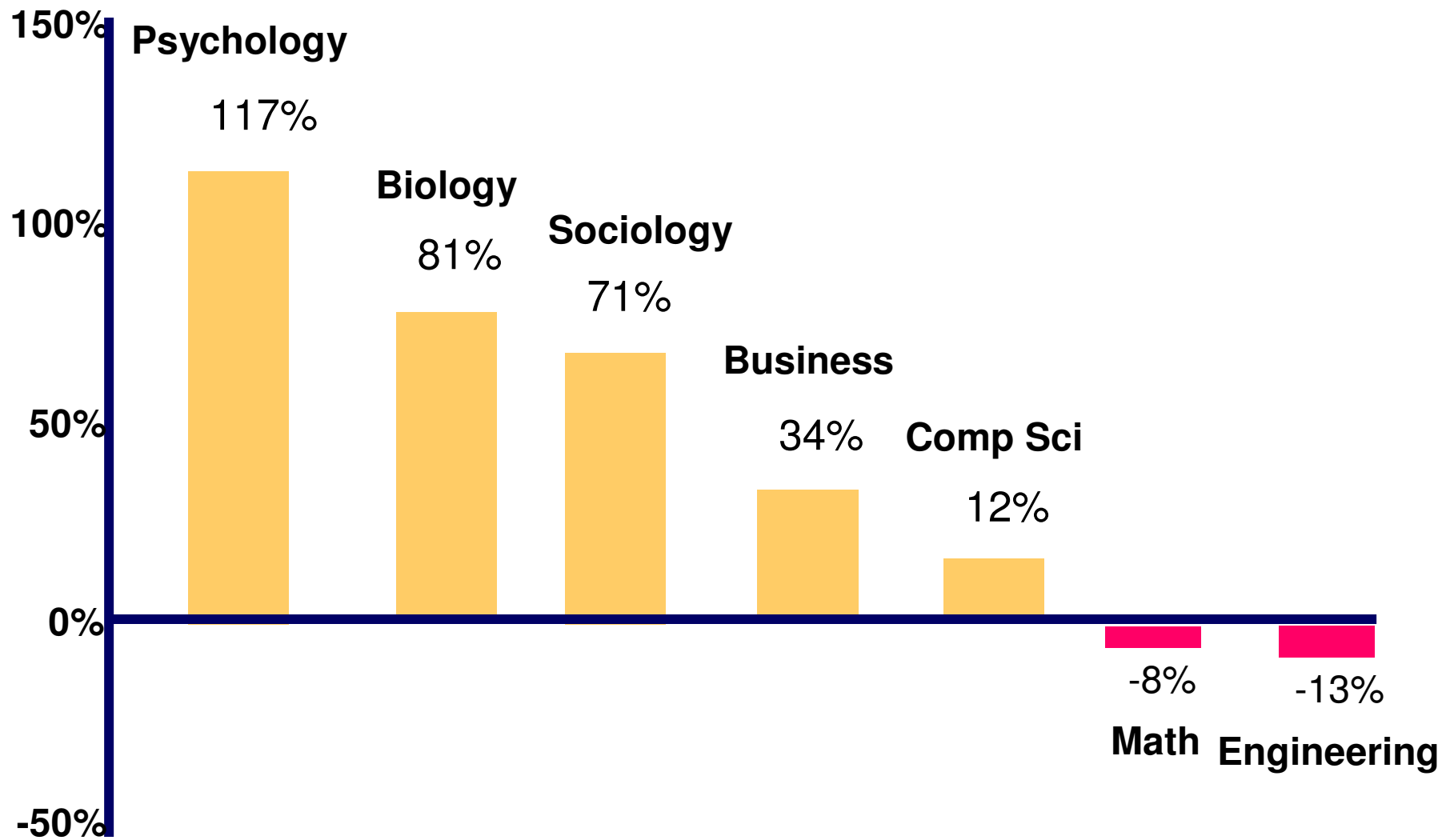


# Volunteerism Rates in US College Freshmen





# Change in US Degree Choices 1985-2005



*“We need to change  
