

The Importance of the Next Generation

Recruiting, Developing & Retaining The Engineers of Tomorrow

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The Rising Generation of Engineers

How do they differ from their professional predecessors?

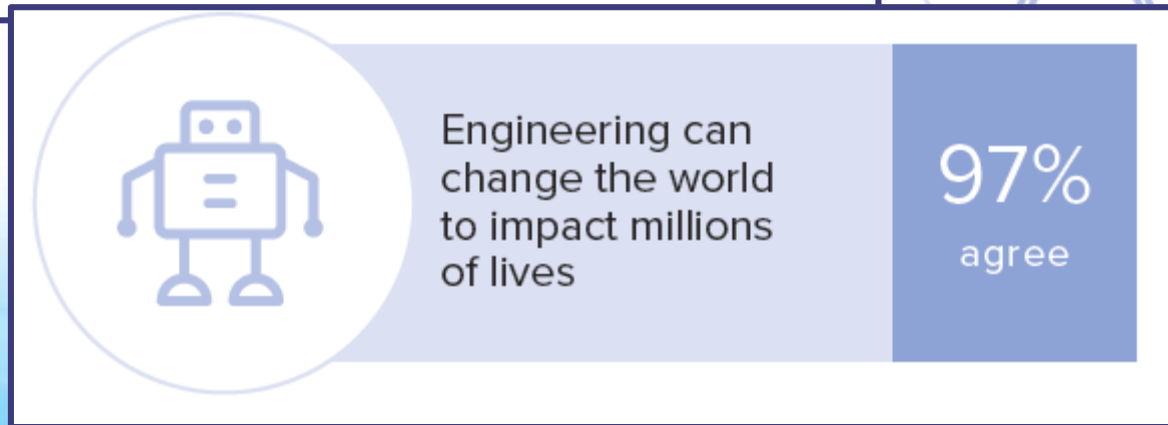
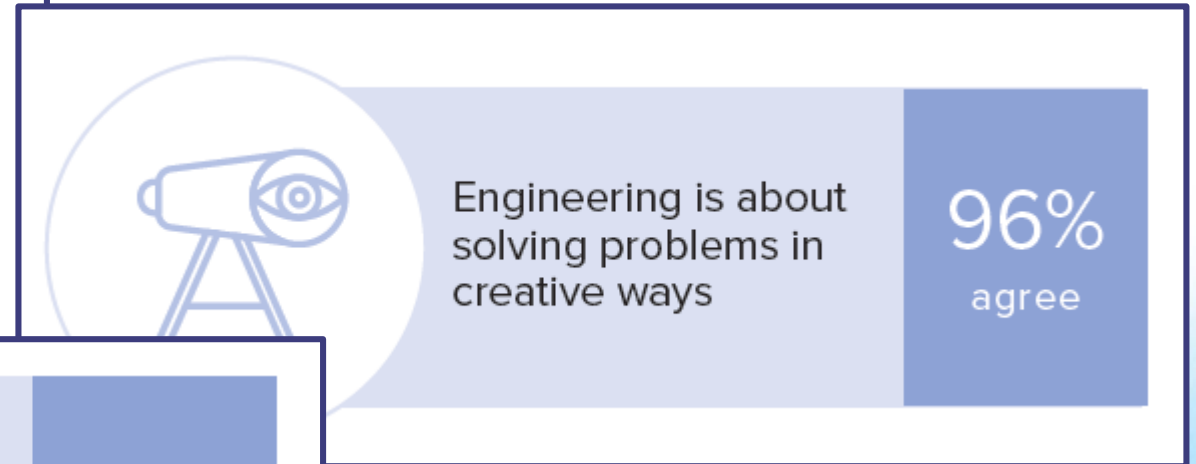
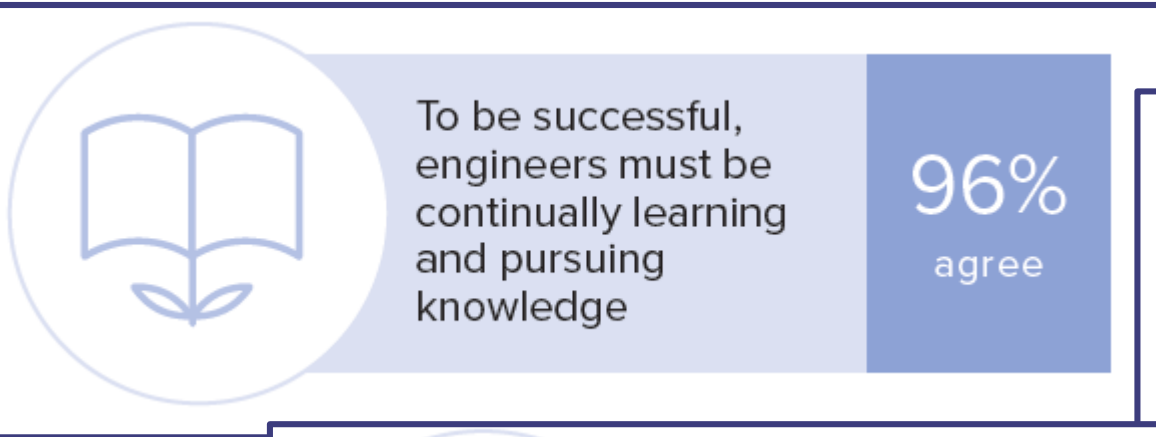


