## INTRODUCTION

During the fall of 2023, Utah Women \& Leadership Project (UWLP) researchers conducted a statewide study to establish a baseline for public perceptions related to the awareness, understanding, and attitudes about challenges that Utah women and girls face (see Background \& Methods for details). The study was created to support the work of 18 areas of focus (spokes) within the movement called A Bolder Way Forward, which is dedicated to helping more Utah girls and women thrive. One of the 18 areas of focus is K-12 initiatives, and this summary shares findings that illuminate present circumstances and establishes a baseline to track progress in a few areas.

## BACKGROUND

Vast research confirms that educational experiences of all types during childhood and youth are important preparation for their lives. The teaching, counseling, and programs within the schools and beyond are critical to children's growth and development, and adults (e.g., parents, administrators, teachers, counselors, politicians, community leaders) often determine what and how children learn. Further, the perceptions of adults in all settings, including religious spaces, influence children's views of their own possibilities, educational aspirations, and career opportunities and choices. Findings from this study provide insights from Utah adults more generally on significant areas that influence girls. Exploring Utahns' current perceptions may guide strategies for change.

## RESEARCH FINDINGS

Participants responded to each survey item using a 7-point Likert scale (1= strongly disagree, 2=disagree, 3=somewhat disagree, 4=neither disagree nor agree, 5=somewhat agree, 6=agree, and $7=$ strongly agree). For Sample 1 (nonprobability), 2,660 Utahns responded to these four questions, and for Sample 2 (representative), there were 650 participants (Total=3,310).

1. Math: The first survey item was "It is important for girls in K-12 to have strong math skills for their future career and life." The statistical mean was 6.14 (SD 1.04) for the non-probability sample and 5.56 (SD 1.35) for the representative sample. There is a significant difference between samples, with $42.6 \%$ participants strongly agreeing in the first and only $28.5 \%$ in the latter. See the combined demographic findings below.

## DEMOGRAPHIC FINDINGS

Gender: Women's agreement levels were similar to men's (6.00 and 5.83, resp.).
*Age: Respondents 18-29 had lower levels of agreement than those 35-69 years of age.
*Education: The higher the education, the more the agreement.

Marital Status: Agreement levels were similar in all categories.
*Income: The higher the income level, the stronger the agreement.
*Children: Respondents with children agreed significantly more than those without children, and parents with more children (up to three) in the 6-11-year-old range agreed more.
*Race \& Ethnicity: White, Asian, and Hispanic respondents had higher agreement.
*Religion: Protestants had the highest agreement, while "spiritual but no affiliation" had the lowest.
*Employment: Full-time homemakers and the unemployed had the lowest agreement.

Residency: There were no significant differences among categories.
*Counties: Cache, Davis, Summit/ Wasatch, and Iron counties had the highest agreement, while the 10 rural eastern counties; the Millard, Sevier, Juab, Beaver, and Piute grouping; and Box Elder counties had the least.
*Denotes statistically significant differences within the demographic categories.
2. CTE: The second survey item was "It is important for girls to complete Career and Technical Education (CTE) pathways in high school." The statistical mean was 5.83 (SD 1.16) for the nonprobability sample and 5.37 (SD 1.31) for the representative sample, which reflects a significant difference between the samples. In the combined samples, $82.2 \%$ of respondents agreed with the statement at some level, with only 17.8\% disagreeing or selecting "neither agree nor disagree." See the demographic findings for this question below.

## DEMOGRAPHIC FINDINGS

*Gender: Women's agreement levels were higher than men's ( 5.72 and 5.52, resp.).
*Age: Those in the 18-24 age range agreed less strongly than those in other age categories.
*Education: The more the education, the stronger the agreement.
*Marital Status: Single respondents had the least agreement compared to all other categories.
*Income: The higher the income level, the stronger the agreement.
*Children: Parents had stronger agreement than nonparents. There were no significant differences among parents based on number or ages of children.
*Race \& Ethnicity: Those who identified as White, Hispanic, and Pacific Islander had the highest agreement.

Religion: There were no significant differences among religious affiliations and activity levels.
*Employment: Full-time homemakers and students had the lowest agreement with this statement.
*Residency: Those who had lived in Utah 2-5 years had significantly lower agreement than all others.

