

HIDDEN IN PLAIN SIGHT



DISCOVERING STEM POTENTIAL



po·ten·tial

AN ABILITY THAT HAS

NOT YET DEVELOPED

(CAMBRIDGE DICTIONARY)



po·ten·tial

SOMETHING OR SOMEONE THAT HAS
THE POWER TO BECOME SOMETHING

(VOCABULARY.COM)



po·ten·tial

EXISTING IN POSSIBILITY

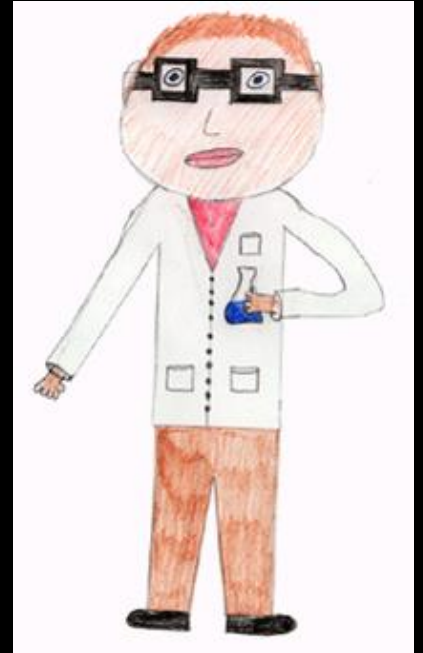
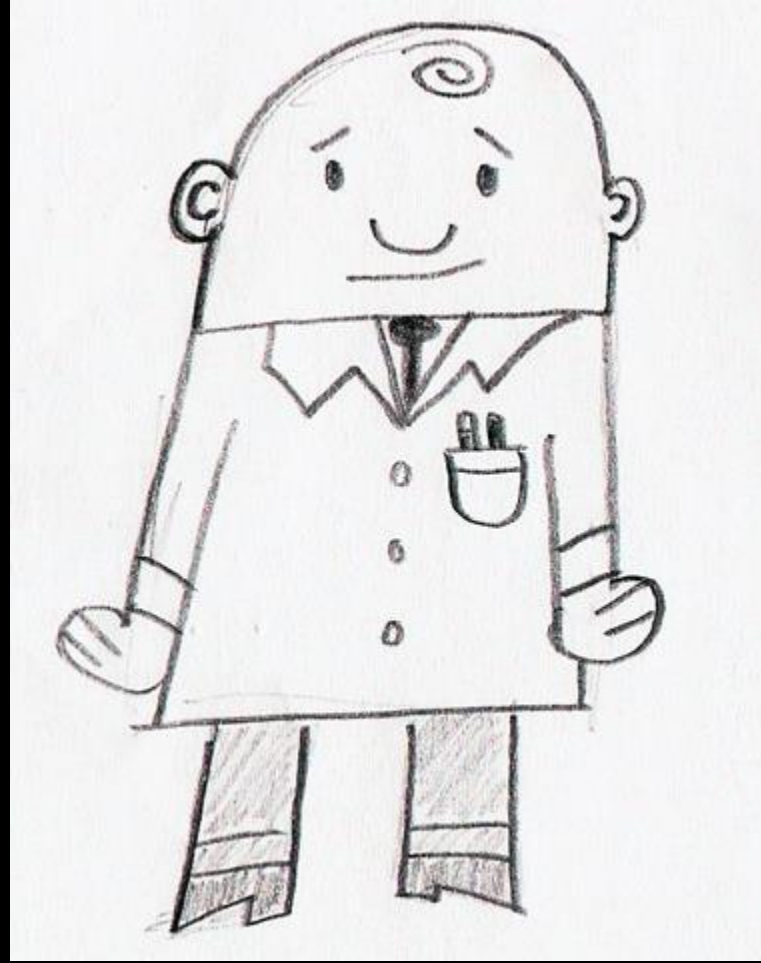
(THESAURUS.COM)

YOU DON'T HAVE TO
BE A GENIUS
TO FIND THE
HIDDEN POTENTIAL
DEEP IN YOUR MIND

-RAY DAVIES



A SCIENTIST?



THIS YEAR, THE U.S. WILL HAVE AN ESTIMATED

779,000

JOB OPENINGS REQUIRING STEM DEGREES

BUT THERE WILL BE AN ESTIMATED

555,200

ADVANCED DEGREE HOLDERS IN STEM FIELDS

CREATING A SHORTFALL OF
223,800 STEM WORKERS

IF WE DON'T FIGURE OUT WHY...