the conversation ...”*



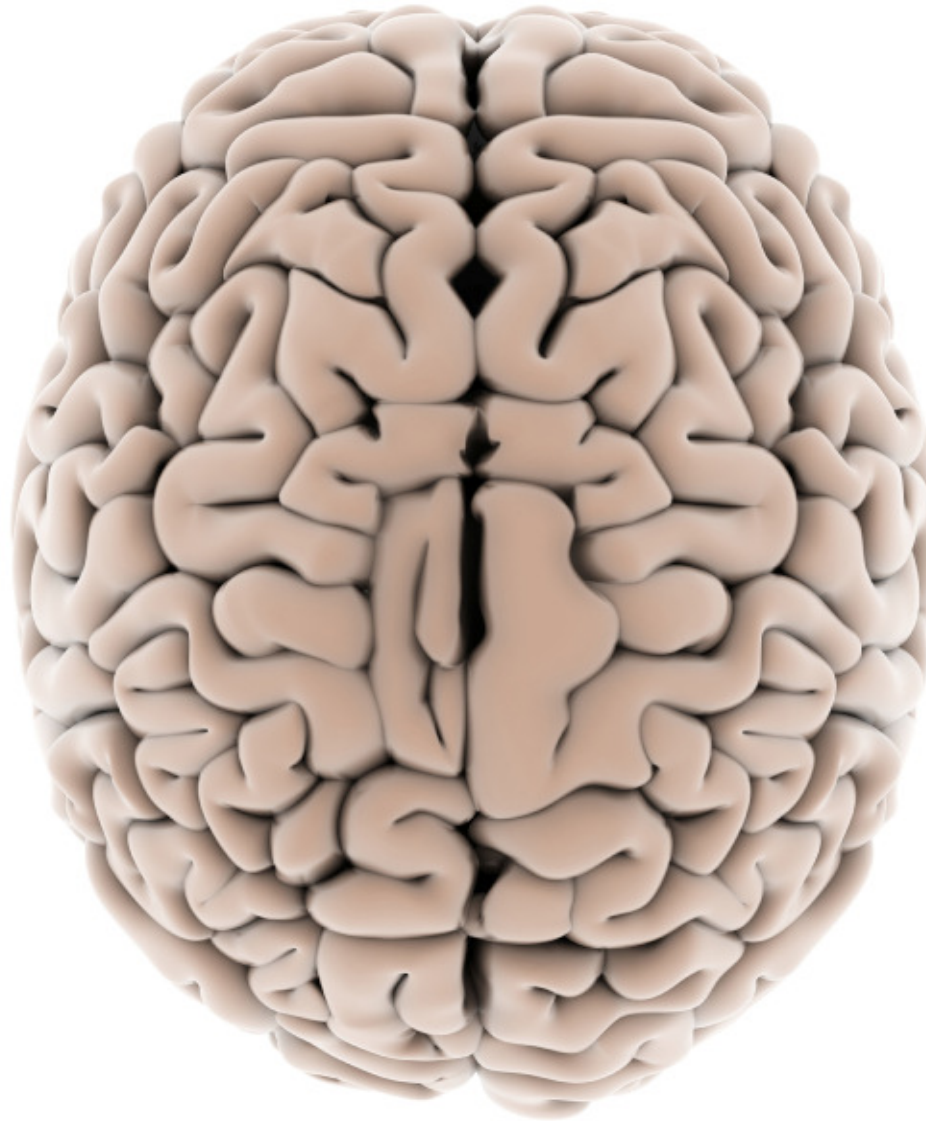
# Left Brain | Right Brain

**Logic**

**Analysis**

**Detail**