ASME/YouGov Study 2018

- Younger Engineers have new and different
 - Skill sets
 - Attitudes
 - Learning Styles
- **HOWEVER** - just like earlier generations of professionals:
Young Engineers are also “born problem solvers who are insatiably curious about the way things work”

Engineers are Lifelong Learners

...who aspire to make the world a better place

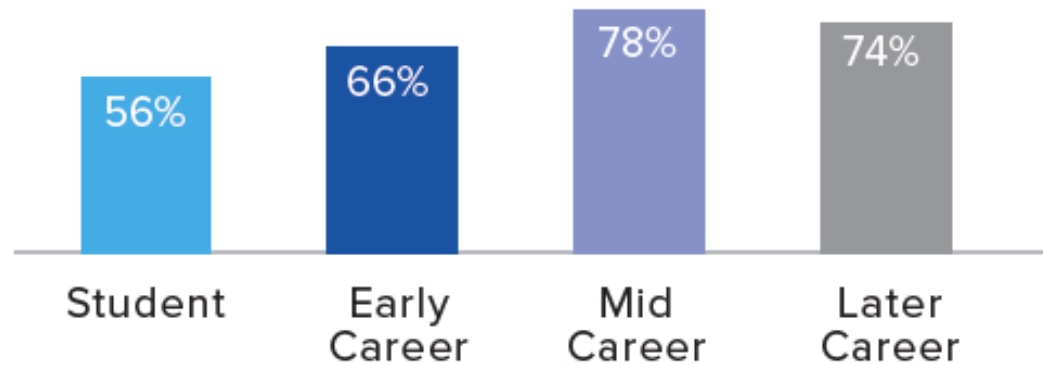


“Old School vs. New School”

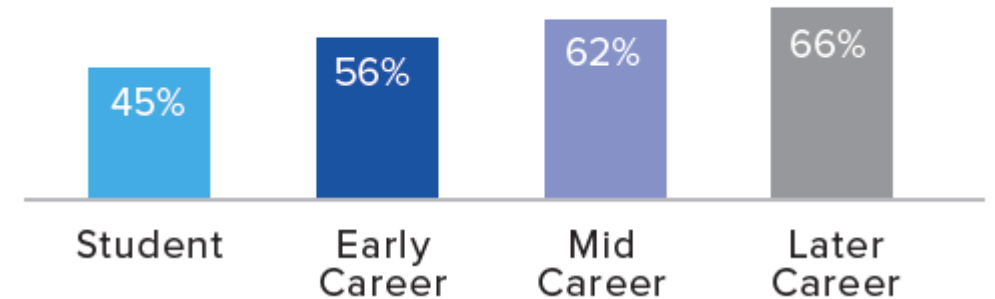
Differing Attitudes between Established & Rising Generations of Engineers

AGREEMENT WITH STATEMENTS

Today’s new engineers rely too much on software at expense of understanding traditional engineering theory



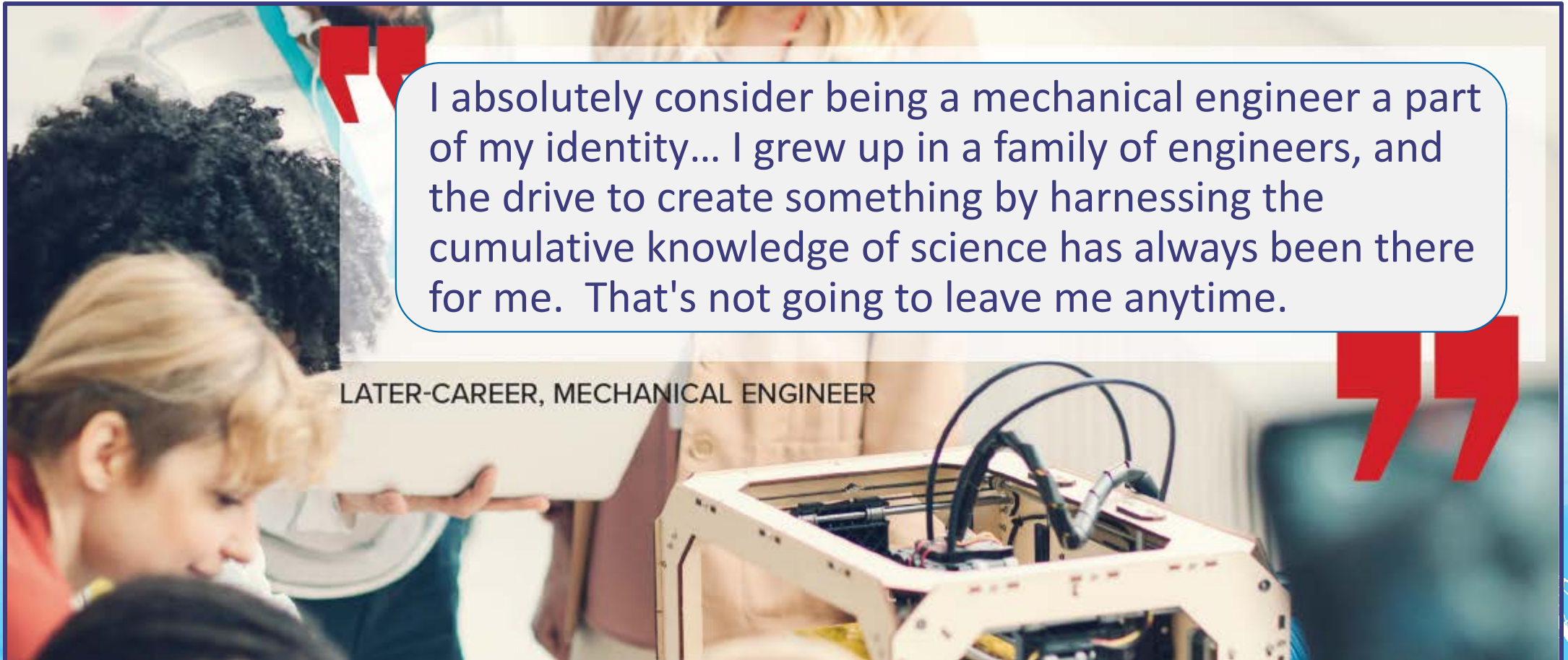
I am concerned that as a field we are losing our “engineering intuition”



