

Gender-Specific Barriers to Educational Attainment for Utah Secondary School Students

Despite being ranked as the second-best state for education in the US,¹ Utah shows a clear gender disparity in educational attainment. Utah is the only state in which more women (22.7%) than men (22.4%) have a high school diploma (or equivalent) as their *highest* education level.²

At the undergraduate level, there are some positive signs, with more Utah women earning an associate’s (11.0%) or bachelor’s (24.4%) degree compared to Utah men (8.9% and 23.4%, respectively),³ which aligns with national trends. However, Utah women (25.6%) are ranked second in the US for starting college, *but not finishing*, compared to Utah men (23.5%; 7th). The difference between percentage of women and men completing some college in Utah is the largest gap in the US. More Utah women than men leave college without graduating.

Furthermore, the most glaring discrepancy remains in graduate or professional degree attainment, where 14.5% of Utah men have such degrees, surpassing the national average of 12.9% and ranking 10th in the US.⁴ In contrast, only 10.0% of Utah women hold these degrees, far below the national average of 13.9%, placing them 46th in the US. Utah has the worst male–female educational attainment gap in the US, making it one of only four states (with Florida, Virginia, and Idaho) in which men outnumber women in graduate or professional degree completion.

In short, relative to Utah men, Utah women appear to be more likely either to stop their educational journey after high school or to leave college uncompleted, and they are considerably less likely to earn advanced degrees. Lack of educational attainment can have lifelong detrimental effects (e.g., lower earning potential).⁵ Thus, it is critical to understand gender-related educational disparities and to address them through tailored guidance and support systems to ensure all Utah students have an equal chance to thrive.

To have the greatest influence, it is important to take proactive steps to empower Utah’s students early. To implement potential solutions, stakeholders must understand the issues Utah students confront and the barriers they face when considering furthering their education. Since 2022, Envision Utah has collected annual survey responses from secondary students. This Research & Policy Brief updates our understanding since the 2022 iteration of this survey,⁶ focusing on the motivations and unique barriers Utah’s female secondary school students face when considering and implementing their higher education plans.

Survey Background

From March to July 2023, Envision Utah conducted an extensive survey, which covered several areas of interest. However, this brief focuses only on questions related to students’ perceptions of higher education (e.g., plans, influences, motivations, barriers, and solutions).

Responses were collected from 1,913 eligible students (i.e., at least 13 years old, in high school or recently graduated, living/studying in Utah, answered at least one of our non-demographic questions). Note that because of the voluntary nature of the items, participants did not answer all questions.

In addition, to remain consistent with the previous Research & Policy Brief and to allow more accurate comparisons, the final sample was restricted to students who explicitly identified as male or female. Thus, analyses were performed using 1,828 responses (see Table 1 for demographics). However, the 85 nonbinary and non-reporting students, whose school experiences are equally as important, are discussed in a subsection of this brief.

Table 1: Participant Demographics

Category	Female	Male	Total	% Female
Grade				
8th	44	37	81	54.3%
9th	119	63	182	65.4%
10th	220	143	363	60.6%
11th	250	127	377	66.3%
12th	398	217	615	64.7%
Other	7	1	8	87.5%
Just Graduated	148	54	202	73.3%
Ethnicity				
White	881	501	1382	63.7%
Black	25	6	31	80.6%
Latinx/a/o	108	40	148	73.0%
Pacific/Hawaiian	6	2	8	75.0%
East Asian	21	14	35	60.0%
South Asian/Indian	13	5	18	72.2%
Native American	6	6	12	50.0%
Other	7	4	11	63.6%
Multiple Indicated	117	64	181	67.2%
Not Indicated	2	0	2	100.0%
Total	1187	642	1828	64.9%