Counties: There were no significant differences among counties; however, the means ranged from 5.29 (Washington and Box Elder) to 5.88 (the Millard, Sevier, Juab, Beaver, and Piute grouping).
3. Advanced Coursework: The third survey item was "It is as important for girls as it is for boys to take advanced coursework in high school that prepares students for postsecondary opportunities and careers." The statistical mean was 6.65 (SD .75) for Sample 1 and 5.91 (SD 1.31) for Sample 2. In Sample 1, 75.8\% $(2,018)$ selected "strongly agree," while 41.5\% (270) of Sample 2 did. Both were still high, but the difference was substantial. In the combined samples, only 5.1\% of respondents disagreed at some level or chose "neither agree nor disagree." See the combined demographics below.

## DEMOGRAPHIC FINDINGS

*Gender: Women's agreement was significantly higher than men's (6.51 and 6.15, resp.).

Age: There were no significant agreement differences by age.
*Education: The higher the educational attainment, the higher the agreement.

Marital Status: There was no significant difference among marital status categories.
*Income: Respondents with higher income levels had stronger agreement.

Children: There were no significant differences between parents and nonparents, and there were no significant differences among parents based on number or ages of their children.
*Race \& Ethnicity: The highest agreement came from White, Hispanic, and Asian participants.
*Religion: Those who selected agnostic and Latter-day Saint had the highest agreement, while Catholic respondents had the least. The highest agreement came from those who were most religiously active.
*Employment: Respondents who were employed full-time had the highest agreement levels, while those who were unemployed (looking for work) had the lowest. However, all agreed.

Residency: There are no significant differences in agreement levels.
*Counties: The highest agreement came from respondents in Summit/ Wasatch, Cache, Davis, Salt Lake, and Utah counties, while Washington, Box Elder, and Weber had the least agreement. However, the means in all counties ranged from 6.09 to 6.54 .
4. Math Gender Difference: The final survey item was "It is concerning that The Nation's Report Card math scores for 4th and 8th grade in Utah are lower for girls than they are for boys." The statistical mean was 6.42 (SD 0.97) for Sample 1 (non-probability) and 5.44 (SD 1.41) for Sample 2 (representative). In the latter sample, although only 7.7\% disagreed and $20.0 \%$ were unsure, $55.3 \%$ either agreed or strongly agreed. Yet, in Sample 1, 24.5\% agreed, and $56.4 \%$ strongly agreed. See the combined demographic findings below.

## DEMOGRAPHIC FINDINGS

*Gender: Women's agreement was significantly higher than men's (6.25 and 5.66, resp.).
*Age: Those participants 35 to 69 years of age had higher agreement.
*Education: The higher the educational attainment, the higher the agreement.

Marital Status: There were no significant differences among categories.
*Income: Respondents in higher income categories had higher agreement levels.
*Children: Parents were significantly more likely to agree compared to nonparents, but both still agreed.
*Race \& Ethnicity: Those who identified as White, Asian, and Hispanic (highest first) most somewhat agreed with the statement, while American Indians had significantly lower agreement (though it was slightly above "somewhat agree").
*Religion: There were significant differences among religious affiliation choices, with agnostics having the highest statistical mean, followed by Latter-day Saints and Protestants. Catholics had the lowest agreement, although it was closer to "agree" than to "somewhat agree."
*Employment: Full-time employees and retirees had stronger agreement, while unemployed people had the least.
*Residency: Those who had lived in Utah less than 2 years had significantly lower agreement levels than all other categories.
*Counties: The highest agreement levels came from Summit/Wasatch, Cache, Salt Lake, and Davis, with means from 6.20 to 6.38 . The respondents with the least agreement were from Washington and Box Elder (5.70 to 5.77).

## CONCLUSION

This summary highlights key findings related to K -12 education initiatives in Utah. Respondents from across the state participated in the study (see Background \& Methods for the demographic details of both the nonprobability and representative samples). Since the perceptions of adults in all settings influence children's learning, decisions, and aspirations, findings from these samples will help decision makers understand Utahn's current perceptions related to issues that specifically influence the education of girls.

Two of the questions in this survey related to math, as Utah ranks 50th of 50 states on the disparity in math test scores between boys and girls, with girls lagging. This shows that there are subtle and not-so-subtle messages influencing Utah girls to believe that they are not good at math. The divide, however, has been created by socialization rather than genetics. Yet, most Utahns, and women more firmly, believe that girls and young women need stronger math skills. Utahns also see the importance of young women completing CTE and advanced coursework as well. These important findings can influence decisions that can change the trajectory of girls and women in Utah.

## For questions and information:

- uwlp@usu.edu
- utwomen.org
- abolderwayforward.org