**Facts**



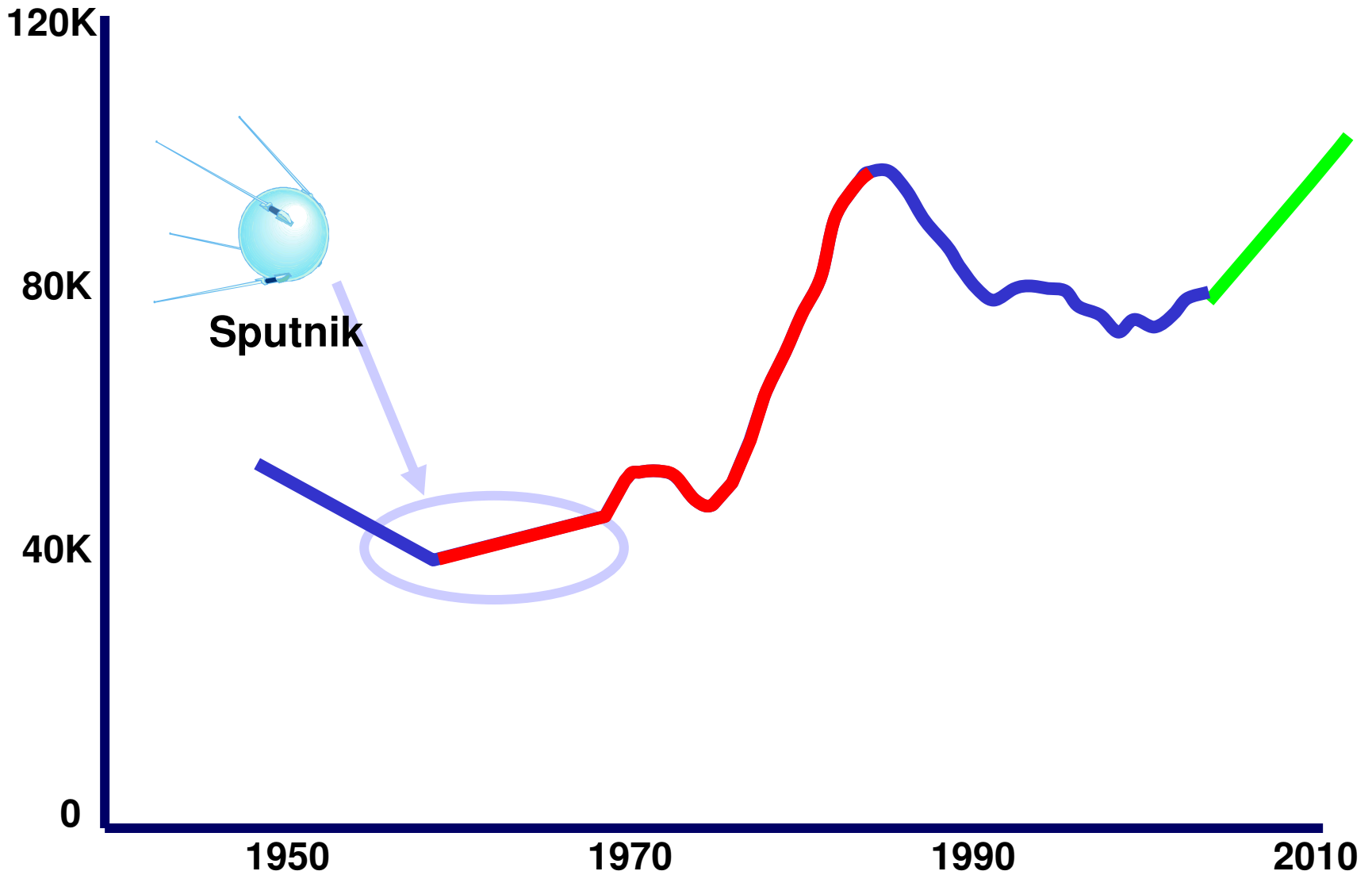
**Creativity**

**Empathy**

**Imagination**

**Passion**

# Us Engineering Degrees – The Sputnik