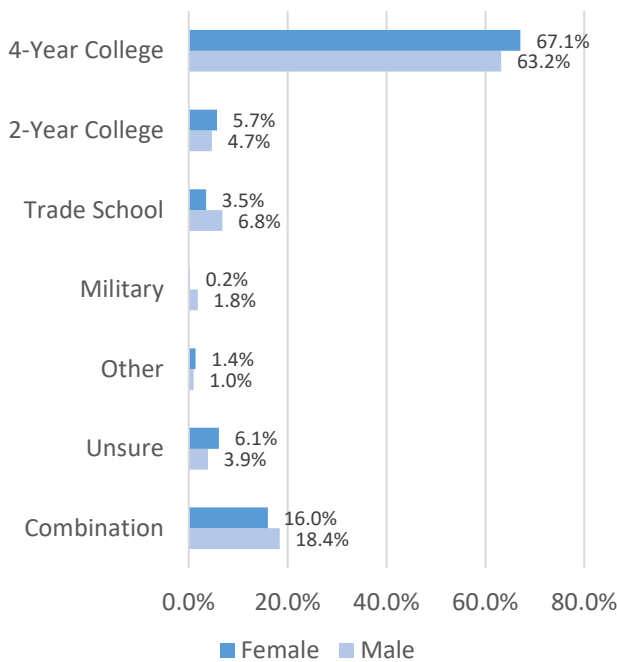
Postsecondary Plans

Consistent with the national trend⁷ and the previous iteration of this survey, Utah female secondary school students remain

ambitious about their plans for educational attainment. As illustrated in Figure 1, more female students plan to attend both two-year and four-year colleges than male students do. Most of those who also selected “other” mentioned plans that involved gaining multiple degrees in various fields (e.g., medical, veterinary, culinary). More female students indicated they were unsure what they would do after high school. More male students indicated they planned to enlist in the military; they also tended to select going to trade school or entering the workforce more than female students did.

Furthermore, based on responses to a question about when the students planned to pursue more education or training, 69.0% of female students indicated they wanted to start right away or within the next year, compared to 42.2% of male students. Additionally, 42.2% of male students were more likely to delay continuing their education until after serving a religious mission compared to only 12.2% of female students.

Figure 1: “What are your plans for more education or training after high school?”



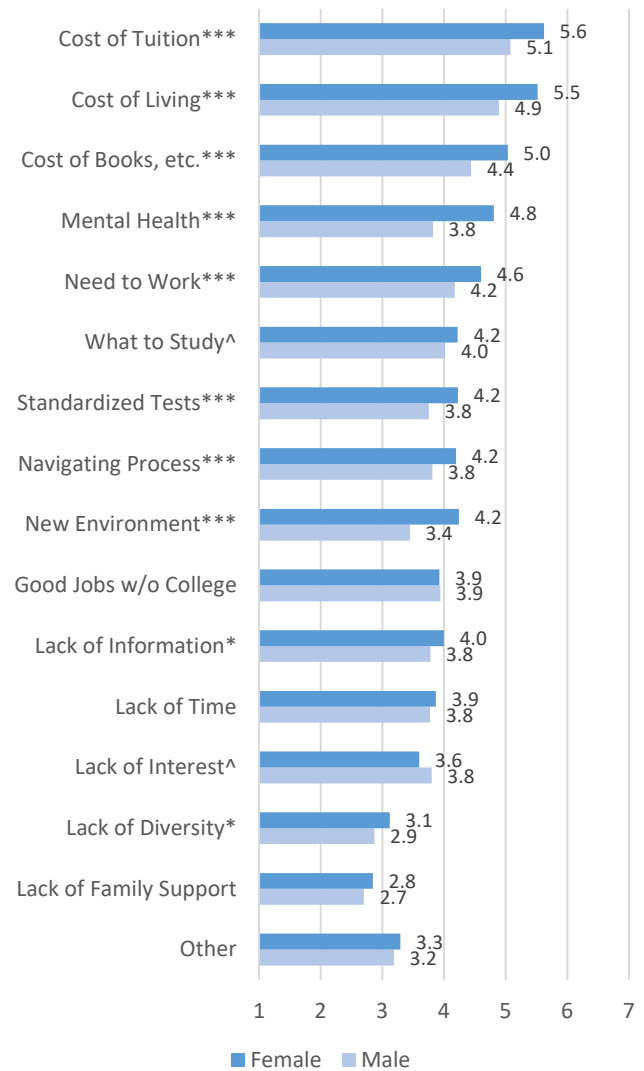
However, as discussed, plans do not always translate into college completion. A greater number of Utah women stop at an associate’s degree or leave college without earning a degree at all, and even fewer pursue advanced degrees. This ongoing trend suggests that while female students show a strong motivation to attend college, they face significant challenges in starting and/or completing their education compared to their male counterparts.