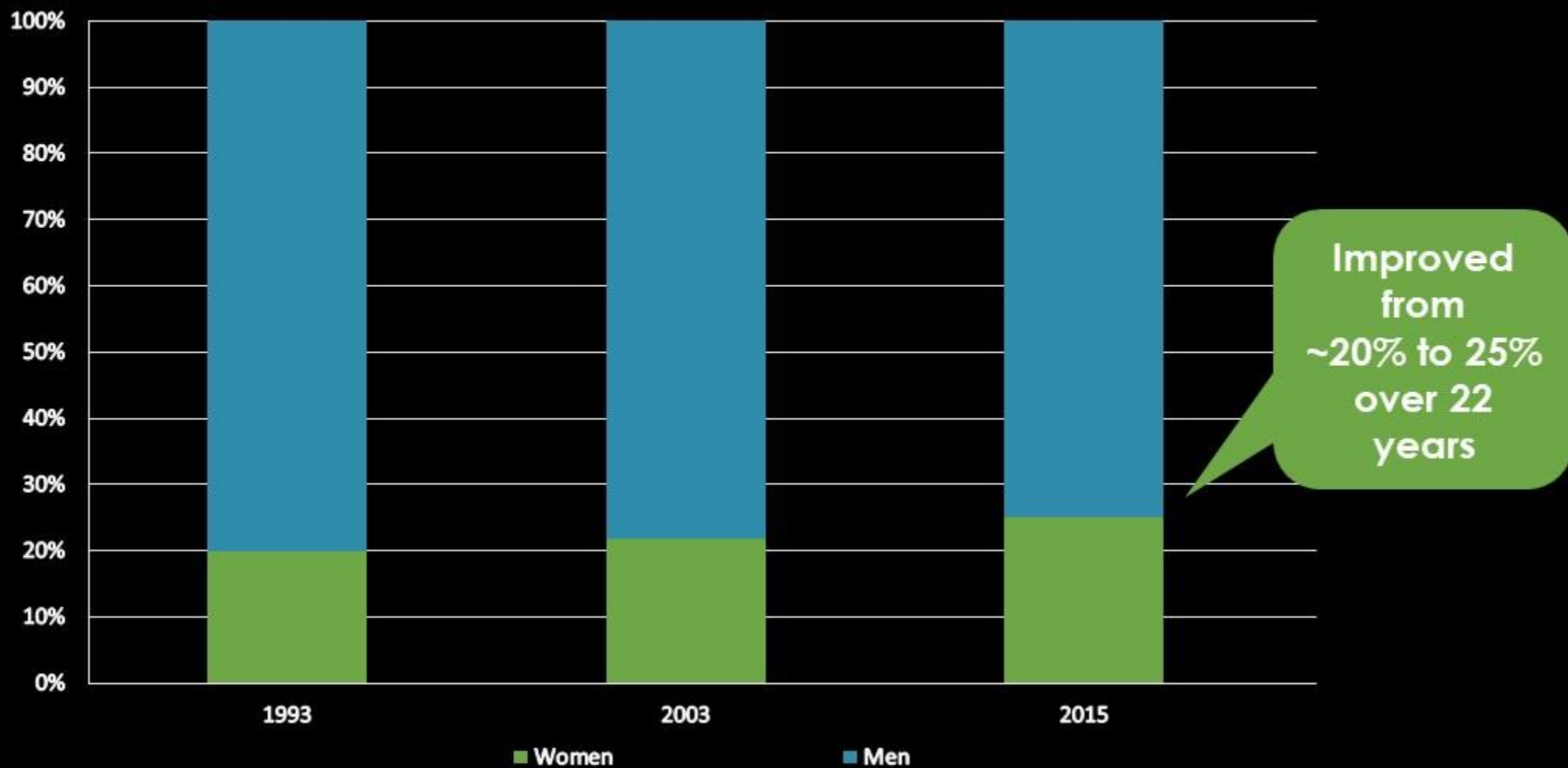
THE STEM WORKFORCE SHORTAGE
IS PROJECTED TO COST THE U.S.