Effect



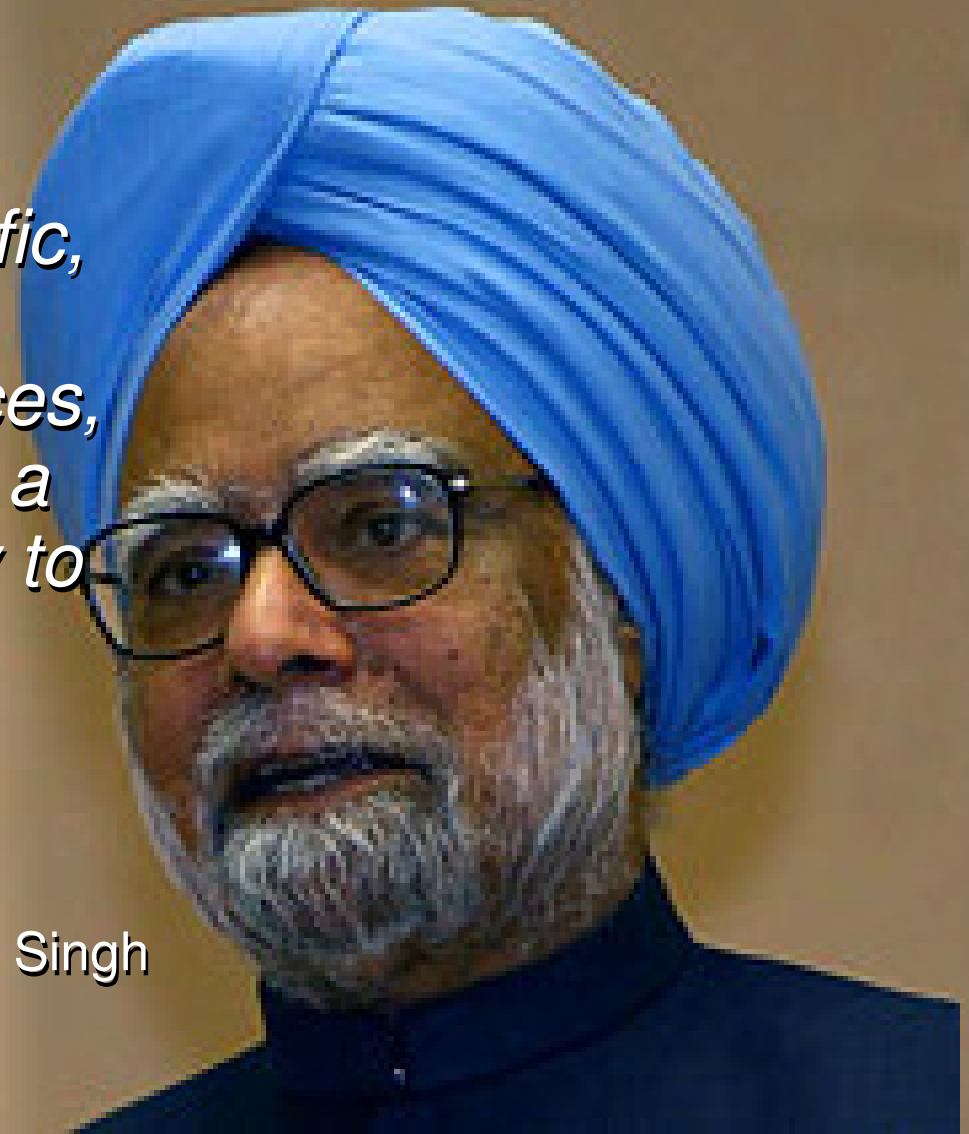
79%

of kids worldwide  
believe that we  
must address  
environmental and  
energy issues

