



NEBRASKA WOMEN IN STEM

LISTEN THEN ACT

EXECUTIVE SUMMARY

A large and vibrant science, technology, engineering, and math (STEM) workforce has a range of benefits for the economic and social well-being of communities; yet, women continue to be underrepresented in these occupations. Nationally, in 2017, women accounted for over half of the college-educated workforce but made up only 29% of those employed in science and engineering occupations, while being overrepresented in STEM-related fields like healthcare. Nebraska's STEM workforce is reflective of national trends. In 2019, about 27% of Nebraska women 25 years or older worked in a core STEM occupation, which we can estimate to be about 15,300 women (U.S. Census Bureau, 2019). Women of color are even less represented.

In partnership with the Center for Public Affairs Research (CPAR) at the University of Nebraska at Omaha (UNO), Bio Nebraska and the Nebraska Coalition for Lifesaving Cures sponsored an extensive qualitative research initiative to better understand the challenges and opportunities for women working in STEM occupations in Nebraska. In order to hear the lived experiences of women working in STEM, researchers at UNO CPAR conducted 48 in-depth, semi-structured interviews with women working in STEM occupations and residing in Nebraska.

KEY FINDINGS

Through interviews, six key findings emerged as central to the experiences of women working in STEM in Nebraska, including:

-  INTEREST AND MOTIVATION FOR PURSUING A CAREER IN STEM
"I was brought up to know that if a male counterpart can do it, I can do it as well." (Interviewee 15)
-  HOW WOMEN PERSEVERE IN STEM CAREERS
"I will advocate for myself and stand up for myself, and I see that's not always happening with women in the workplace..." (Interviewee 20)
-  WORKPLACE POWER DYNAMICS IN THE STEM ENVIRONMENT
"...I could say something in a room and certain personalities will argue with me and the guy sitting right next to me could say the exact same thing that I said and those same men would be like, 'Oh yeah that makes total sense,' because a guy had said it..." (Interviewee 46)



BARRIERS WOMEN FACE IN CAREER PROMOTION AND ADVANCEMENT

"I didn't know that we are allowed to do that [negotiate]..." (Interviewee 35)

NAVIGATING WORK-LIFE BALANCE

"...there's a couple things that are obviously different for women. You're the physical caretaker for newborns ... even as kids get older there's certain things they want mom for and not dad." (Interviewee 17)

UNIQUE NEBRASKA INFLUENCES ON THE STEM CULTURE AND WORKFORCE

"I would like to say that I wasn't discriminated against. I would like to say that I wasn't held back...but that wouldn't be true...I still see things happen to women and minorities in the STEM fields that aren't terribly encouraging...we need to figure that out in Nebraska." (Interviewee 11)

RECOMMENDATIONS

Researchers specifically asked women to share ideas and recommendations for how to improve the experiences of current and future women in STEM. Interviewees' recommendations are shared below.

GREATER AWARENESS OF BARRIERS FOR WOMEN IN STEM

We need our male allies to be in those rooms and to hear this.

Interviewee 2

INCREASING ACCESS TO PROFESSIONAL NETWORKS

I think one way to promote more grit in women is by giving them networks.

Interviewee 17

INVESTING IN SCHOOLS AND TEACHERS TO BUILD THE STEM PIPELINE

In Nebraska...we really need to start working with women and minorities to let them know that these are opportunities that exist out there and that these are good jobs.

Interviewee 11

GREATER FLEXIBILITY IN THE WORKPLACE

...the lack of good childcare options and affordable childcare options here is really challenging.

Interviewee 1

PROFESSIONAL DEVELOPMENT OPPORTUNITIES

Training for women is really important... You need to speak up...and make sure you're being treated appropriately...

Interviewee 12

ADVANCING SCIENCE LITERACY

...we need to repackage what science policy training is and science literacy and communication into some sort of science advocacy professional development training.

Interviewee 21