Barriers to Educational Attainment

The updated Envision Utah survey data provide insight into why seemingly motivated female students may not graduate from college and why this trend does not seem to occur for

male students. As in 2022, female students consistently perceived most barriers as more challenging to overcome than male students did. However, there were no significant differences in beliefs in being able to get a good job without a college degree, lack of time, lack of family support, and other. Male students rated lack of interest marginally higher than female students did, which differed from the 2022 survey, potentially revealing an increase in apathy. Figure 2 presents these gender-based differences, and the subsequent sections provide a detailed discussion of these perceived barriers.

Figure 2: “What are the biggest challenges or barriers that someone like you faces when you think about pursuing education or training after high school?”



Note: *** $p < .001$, ** $p < .01$, * $p < .05$, ^ $p < .10$.

Financial Barriers

Consistent with the 2022 survey, Utah female secondary students remained concerned about a lack of external resources. More specifically, female students were significantly more

concerned about how they would pay for tuition, living expenses, and course materials than male students were.

Although the in-state cost of public higher education in Utah remains affordable relative to other states (4th in the US behind Florida, Wyoming, and Nevada),⁸ and Utah has the 15th-lowest average student debt in the US,⁹ female students' concern about incurring debt persists. Nationally, the trend of women holding more student loan debt than men, which is amplified for women of color, also remains unchanged.¹⁰ Their concerns are not unfounded, given that women with bachelor's degrees are paid 80.0% of what men with similar qualifications earn. In Utah, the gender wage gap is even greater—and remains the worst in the US—with women earning 73 cents for every dollar made by men.¹¹ Even after accounting for factors such as different fields of study, careers, and time spent working, which can and do contribute to this gap, the alarming differences in earnings remain. Although generally as educational attainment increases, unemployment rates decrease and incomes increase;¹² the fact that women do not experience this at the same rate as men is lamentable.

The earnings disparity reinforces concerns among female students that the cost of college may not yield sufficient financial returns, potentially making them more cautious about investing in higher education. This concern was supported through the examination of the written responses in the survey. Most students said that the principal downside or risk of tertiary education was the debt incurred and the potential inability to pay back student loans. Lower pay after graduation means students may struggle more to pay off student loan debt incurred during college. Given that needing to work was rated as a significantly more challenging barrier for female students, this could reflect an awareness that cutting back on hours and, consequently, income would have a more adverse effect on them than for male students.

Interestingly, framing the cost of the average Utah student loan payment as \$200 per month was significantly more compelling to female students than male students. When framing the cost as \$2,400 per year or \$20,000 total, this difference went away. The finding that female students are more responsive to understanding costs on a monthly basis may suggest they are more attuned to immediate financial realities and day-to-day budgeting. This insight may be crucial for tailoring financial communication strategies, highlighting how small, manageable payments can make education more accessible and less daunting for female students.

The ongoing concerns of Utah female students about the financial burdens of higher education, despite relatively low tuition costs, reflect broader issues tied to the gender wage gap. To address these issues, expanding targeted scholarships, increasing financial literacy education, and implementing equal pay initiatives are essential. In addition, enhancing access to career counseling can help female students make informed decisions, ensuring that the pursuit of educational attainment leads to meaningful and equitable outcomes.

Information Barriers

Also consistent with the 2022 survey, lack of information remains a significant barrier for female students, who rated uncertainties about how to apply to college, navigate financial aid, and make informed decisions about their education as more significant obstacles than male students did.

This ongoing concern suggests the need for improved information dissemination and support, highlighting that many female students still feel inadequately informed about their higher education options. The persistence of these concerns underscores the importance of targeted efforts to ensure that female students receive the unbiased guidance they need to make informed decisions about their own education path.

Mental Health Barriers

Unfortunately, mental health continues to pose a significant barrier for female students. Students rated mental health as one of the most critical barriers; in fact, it was the greatest gender difference among all listed barriers. Of note is that this result was also found in the previous iteration of the Envision Utah survey, which was administered during the COVID-19 pandemic. These new findings reaffirm concerns that even though school has returned to in-person instruction, poor mental health still has a formidable negative impact on female students' likelihood of pursuing higher education and engaging in the workforce. Moreover, female students still express greater concern about their sense of belonging, with higher ratings for fear of a new environment and a lack of diversity. This consistent finding suggests that female students are apprehensive about how well they will fit into the higher education community.

