

WOMEN'S WORK: WOMEN TECH LEADERS ON THE GENDER GAP

Leading Question

Whats it like to be a woman working in tech today?

Watch the video

<https://youtu.be/aWkg1WbYhjY>

While bias and harassment have persisted, the number of women working in computer science and STEM (science, technology, engineering, and math) fields was not always as low as it is today. Looking back to the past can provide context for understanding the present and insights for changing the future.

1. What are the speaker's perspectives in these clips? Are they similar or different? In what areas? Why or why not?
2. Whose perspectives are missing from this video? Why do you think that is?
3. Have you witnessed or experienced sexism in your career? If so, how have you handled it? What advice might you give to a young woman just starting out in your field?
4. Do you think conditions are better or worse for women in tech today compared to 1985? 1995? 2005? Why?

5. The upward trend of women pursuing computer science (CS) majors in the 1970s and '80s changed to a downward trend in the 1990s. What do you think may have led to this reversal?

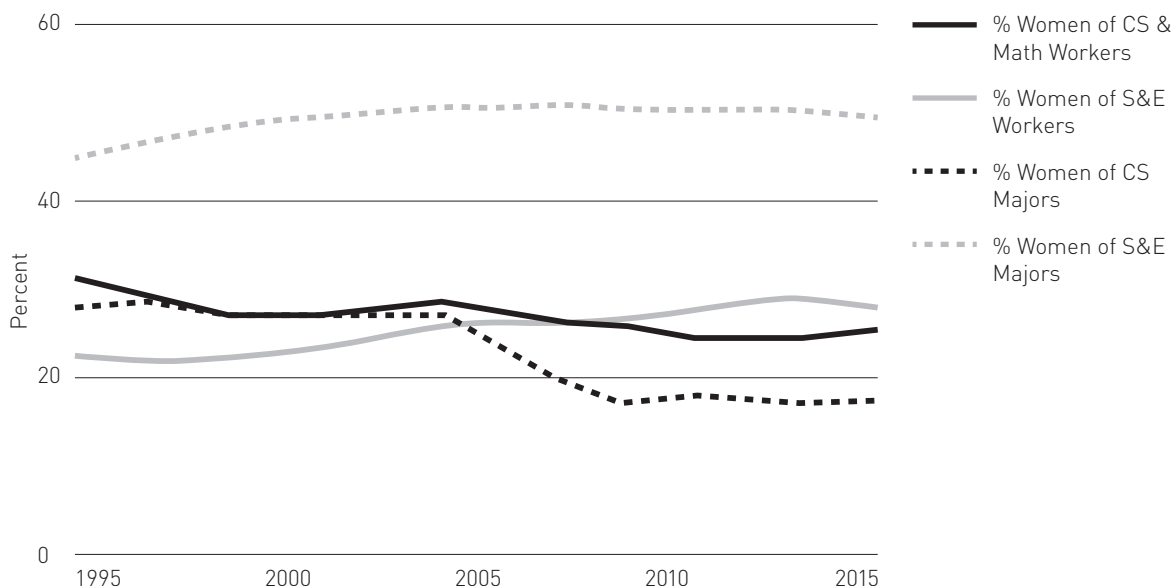
6. Why do you think that women make up 50% of science and engineering majors in higher education but have only 25% of those jobs in the workforce?

7. Can you identify particular words, phrases, or stories that you have heard and continue to hear that discourage inclusion and equality? Why do you think they persist?

START SOMETHING

What specific actions can you take to promote greater inclusion and equality in your own career and personal life?

Women in the Workforce



About

This discussion guide is part of the series Women's Work: Perspectives on Gender in Tech, nine videos produced by the Exponential Center at the Computer History Museum. The center is dedicated to capturing the legacy and advancing the future of entrepreneurship and innovation in Silicon Valley and around the world.

BIOGRAPHIES

Helen Bradley

Helen Bradley was the Senior VP of Software Systems at Sun from 1990-1994 and then the Senior VP of Engineering at NetApp from 1995 to 1999. When NetApp went public in 1995, it was made up of 100 people and has since grown to over 10,000 employees. Bradley was essential in building the engineering team at a time when the company was doubling in size every year. Bradley earned a bachelor's degree in math from MIT and a master's in Computer Science from the Georgia Institute of Technology.

Diane Greene

Diane Greene is the senior vice president of Google's cloud business and sits on the boards of Alphabet, Intuit, and MIT. She took on this role in 2015, after Bebo, the cloud developer platform she cofounded, was acquired by Google for \$383 million. After receiving degrees in mechanical engineering, naval architecture, and computer science from University of Vermont, MIT, and UC Berkeley, respectively, Greene held engineering and management positions for SGI, Tandem, and Sybase. In 1998, she cofounded and served as CEO of virtualization giant VMware. Over the course of 10 years, she took the company public and to a \$2 billion run rate. In 2016, Dell Technologies acquired VMware as part of its \$67 billion merger with EMC, the largest technology deal in history.

Mary Lou Jepsen

Mary Lou Jepsen's company Openwater is developing technology to produce high-resolution images equal to those of an MRI. Previously, she led advanced consumer electronics and virtual reality at Facebook and Oculus and had a similar role at Google and Google X. Jepsen cofounded One Laptop per Child and was the lead inventor of the \$100 laptop. With a PhD in optical physics and a ScB in electrical engineering from Brown University as well as a ScM in computational holography from the MIT Media Lab, Jepsen is an inventor on over 100 published or issued patents.