Elders believe younger engineers too software-focused

Engineering: Not Just a Profession

It's Who They Feel Themselves To Be



I absolutely consider being a mechanical engineer a part of my identity... I grew up in a family of engineers, and the drive to create something by harnessing the cumulative knowledge of science has always been there for me. That's not going to leave me anytime.

LATER-CAREER, MECHANICAL ENGINEER

Increasing Knowledge

Engineers of all ages seek to do so continuously...

...but younger engineers are especially interested in knowledge that can help them to:

BUILD THEIR CAREERS 83%

vs.
59%

BE SEEN AS AN INNOVATOR 62%

vs.
53%

Learning Their Way

Young Engineers More Likely to Consume Content

RESOURCES USED AND ACTIVITIES ENGAGED WITH IN PAST YEAR

	Students	Early Career	Mid Career	Later Career
51% Journals/Conference Proceedings/Books	48%	50%	53%	52%
51% Conferences	44%	47%	55%	59%
50% Codes & Standards	22%	51%	67%	55%
46% Training	37%	49%	55%	38%
29% Certifications & Licensures	17%	28%	39%	29%

FORMS OF PROFESSIONAL DEVELOPMENT INTERESTED IN WITHIN THE NEXT 24 MONTHS

	Students	Early Career	Mid Career	Later Career
92% Reading professional/scientific journals, industry magazines, blogs, etc.	87%	92%	97%	91%
86% In-person seminar/classes	91%	88%	89%	73%
85% Videos of lectures, processes and practices	89%	90%	88%	73%
82% Interactive online courses	78%	89%	87%	70%
72% MOOCs (Massive Open Online Course)	69%	85%	75%	53%

via Video, Online/Interactive & MOOCs

Staying Engaged

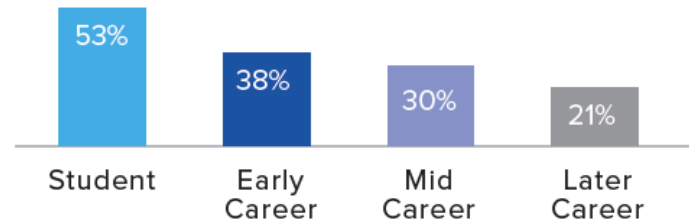
...through Content Consumption & Professional Development



MOST COMMON STEPS TAKEN WHEN NEEDING TO EXPAND ENGINEERING KNOWLEDGE



PERCENTAGE WHO USE AN ACADEMIC SEARCH ENGINE OR SHARING SITE TO EXPAND ENGINEERING KNOWLEDGE



I try to take a course every semester in something new just so I can keep up. And that might not be a formal course, but I'm watching something online, I'm engaged in something [I receive] by mail, [etc.].

EARLY-CAREER ENGINEER, CALIFORNIA

The ASME Mission

**“To serve diverse global communities
by advancing, disseminating and applying
engineering knowledge
for improving the quality of life —
and communicating
the excitement of engineering.”**



What is ASME Doing

To Get – and Keep – Connecting Young Engineers



ASME **E-Fests**TM
Brought to you by ASME Engineering FestivalsTM.

E-FEST NORTH
April 5th - 7th, 2019
Michigan State University, Michigan, USA

[Register](#)



E-FEST WEST

An ASME EFX will take your engineering skills to the next level



E-FEST SOUTH AMERICA
August 8th - 10th, 2019
Pontificia Universidad Católica del Perú
Lima, Peru

[Register](#)

E-FEST ASIA PACIFIC

EVENTS

ASME EFX NYU: MakerHack

SPECIAL EVENT, WORKSHOP

OPEN TO TH



Thank You!



Questions?