\$95 TRILLION

OVER SEVERAL DECADES

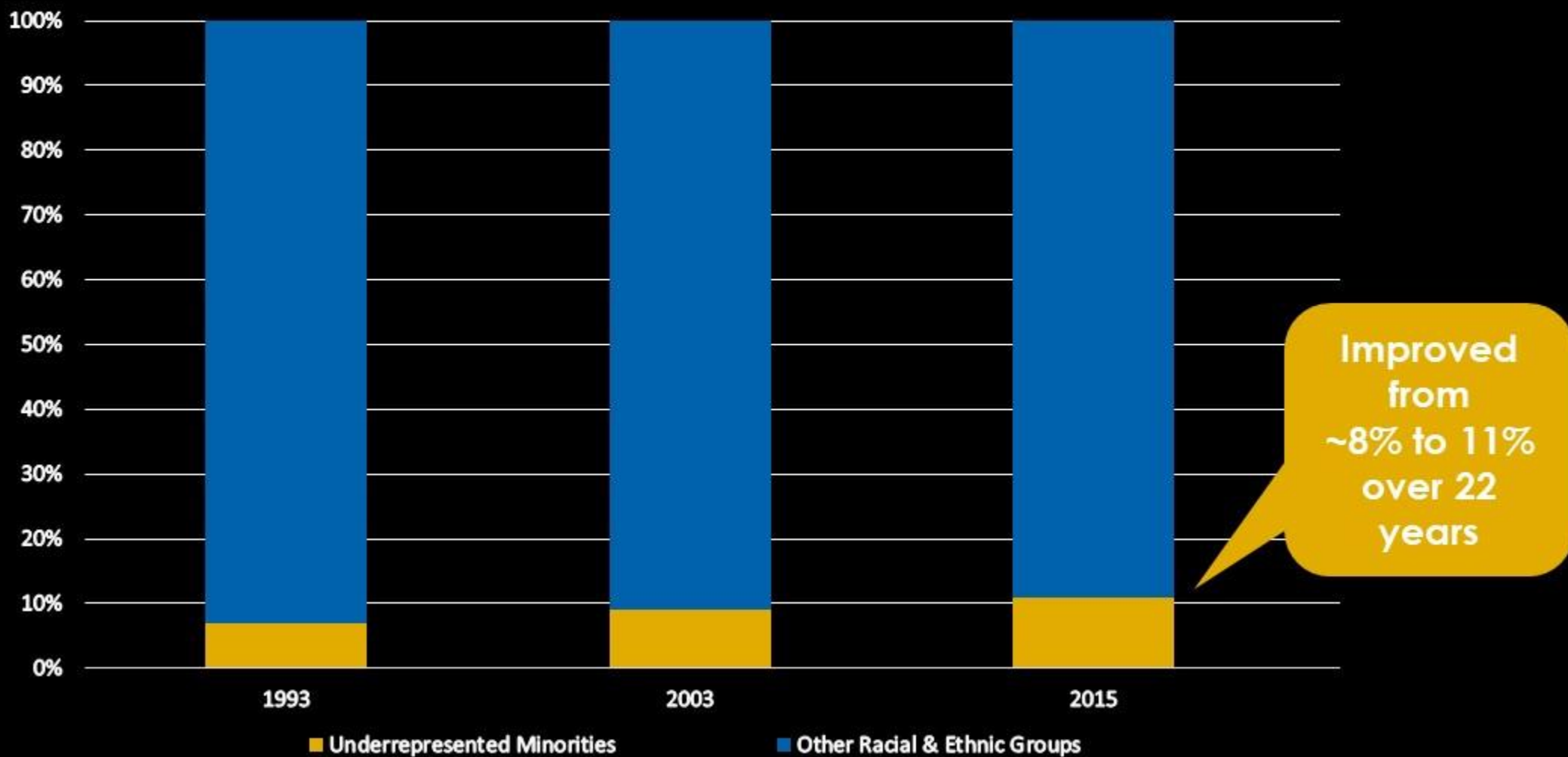
NATIONAL EMPLOYMENT IN STEM BY GENDER

NATIONAL SCIENCE FOUNDATION



NATIONAL EMPLOYMENT IN STEM BY ETHNICITY

NATIONAL SCIENCE FOUNDATION



EACH OF US HAS MUCH MORE
HIDDEN INSIDE US
THAN WE HAVE HAD
A CHANCE TO EXPLORE.