Daphne Koller

As chief computing officer at Calico, Daphne Koller explores human aging and diseases associated with age. Prior to that, Koller was a computer science research professor at Stanford University for 18 years, specializing in machine learning and probabilistic modeling. While on a leave of absence from Stanford, she co-founded Coursera, a company revolutionizing global education through universal online access with 29 million users. Koller has received a number of prestigious awards, including the Presidential Early Career Award for Scientists and Engineers and a MacArthur Foundation Fellowship. Koller earned her BS in math and computer science and an MS in computer science from the Hebrew University of Jerusalem and a PhD in computer science from Stanford University.

Heidi Roizen

Heidi Roizen graduated from Stanford University with what she calls the "coveted creative writing major" before getting her MBA, also at Stanford. From 1983 to 1996 she was the CEO of the company T/Maker which she cofounded with her brother. After leaving T/Maker, Roizen worked as Vice President of Worldwide Developer Relations for Apple before becoming a venture capitalist with Draper, Fisher, Jurvetson (DFJ) where she is operating partner today.

Bozoma Saint John

Bozoma Saint John, chief brand officer at Uber, is a trailblazing marketing and advertising executive. Before joining Uber, she was the head of Global Consumer Marketing for Apple Music and iTunes, introducing the new Apple Music interface in Apple's keynote at the Worldwide Developers Conference. Before Apple, Saint John headed the Music and Entertainment Marketing Group at Pepsi-Cola North America, served as vice president of marketing for Ashley Stewart, and managed accounts at advertising agencies Arnold Worldwide and Spike Lee's SpikeDDB. Saint John received her bachelor's degree in English and African American Studies from Wesleyan University, at which she currently sits on the President's Advisory Council.

BIOGRAPHIES (CONTINUED)

Sheryl Sandberg

Sheryl Sandberg is the chief operating officer of Facebook and the first woman to serve on its board. She is also the founder of Leanin.org. Previously, Sandberg was vice president of global online sales and operations at Google and was involved in launching Google's philanthropic arm, Google.org. Before Google, Sandberg served as chief of staff for United States Secretary of the Treasury Lawrence Summers. In 2012, she was named in the Time 100 as one of the most influential people in the world. She has both a BA in economics and an MBA from Harvard.

Debra Sterling

Stanford engineering graduate Debra Sterling is on a mission to disrupt the "pink aisle" in toy stores globally. Her award-winning children's multimedia company, GoldieBlox, challenges gender stereotypes with the world's first girl engineer character and construction toys for girls. Sterling was recently added to Fortune magazine's 40 Under 40 list and has received a number of other awards.

Susan Wojcicki

Susan Wojcicki, Google employee number 16 and the only woman CEO under the Alphabet umbrella, is the head of YouTube, the world's most popular digital video platform. Instrumental in Google's 2006 acquisition of YouTube, Wojcicki oversees content and business operations, engineering, and product development. She has a BA from Harvard; a Master's from the University of California, Santa Cruz; and an MBA from the UCLA Anderson School of Management.

Michelle Zatlyn

Michelle Zatlyn was pursuing her MBA at Harvard Business School when she began talking to classmates Matthew Prince and Lee Holloway about ideas to make the Internet safer to use. In 2009, they moved to Silicon Valley and secured Series A funding for their new startup from Ray Rothrock of Venrock and Carl Ledbetter from Pelion Venture Partners. Zatlyn's company, CloudFlare, launched at TechCrunch 2010 and today supports over six million web pages.

RESOURCES

Watch all nine videos of Women's Work:

Perspectives on Gender in Tech

<http://www.computerhistory.org/exponential/women-swork/>

Oral history interview of Helen Bradley

<https://youtu.be/hVY5dDyfDNc>

CHM Revolutionaries: Lean In- Women, Work, and the Will to Lead with Author Sheryl Sandberg

<https://www.youtube.com/watch?v=4WWumJF1dEY&t=>

Building Ships, Companies, and the Cloud (Diane Greene)

<https://www.youtube.com/watch?v=hYZpv5oaHq4&t=>

Pioneers of the Possible: Women Entrepreneurs on Innovation and Impact (Heidi Roizen & Michelle Zatlyn)

<https://www.youtube.com/watch?v=4xE2rRBb9FI&t=>

From Screen Queen to Imaging Innovator (Mary Lou Jepsen)

https://www.youtube.com/watch?v=ExV0fRCYOY&index=21&list=PLQsxaNhYv8dZMhpT8-934UPMdto7G2_W

Wonder Women: Entrepreneurship, Education, and New Frontiers (Daphne Koller & Debra Sterling)

https://www.youtube.com/watch?v=UC99u7NJh14&index=3&list=PLQsxaNhYv8dZMhpT8-934UPMdto7G2_W

Thinking Big with YouTube CEO Susan Wojcicki & Computer Pioneer Ada Lovelace

<https://youtu.be/FGExa9BCqkQ>

Inside the Transformation: Driving Change (Bozoma Saint John)

<https://www.youtube.com/watch?v=U4m1xSnQu64>

National Science Board, Science & Engineering Indicators 2018: Women in S&E Occupations, 1993-2015

<https://www.nsf.gov/statistics/2018/nsb20181/figures/fig03-27>

National Science Foundation, Science & Engineering Degrees, 1966-2012

<https://www.nsf.gov/statistics/2015/nsf15326/#>

National Science Board, Science & Engineering Indicators 2018: Earned bachelor's degrees, by sex and field: 2000-15

<https://www.nsf.gov/statistics/2018/nsb20181/tables/at02-21>