Additional responses within the survey further illuminated students' experiences with mental health issues. More female students (80.7%) reported that they have concerns about issues such as bullying, sexual harassment/assault, or a combination of issues, compared to male students (61.1%). Because of these concerns, female students were significantly more likely than male students to indicate that they personally experienced mental health challenges that adversely affected their educational experience, and female students (46.4%) experienced more anxiety than male students (21.7%).

Examining open-ended responses deepened insight into the students' thought processes. Many felt they were severely discriminated against based on their sex, gender, ethnicity, and religion (or lack of). The 2022 brief highlighted that many students were deterred from remaining in Utah to further their education because they were not a member of the predominant religion. This trend continues with the current cohort of students, with many feeling unwelcomed and unsupported. One student even recounted being “fetishized.” As a further hindrance to educational attainment, some students reported the pressure to conform to gender stereotypes.

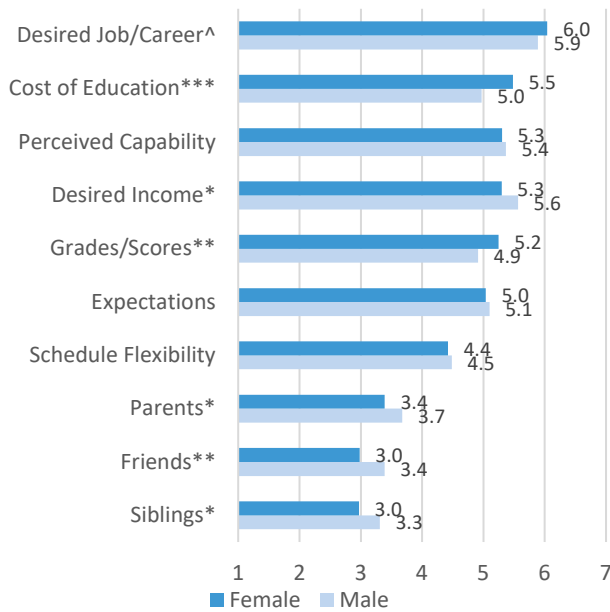
The findings should cause concern because poor mental health may negatively affect female students' likelihood of

pursuing higher education and engaging in the workforce. Increasing representation of women and other underrepresented groups remains a critical strategy for making higher education institutions more welcoming. Diversity has been shown to enhance the educational experience, and increased representation can improve female,¹³ racial,¹⁴ and sexual minority¹⁵ students' college attendance and graduation rates.

Education Influences & Expectations

Factors that influenced whether students planned to continue their education after high school also differed between female and male students (see Figure 3). How much education costs, their grades/test scores, and what kind of job they wanted were significantly more influential during the decision process for female students. Male students were significantly more influenced by what their friends, siblings, and parents were doing or had done in the past, as well as how much money they wanted to earn.

Figure 3: “What factors have the biggest influence on your decisions?”



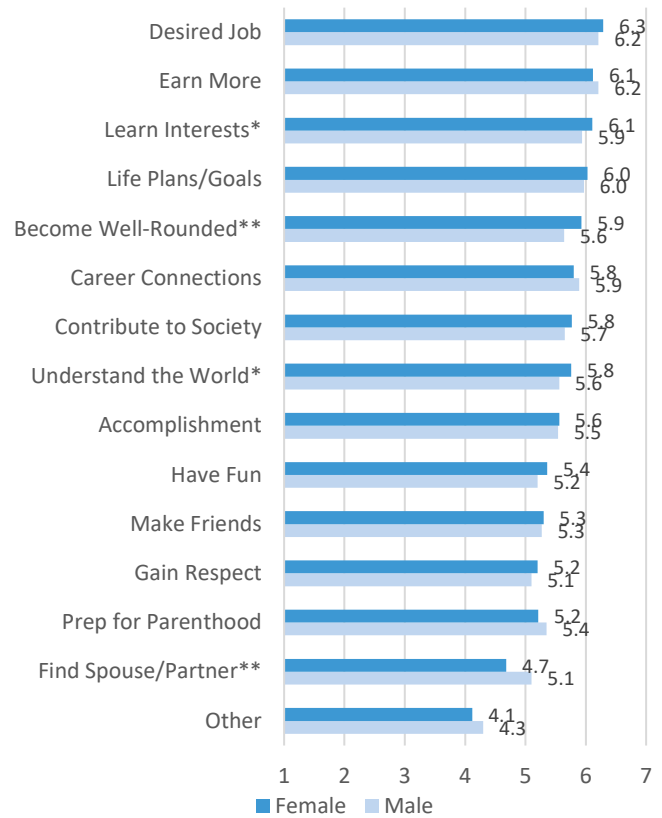
Note: ^{***} $p < .001$, ^{**} $p < .01$, ^{*} $p < .05$, [^] $p < .10$.