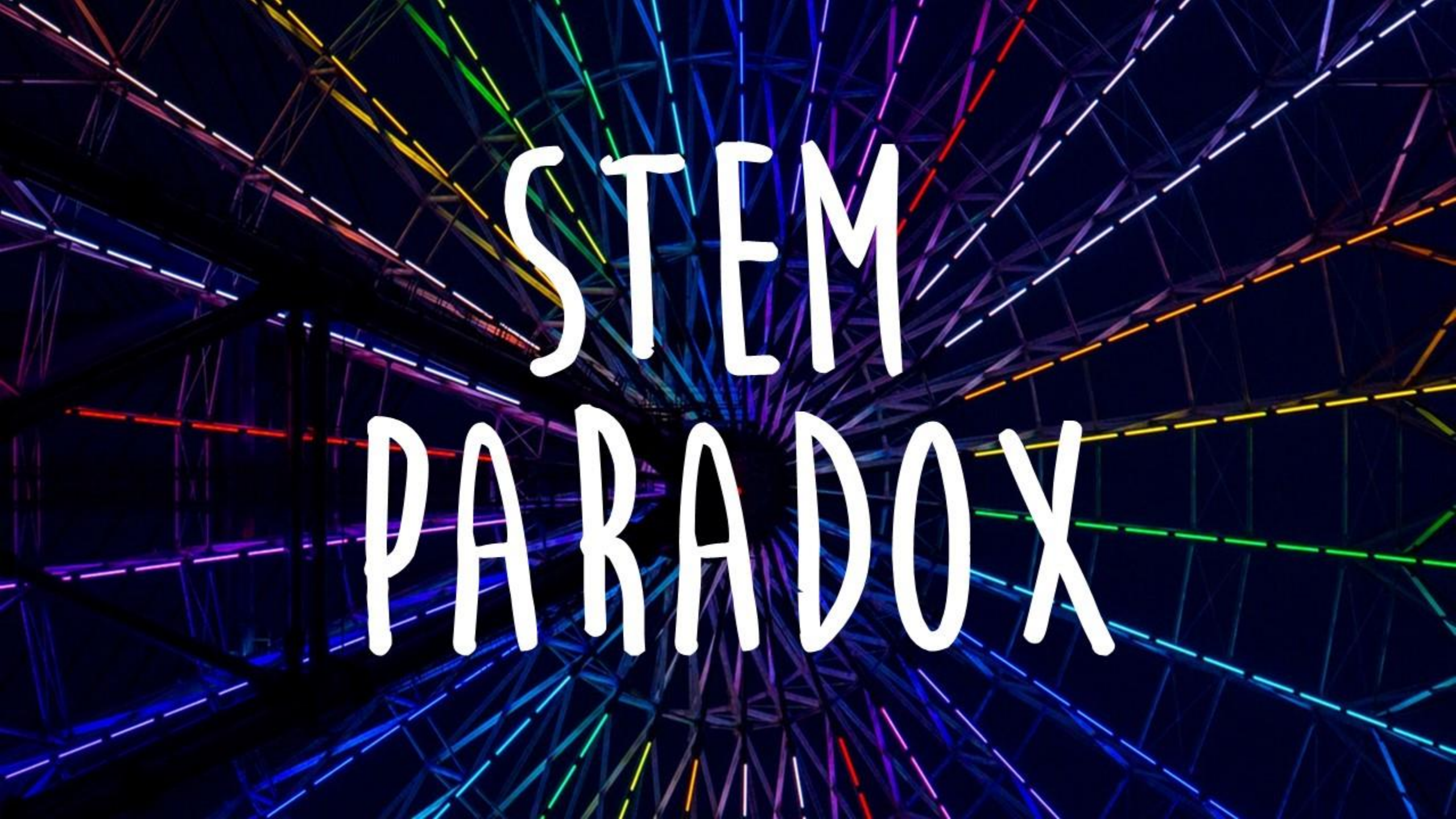
UNLESS WE CREATE AN ENVIRONMENT
THAT ENABLES US TO DISCOVER
THE LIMITS OF OUR POTENTIAL,
WE WILL NEVER KNOW
WHAT WE HAVE INSIDE OF US.