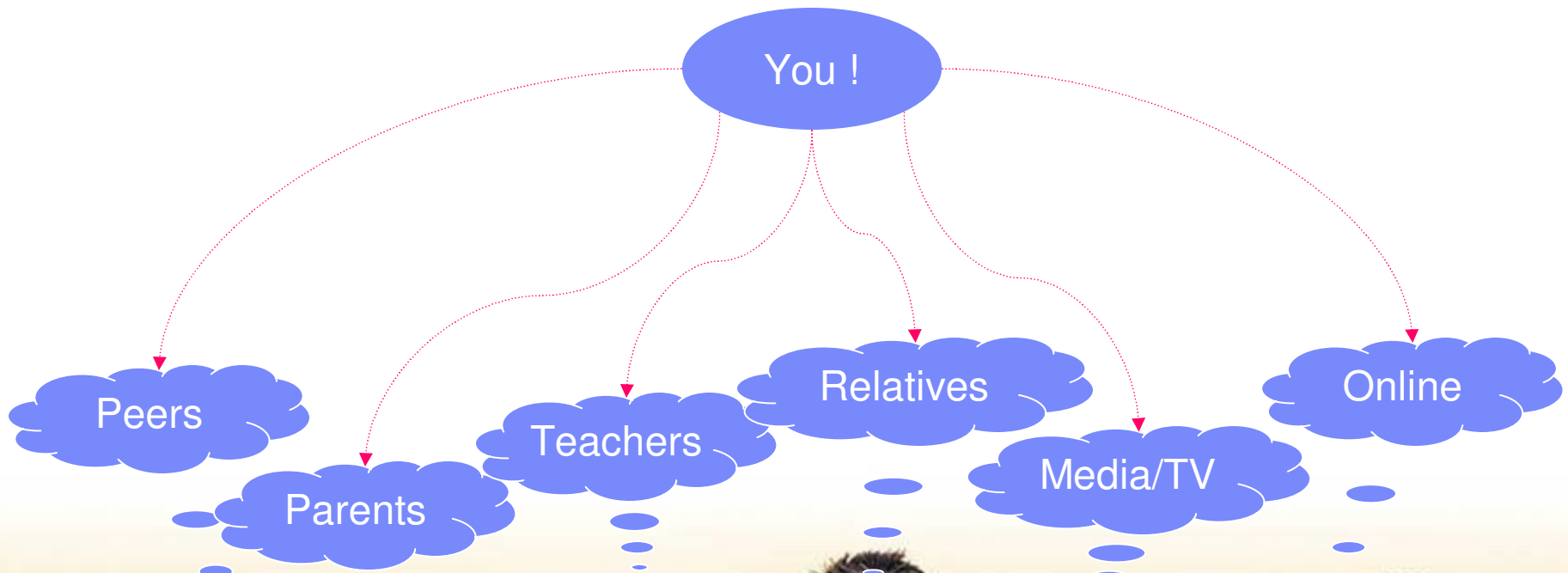


*“We will pool all our scientific, technical and managerial talents, with financial sources, to develop solar energy as a source of abundant energy to power our economy and to transform the lives of our people”*