Thus, it appears female students are more likely to consider financial aspects of continuing their education, which is consistent with their concerns regarding potential debt burden. Additionally, their academic performance significantly impacts their confidence and choices about getting into college. In contrast, male students are more swayed by social factors, suggesting they may prioritize social acceptance and aligning with their social circles over other considerations. Moreover, the potential to earn a high income is a stronger motivator for male students, indicating that financial security and/or status may play a more pronounced role in their higher education decisions. These differing influences highlight the need for tailored guidance and support systems that address the unique

concerns and motivations of both female and male students as they plan their educational futures.

Similarly, Utah female students have very different expectations from higher education than male students do (see Figure 4). Specifically, female students expect to become a more well-rounded person, understand the world better, and learn about topics that interest them at a significantly greater level than male students do. Conversely, the only outcome that male students rated significantly more important than female students did was finding a spouse/partner.

Figure 4: “What are the most important outcomes you would expect from education after high school?”



Note: ^{***} $p < .001$, ^{**} $p < .01$, ^{*} $p < .05$, [^] $p < .10$.

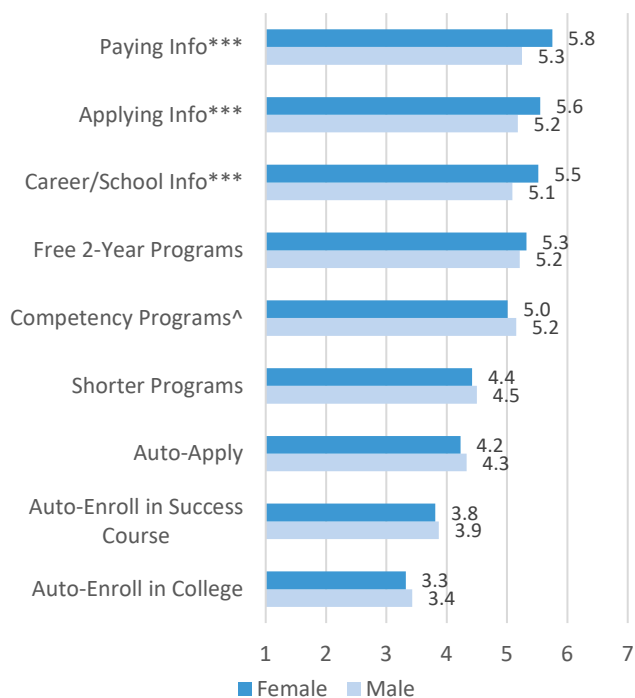
Diverging expectations suggest that female students view higher education as a holistic experience, one that extends beyond just academic achievements or career preparation. The range of expectations highlights the importance of creating educational environments that cater to a variety of student goals, ensuring that both personal and social dimensions of learning are supported for all students.

Perceived Effectiveness of Proposed Solutions

Figure 5 presents a comparison of the effectiveness of various proposed solutions as perceived by female and male students. The top-rated solutions for all students were providing more information and assistance related to how to pay for education, how to apply to institutions, and how to navigate school

and career school options, with female students considering these to be significantly more effective than male students. In addition, male students rated the provision of more programs based on skills competency as marginally more effective. Given that the highest-rated barriers to attending college were a lack of information and the cost and associated student loans, it makes sense that the highest-rated solutions addressed paying for college. While it appears that all students see value in simplifying the higher education process, female students have a stronger desire for detailed information and accessible financial support.

Figure 5: “How effective do you think the following ideas would be?”



Note: *** $p < .001$, ** $p < .01$, * $p < .05$, ^ $p < .10$.

