

Women & STEM: What Utahns Need to Know

UTAH WOMEN & LEADERSHIP Project

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RESEARCH SUMMARY

Science, technology, engineering, and mathematics (STEM) fields are increasingly important to Utah's economy, workforce, and future innovation. As STEM-related industries grow, expanding opportunities for girls and women to participate and lead is increasingly important. While progress has been made, gaps remain in education, workforce participation, workplace culture, and advancement. Research shows that barriers often begin early and continue through higher education and into careers. Addressing these challenges can help Utah fully leverage the talents and potential of all its residents.

INDUSTRY GROWTH

STEM fields are among Utah's fastest-growing industries and will continue to play a critical role in the state's economic future. STEM occupations are projected to grow by 31.7% between 2022 and 2032, roughly three times the national rate, while Utah's technology sector continues to fuel innovation and economic growth through hubs such as Silicon Slopes. STEM careers also offer substantial economic opportunities, with average salaries in Utah exceeding \$117,000 statewide, and software and IT positions averaging more than \$126,000 annually. As demand for STEM talent continues to rise, strengthening participation among women and girls will be essential to meeting Utah's future workforce needs.

PERSISTENT GAPS

Despite recent gains, women remain underrepresented in Utah's STEM workforce. In 2023, women made up 45% of the state's workforce but held only 23.9% of STEM occupations. Although this is an improvement from 21% in 2019, Utah still trails the national average of 26.9%. These gaps highlight the need to strengthen recruitment, retention, and advancement opportunities for women in STEM.

DEFINITION

"STEM is an acronym for the disciplines of science, technology, engineering and mathematics taught and applied either in a traditional and discipline-specific manner or through a multi-disciplinary, interconnected and integrative approach. Both approaches are outcome-focused and aim to solve real-world challenges."

*National Centre for
Vocational Education Research*

EARLY INFLUENCES

Research suggests that STEM disparities begin long before career decisions are made. National studies show that stereotypes about girls' interest and abilities in STEM fields can emerge as early as age six, shaping perceptions and opportunities from a young age. Confidence is also a key factor. Among Generation Z, 85% of men reported being somewhat or very interested in STEM compared to 63% of women. Women were also more likely than men to avoid STEM careers because they did not believe they would be successful in them (57% versus 38%). Addressing stereotypes, confidence gaps, and perceptions during childhood and adolescence is essential to expanding participation in STEM.

WOMEN IN STEM:

- drive Utah's future workplace.
- remain underrepresented.
- face early barriers and stereotypes.
- benefit from support and mentorship.

WORKPLACE BARRIERS

Women in STEM continue to face barriers to entering, remaining in, and advancing within STEM careers. UWLP research shows that women experience gender discrimination, sexual harassment, overlooked contributions, and higher performance expectations than their male colleagues. Many also report feeling undervalued or excluded in male-dominated environments, while work and family pressures can further complicate career progression. Together, these challenges contribute to lower participation and higher attrition among women in STEM fields.

Statewide perception data reinforces these concerns. Only 11.7% of Utahns strongly agreed that STEM fields are welcoming to women and girls, while 45.3% either disagreed or were neutral. Additionally, 38.9% either disagreed or were uncertain that women can successfully advance their careers in Utah's STEM industries. Women report that sexism, cultural bias, and gender-based expectations remain barriers to entering, advancing, and thriving in STEM careers. Increasing women's representation in STEM will require expanding opportunities and fostering workplace cultures where women feel welcomed, valued, and able to advance.



EDUCATION BARRIERS

Gender disparities in STEM remain visible throughout higher education. Nationally, men persist in STEM majors at a rate of 65%, compared to 48% for women. In Utah, 42.1% of men with bachelor’s degrees or higher earned science or engineering degrees, compared with 24.1% of women. However, younger women are making gains. Among women ages 25–39, 27.3% earned science or engineering degrees, compared with 16.6% of women ages 65 and older. While progress is evident, women continue to leave STEM educational pathways at higher rates than men.

BUILDING STEM PATHWAYS

Early support can shape future STEM pathways. STEM careers offer strong opportunities, but interest and confidence often develop long before career decisions are made. Expanding access to STEM learning experiences, mentorship, role models, internships, and career exploration opportunities can help more girls build confidence, develop interest, and envision themselves pursuing STEM education and careers.

Inclusive cultures can help women thrive in STEM. Encouraging girls to enter STEM is only part of the solution. Women are more likely to succeed when they have access to supportive workplaces, mentorship, advancement opportunities, and environments where they feel valued and respected. Addressing barriers related to bias, discrimination, and belonging can help more women remain in STEM fields and advance into leadership roles.

Investing in women strengthens Utah’s future. Families, educators, employers, policy-makers, and community organizations all have a role to play in expanding opportunities for women in STEM. Supporting girls and women as they pursue, persist, and advance in STEM careers can strengthen Utah’s talent pipeline, foster innovation, and improve outcomes for individuals, families, and communities.

OPPORTUNITIES

Exposure, encouragement, and meaningful STEM experiences can help more Utah girls envision STEM careers. Mentorship, hands-on learning, internships, STEM clubs, camps, and connections with women in STEM can build confidence, expand career awareness, and foster belonging while helping increase women’s participation in Utah’s STEM workforce.

SUPPORTING UTAH WOMEN IN STEM

You can help increase opportunities for Utah women in STEM by encouraging exposure to STEM experiences, supporting mentorship and career exploration, and helping create inclusive cultures where women can thrive. See below for calls to action and resources that can support women and girls pursuing STEM education and careers.

Data Sources: [UWLP Snapshot No. 58 \(2025\)](#), [UWLP White Paper No. 21 \(2026\)](#)

WHAT YOU CAN DO

- **Learn More:** Explore resources in the UWLP STEM Fields [Resource Kit](#).
- **Review:** Goals, perceptions, and community partners on the STEM Fields Spoke [webpage](#).
- **Get Involved:** Connect to grassroots movement happening within [A Bolder Way Forward](#).
- **Take Action:** Help move the needle and discover additional [Calls to Action](#) for groups, organizations and communities.



Engage girls and young women in conversations about the wide range of STEM career opportunities available to them (see the [resource kit](#) for ideas).



Encourage Utah women currently employed in STEM fields to pursue advancement opportunities within their organizations.



Highlight and recognize women you know working in STEM and other nontraditional female fields on social media.

Learn more at www.utwomen.org

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