· Indian Prime Minister Manmohan Singh



# How do you fit-in ?

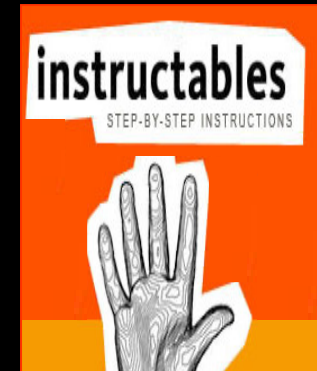


# The Importance of Outreach

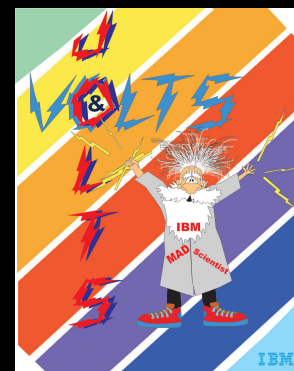
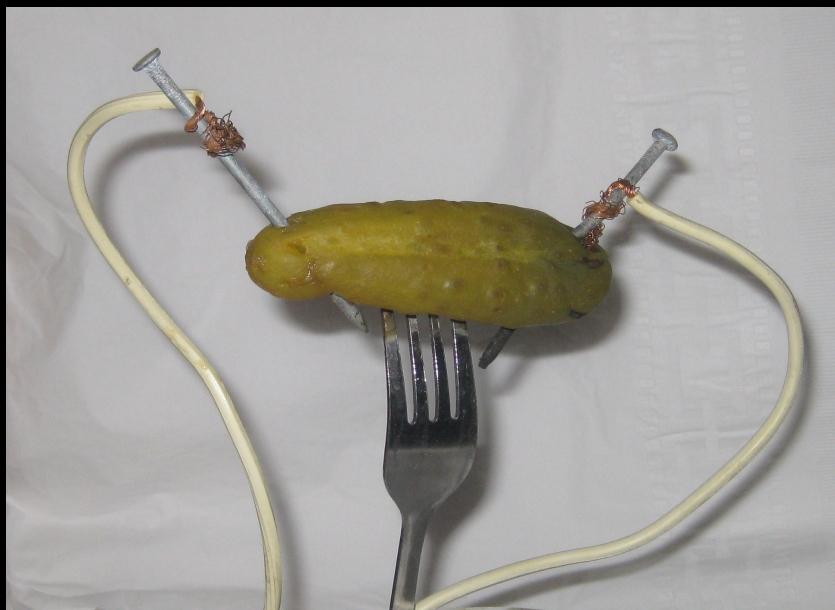




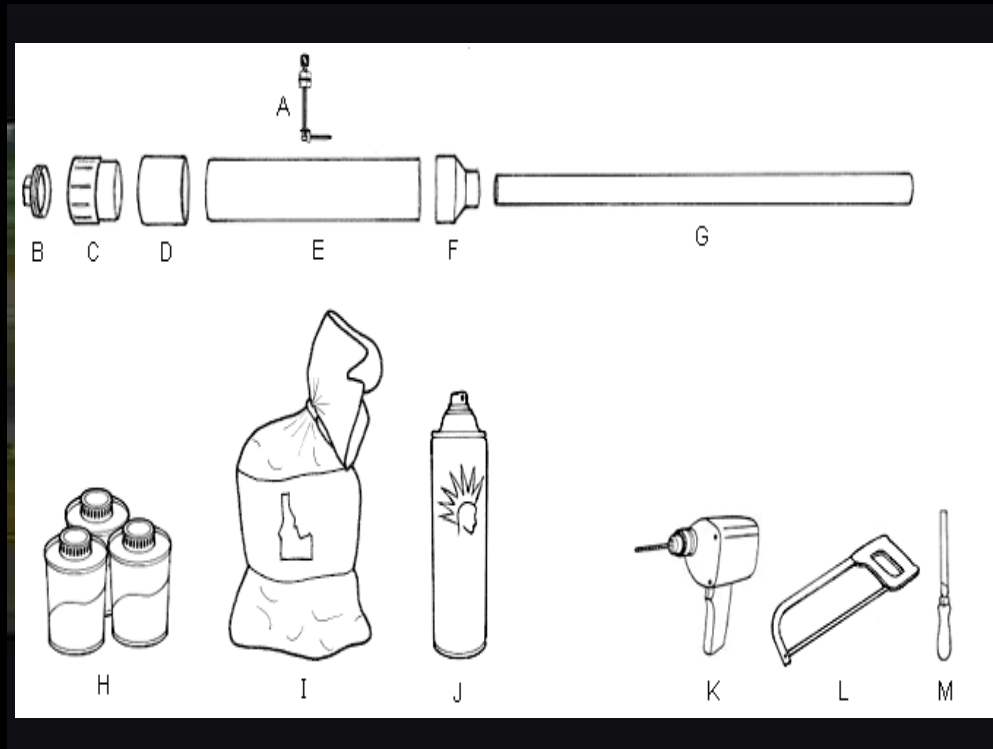
# In Your Home



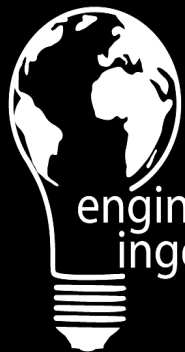
# In Your Schools



# In Your Community



# In The World



engineers without borders  
ingénieurs sans frontières



**IEEE**

*“Never doubt that a small group of thoughtful, committed citizens can change the world. ....*



*Indeed, it's the only thing that ever has.”*  
-Margaret Mead