Additional Survey Insights

Although the survey question asking about students’ gender included an “Other” option, there was no text box allowing the students to specify their gender identity. Because the 41 nonbinary students (and 44 who chose “Prefer not to answer”) were unable to have their gender categorized and used as an additional level within the independent variable, they were screened from the sample. Thus, the analyses presented in this brief examined disparities only between students in Utah who explicitly identified as female or male. However, nonbinary students should not be disregarded when attempting to address gender disparity issues. Nonbinary students experienced mental health challenges that affected their high school experience at a greater level ($M = 4.42$, $SD = 1.00$) than cisgender female students ($M = 3.47$, $SD = 1.30$; $p = .02$) and cisgender male students ($M = 2.80$, $SD = 1.40$; $p < .001$). They were also more likely to be concerned that mental health challenges would continue and would negatively affect future

success in higher education ($M = 4.10$, $SD = 1.45$) than cisgender females ($M = 3.36$, $SD = 1.15$; $p = .05$) and cisgender males ($M = 3.35$, $SD = 1.21$; $p = .06$). Nonbinary students listed mental health as the *most* challenging barrier to furthering their education ($M = 6.23$, $SD = .97$), rating it as a greater challenge than any of the concerns expressed by cisgender students (p ’s $< .001$).

Examining the written responses provides an even richer insight into the experience of nonbinary students. For example, as illustrated by the following quotations,¹⁶ nonbinary students frequently deal with issues above and beyond what cisgender students experience:

“There has been a lot of controversy over people in the LGBTQIA+ community, and I have been verbally assaulted in women’s bathrooms even though I am biologically a female.”

“I’m surrounded by people who talk to me and about people like me in the LGBT+ community like we’re bad for just existing. I hear so much crap from people in churches about how I should live and stop doing sinful things by just existing. I’m afraid I’ll get hurt in a new environment I don’t already know how to navigate.”

“I am AFAB [Assigned Female at Birth] and queer. I am agender and I feel the environment in most trade school pushes white cis males towards success while they belittle those around them that are different from them.”

To ensure that these and similar students are not overlooked or ignored when researching gender disparities, gender should not be operationalized as a binary construct (i.e., as a categorical variable with only two levels). Given Utah has one of the highest rates of LGBTQ+ residents reporting depression “nearly every day”¹⁷ and LGBTQ+ youth suicide¹⁸ in the US, it is crucial to ensure that *all* Utahns are heard and equitably supported.

Discussion of Findings

Given that the foremost perceived barriers to educational attainment by Utah female students continue to be related to costs, lack of information, and mental health, updated recommendations emphasize building on previously suggested strategies while adapting to the current findings.

Enhancing Financial Support: Female students remain particularly concerned about the costs of college. Consequently, additional financial support remains crucial. Efforts to expand state-sponsored scholarship programs and partnerships with private businesses should continue. New solutions at institutional, state, and national levels, such as innovative funding models and cost reductions, should still be explored. Addressing the gender wage gap remains a long-term goal that could help more women justify the investment in higher education.

Improving Information Accessibility: The ongoing concern about insufficient information underscores the need for more robust initiatives to inform students. As recommended in the previous brief, this can include providing information about

applications, financial aid, and career planning, as well as enhancing college preparation workshops, online resources, and career fairs. Continuing to encourage job shadowing and informational interviews can also help all students make informed decisions. Promoting higher education opportunities equally across all genders and providing targeted support for lower-income and minority students should also continue.

Supporting Mental Health: As mental health remains a significant barrier, there is a need for expanded resources to support students' mental health. Schools should continue to implement and enhance mental health literacy initiatives and provide access to on-site mental health services. Proactive measures to address the underlying causes of mental health issues, including promoting a more inclusive and supportive environment, should be prioritized.

Increasing Representativeness: The demographics and psychographics of students, faculty, and staff at Utah's higher education institutes should reflect the broader population; presently, they do not. Diversity adds immeasurable value to campuses¹⁹ and workplaces.²⁰ Thus, everyone benefits when

higher education institutions implement strategic efforts to ensure that all students feel a sense of belonging and tailor approaches to meet the unique needs of each individual.

Conclusion

To address educational disparities Utah women experience, a cultural shift led by community and religious leaders at the highest level is likely required. Some conservative ideologies and religions, which are both predominant in Utah, are more likely to support,²¹ and perpetuate,²² gender stereotypes. Therefore, Utah's policymakers and clergy should publicly, and privately, challenge cultural pressures that demand conformity with rigid gender stereotypes, advocate for the importance of higher education and career aspirations for women, and declare that inequities and discrimination are unacceptable. By promoting a more forward-thinking narrative around gender equality, influential figures can encourage families to increase education prioritization for their daughters, help close the educational attainment gap in the long term, and inspire broader societal change.