- MUHAMMAD YUNUS



DIGITAL NATIVES





STEM PARADOX

HARVARD UNIVERSITY STUDY

ACHIEVEMENT AT THE JOB IS:

80% SOFT SKILLS

20% HARD SKILLS

CARNEGIE MELLON FOUNDATION
& STANFORD RESEARCH INSTITUTE

LONG TERM JOB SUCCESS OF FORTUNE 500 CEOs:

75% WAS SOFT SKILLS

25% WAS HARD/TECHNICAL SKILLS

WALLSTREET JOURNAL

INTERVIEWED 900 EXECUTIVES

92% SOFT SKILLS AS IMPORTANT AS TECHNICAL

89% HARD TIME FINDING HIRES WITH SOFT SKILLS

CARNEGIE INSTITUTE OF TECHNOLOGY RESEARCH

FINANCIAL SUCCESS IS DUE TO:

85% SKILLS SUCH AS ABILITY TO COMMUNICATE,
NEGOTIATE & LEAD

15% TECHNICAL KNOWLEDGE

U.S. NEWS & WORLD REPORT

NY DAILY NEWS

BLOOMBERG BUSINESSWEEK

MEDIA PLANET



PROJECT OXYGEN (2013)

8 QUALITIES OF TOP EMPLOYEES:

#1-7 SOFT SKILLS

#8 EXPERTISE

The Google logo is displayed in its characteristic multi-colored font: blue 'G', red 'o', yellow 'o', blue 'g', green 'l', and red 'e'.

PROJECT ARISTOTLE (2017)

INVENTIVE & PRODUCTIVE TEAMS

SOFT SKILLS

WHAT ARE THEY?





SOFT SKILLS

A COMBINATION OF PEOPLE SKILLS,
SOCIAL SKILLS, COMMUNICATION SKILLS,
CHARACTER TRAITS, ATTITUDES.
CAREER ATTRIBUTES THAT ENABLE PEOPLE
TO NAVIGATE THEIR ENVIRONMENT,
WORK WELL WITH OTHERS, PERFORM WELL,
AND ACHIEVE THEIR GOALS WITH
COMPLEMENTING HARD SKILLS.

NATIONAL BUSINESS EDUCATION ASSOCIATION DEEMS SOFT SKILLS
AS CRITICAL FOR BEING INDUSTRIOUS IN TODAY'S WORKPLACE.



EXPERTS SAY SOFT SKILLS TRAINING
SHOULD BEGIN FOR A PERSON WHEN THEY ARE STUDENTS,
TO PERFORM EFFICIENTLY IN THEIR ACADEMIC ENVIRONMENT
AS WELL AS IN THEIR FUTURE WORKPLACE.

SOFT SKILLS

COMMUNICATION
LISTENING
COLLABORATION
ADAPTABILITY
PROBLEM SOLVING
INFLUENCE
CONFLICT RESOLUTION
INTERPERSONAL
LEADERSHIP
MOTIVATING
NON-VERBAL
HUMOR

RESILIENT
RESPECTFUL
SELF-AWARENESS
SUPERVISING
TAKE CONSTRUCTIVE CRITICISM
OUTSIDE THE BOX
TOLERANT OF CHANGE & UNCERTAINTY
WILLING TO LEARN
WRITING SKILLS
ENCOURAGING

INTERPERSONAL SKILLS

TEAMWORK

CONFLICT MANAGEMENT

DEVELOPING RAPPORT

DIPLOMACY

EMPATHY

FLEXIBILITY

INQUIRY

INSPIRING TRUST

MENTORING

PATIENCE

TOLERANCE

SENSITIVITY

USING "I" STATEMENTS

SHARING CREDIT

OBSERVATION

ENCOURAGING



IQ • INTELLIGENCE QUOTIENT
• ABILITY TO LEARN OR UNDERSTAND

EQ • EMOTIONAL QUOTIENT
• CAPACITY TO PERCEIVE, ASSESS AND MANAGE
THE EMOTIONS OF ONE'S SELF AND OF OTHERS

CQ • CREATIVE QUOTIENT
• CAPACITY TO BE CREATIVE AND ADVENTUROUS

COMMUNICATION



IS KEY

REFRACTION





TEACHER IMPACT

HISTORY WILL JUDGE
US BY THE DIFFERENCE
WE MAKE IN THE
EVERYDAY LIVES
OF CHILDREN.

- NELSON MANDELA



AWARENESS



DISCOVERY TOOLS

TEACHER'S OWN SOFT SKILLS
USING INCLUSIVE LANGUAGE
PROJECT BASED LEARNING
MODEL IMPERFECTION
WHY?



DISCOVERY TOOLS

ANTHROPOLOGY TO ENGAGE MINORITIES & GIRLS

CLEAR GROUND RULES FOR DISCUSSIONS

DQA (DUMB QUESTION AMNESTY)

INVISIBLE / VISIBLE NAME BADGE





LENS OF POSSIBILITY

HIDDEN IN PLAIN SIGHT



DISCOVERING STEM POTENTIAL