Ohio House of Representatives

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Thank you Chair Manning, Vice Chair Bird, Ranking Member Robinson, and members of the Primary and Secondary Education committee for the opportunity to testify today on HB 312, which would designate November 23rd as Women and Girls in STEM Day.

Historically, women have been vastly underrepresented in the science, technology, engineering, and mathematics (STEM) fields. While there have been some strides to encourage and ensure women have more STEM opportunities, the current data from the National Science Board shows that despite women making up almost half of the U.S. workforce, they still only comprise 27% of the STEM fields. According to the American Association of University Women (AAUW), "men vastly outnumber women majoring in most STEM fields in college."[1] In 2019, women were only 15.7% of those employed as engineers and architects; 25.8% of those employed in computer and mathematical occupations; 42.5% of chemists and materials scientists; and 47.7% of biological scientists. The disparities are even more prevalent for women of color in STEM at only 5% of the STEM workforce.

The purpose of this legislation is to increase awareness of opportunities in STEM fields for women and girls and to increase public awareness about the need for women and girls in these fields.

[1] https://www.aauw.org/resources/research/the-stem-gap/

Just a few examples of what women in STEM have accomplished this far:

- Radia Perlman is a revered STEM pioneer known for creating the algorithm that has made today's Internet a reality.
- Dr. Adriana Ocampo is a planetary geologist and contributed greatly to the NASA planetary science projects, including missions to both Jupiter and Pluto.
- Grace Hopper is known as the "Queen of Code" for her programming contributions to one of the earliest computers, the Mark I, during WWII.
- Florence Siebert was a biochemist who developed a system that became the international standard for tuberculosis testing.
- Katherine Johnson was the brains at NASA behind the calculations needed for multiple space missions, including the historic 1969 Moon Landing.

We know how important it is for young people to have role models and to feel that there are endless possibilities for the future. This legislation will broaden the scope of opportunities for young women and will hopefully contribute towards closing the gender gap in the STEM workforce.

As an educator, I (Representative Lightbody) know the importance of encouraging students, especially girls, to study STEM fields starting as early as possible. An education in STEM fields creates critical thinkers, increases science literacy, and enables the next generation of innovators and empowers the next generation of workers.

Science, technology, engineering and mathematic play a key role in the sustained growth and stability of the Ohio economy and that of the United States as a whole. Women and Girls who understand and work in STEM fields are already a critical component to helping us solve the problems that face us in this century.

We would like to thank the committee for their time and we welcome any questions.