¹ U.S. News. (2024). *Education*. <https://www.usnews.com/news/best-states/rankings/education>.

² US Census Bureau. (2022). *S1501 Educational attainment – 2022: ACS 5-year estimates subject table*. <https://data.census.gov/table/ACSST1Y2022.S1501>.

³ US Census Bureau. (2022).

⁴ US Census Bureau. (2022).

⁵ Jackson, C. K., Johnson, R. C., & Persico, C. (2015). Boosting educational attainment and adult earnings. *Education Next*, 15(4), 69–76.

⁶ Utah Women & Leadership Project. (2022, October 26). Perceptions of higher education: Gender differences in Utah secondary school students. <https://www.usu.edu/uwlp/files/briefs/46-perceptions-of-higher-education-gender-differences-utah-secondary-school-students.pdf>

⁷ Wells, R. S., & Lynch, C. M. (2012). Delayed college entry and the socioeconomic gap: Examining the roles of student plans, family income, parental education, and parental occupation. *The Journal of Higher Education*, 83(5), 671–697. <https://doi.org/10.1080/00221546.2012.11777262>

⁸ Hanson, M. (2023, November 23). *Average cost of college by state*. <https://educationdata.org/average-cost-of-college-by-state>

⁹ Hanson, M. (2024, May 13). *Student loan debt by state*. <https://educationdata.org/student-loan-debt-by-state>

¹⁰ Hanson, M. (2024, June 20). *Student loan debt by gender*. <https://educationdata.org/student-loan-debt-by-gender>.

¹¹ Haines, J. (2024, March 12). States with the biggest gender wage gaps. *U.S. News*. <https://www.usnews.com/news/best-states/articles/states-with-biggest-gender-wage-gaps>.

¹² U.S. Bureau of Labor Statistics. (2020, May). *Learn more, earn more: Education leads to higher wages, lower unemployment*. <https://www.bls.gov/careeroutlook/2020/data-on-display/education-pays.htm>.

¹³ Hansen, Z. K., Owan, H., & Pan, J. (2006, May). The impact of group diversity on performance and knowledge spillover: An experiment in a college classroom. *National Bureau of Economic Research*. <https://doi.org/10.3386/w12251>

¹⁴ Bowman, N. A., & Denson, N. (2022). Institutional racial representation and equity gaps in college graduation. *The Journal of Higher*

Education, 93(3), 399–423. <https://doi.org/10.1080/00221546.2021.1971487>

¹⁵ Macini, O. (2011). Attrition risk and resilience among sexual minority college students. *Columbia Social Work Review*, 9(1), 8–22. <https://doi.org/10.7916/cswr.v9i1.1961>

¹⁶ Edited only for grammar, spelling, and punctuation.

¹⁷ Help Advisor. (2022). *Rates of depression in LGBTQ communities, by state*. <https://www.helpadvisor.com/community-health/lgbtq-depression-report-and-resource-guide>

¹⁸ The Trevor Project. (2022). *2022 national survey on LGBTQ youth mental health by state*. <https://www.thetrevorproject.org/wp-content/uploads/2022/12/The-Trevor-Project-2022-National-Survey-on-LGBTQ-Youth-Mental-Health-by-State.pdf>

¹⁹ American Council on Education. (2012, June). *On the importance of diversity in higher education*. <https://www.acenet.edu/Documents/BoardDiversityStatement-June2012.pdf>

²⁰ Stahl, A. (2021, December 17). 3 benefits of diversity in the workplace. *Forbes*. <https://www.forbes.com/sites/ashleystahl/2021/12/17/3-benefits-of-diversity-in-the-workplace/?sh=212f9efe22ed>

²¹ Qin, X., Chua, R. Y. J., Tan, L., & Chen, C. (2023). Gender bias in cultural tightness across the 50 US states, its correlates, and links to gender inequality in leadership and innovation. *PNAS Nexus*, 2(8), pgad 238. <https://doi.org/10.1093/pnasnexus/pgad238>

²² de Vries, E. E., van der Pol, L. D., Tashkov, D. D., Groenenveld, M. G., & Mesman, J. (2022). Fathers, faith, and family gender messages: Are religiosity and gender talk related to children's gender attitudes and preferences? *Early Childhood Research Quarterly*, 59, 21–31. <https://doi.org/10.1016/j.ecresq.2021.10.002>

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