

CLOSING THE GENDER GAP IN STEM

- I. Introduction: The gender gap in STEM needs to be closed.
 - A. Lawrence H. Summers attempts to explain why women are less present in STEM, blaming a lack of intrinsic aptitude for science and mathematics.
 - B. Ability in STEM subjects does not vary biologically; saying so creates false constructions that are harmful to young girls.
 - C. Thesis
 1. In facing the stereotypes placed against women within STEM-related fields, young girls need to be encouraged to pursue a career in a field of engineering through combating the portrayal of engineering as a masculine field, presenting role models for young girls to emulate, and developing their confidence in their skill sets for math and science.
- II. Body Paragraph: The underrepresentation of women in STEM needs to be analyzed.
 - A. Statistics show the gender gap's persistence in STEM.
 - B. Several factors cause women to enter and stay in STEM fields at far fewer rates than men, none of which are biologically based.
 - C. Male domination in STEM serves as wrongful support for sexist stereotypes and female oppression.
- III. Body Paragraph: The apparent gender disparities in STEM perpetuates negative stereotypes against women.
 - A. Gendered stereotypes present in a female's academic career heavily influence her perceptions of STEM careers and interests.
 - B. Family contributions of pressure and bias can also negatively affect a female's experience with math and science.
 - C. These stereotypes build a discouraging environment for young girls, making them less inclined to develop a growth mindset and positively engage with STEM.
- IV. Body Paragraph: Classroom and cultural contributions to gendered stereotypes are heavily influential on a girl's STEM outlook.
 - A. The effect of teachers and classroom materials on perpetuating sexist stereotypes is profound.

- B. Cultural stereotypes about male and female roles and personality traits can heavily dissuade young girls from STEM careers.
 - C. With pressure to conform to family and society, young girls largely stray away from STEM.
- V. Body Paragraph: The portrayal of engineering as a masculine field needs to be combated.
 - A. Success in STEM is heavily associated with masculinity.
 - B. Allocative discrimination against women in STEM is present, undermining their participation. There is a historic undervaluing of women in STEM, conditioning female students to believe that STEM is geared towards men.
 - C. The overly exaggerated masculinity of the STEM field is harmful to the industry and its innovation.
- VI. Conclusion: It is imperative to develop confidence in young girls within STEM and provide female role models for them to emulate.
 - A. A positive perspective of STEM needs to be presented throughout girls' academic careers.
 - B. Initiate changes in curriculum and teaching methods to avoid building upon gendered stereotypes and increase the presence of STEM female figures in educational resources.
 - C. Build a growth mindset within young girls so that it is understood that practice, not innate abilities, fosters success in STEM.
- VII. Islamic Perspective: The importance of education in Islam is persistent and compelling throughout religious teachings.
 - A. The first revelation of the Quran shows the emphasis placed on knowledge.
 - B. Other verses of the Quran display how knowledge has a strong positive weight on a person's character and values.
 - C. The Prophet (PBUH) heavily encourages all Muslims to seek knowledge intently.
 - D. Muslims should strive to castaway negative stereotypes that inhibit an optimistic learning environment and promotion of education for anybody.