



Intelligence in STEM

By: Meredith Maze And Lauren Lambert

Arab Junior High School

This essay is to inform women and men about the importance of women in STEM. We believe that it is vital for everyone to tell and encourage young ladies to go into the STEM field. Not enough females are in STEM as shown by this study by the website study by me about a quarter of workers in the stem field are female. Another study by AAUW states that women take up fifteen percent of Engineers. Women need to take up at least fifty percent of Engineers and STEM workers. Science is everywhere in the world around us. Technology is continuously expanding into every aspect of our lives. Engineering is the basic design of roads and bridges, but also tackles the challenges of changing global weather and environmentally-friendly changes to our home. Mathematics is in every occupation, every activity we do in our lives. By exposing students to STEM and giving them opportunities to explore STEM-related concepts, they will develop a passion for it and hopefully pursue a job in a STEM field. A curriculum that is STEM-based has real-life situations to help the student learn.

STEM is a curriculum based on the idea of educating students about four specific disciplines - Science, Math, Engineering, and Technology in an interdisciplinary and applied approach. STEM education creates critical, increased science literacy, and enables the next generation of innovators. Instead than teaching the four disciplines as separate and discrete subjects, STEM integrates them into a cohesive learning paradigm based on real-world applications. A few reasons why a lot of STEM workers are male is because STEM fields are often viewed as masculine. Teachers and parents often underestimate girls' math abilities as early as preschool. In addition to that girls also have less role models to inspire their interest in these fields, in books, media, and popular culture. Also, since fewer

women study and work in STEM which means STEM is a male-dominated field. In conclusion ladies are treated and thought of as the less powerful gender which is so wrong. Females are very important to be included.

The question still remains; why are there so few women in STEM? One guess is that young girls don't see many role models in STEM so they automatically assume that it is a "male job". Statistics demonstrate that an increasing number of women are choosing to study STEM subjects in college. The number of women who are awarded STEM degrees every year has increased by over 50,000 in the past decade. Over 200,000 women graduated from STEM fields in 2016 in comparison with just over 140,000 in 2009. Female leaders and board members are abnormal across all fields. Some industries such as financials have a higher number of leaders, 16.9% and 17.4% respectively. Nonetheless, only 12.2% of board members in the information technology industry are female. This means that out of each 10 board members roughly one is a woman. Pew Research Center study of U.S. Census Bureau data since 1990 shows that while jobs in STEM have grown substantially in computer occupations, the share of women working in STEM jobs has remained at about half over time. According to the U. S. Department of Commerce, STEM occupations are growing at 17 percent, while other occupations are growing at 9.8 percent. STEM degree holders have a higher income even in non-STEM careers. Science, technology, engineering and mathematics workers play a key role in the sustained growth and stability of the U.S. economy, and are a critical component to helping the U.S. win the future. STEM education creates critical thinkers, increases science literacy, and enables the next generation of innovators. Innovation leads to new products and processes that sustain our economy.

This innovation and science literacy depends on a solid knowledge base in the STEM areas. It is clear that most jobs of the future will require a basic understanding of math and science. Science is everywhere in the world around us. Technology is continuously expanding into every aspect of our lives. Engineering is the basic design of roads and bridges, but also tackles the challenges of changing global weather and environmentally-friendly changes to our home. Mathematics is in every occupation, every activity we do in our lives. By exposing students to STEM and giving them opportunities to explore STEM-related concepts, they will develop a passion for it and hopefully pursue a job in a STEM field.

Over the past few years ladies have been advancing in the STEM field but not enough for females under seventy five years of age take up fifty percent of STEM workers. Instead they take up forty three percent, which is a huge improvement from what it used to be. But, women under the age of twenty nine take up fifty six percent of STEM workers. Which is a huge accomplishment!! (These numbers are determined by the National Science Foundation) Females have done a great job advancing in STEM and we need to continue to do so.

Links

<https://www.nasa.gov/content/girls-in-stem-2021>

<https://www.weareteachers.com/learn-how-to-get-girls-in-stem/>

<https://www.builtbyme.com/statistics-facts-women-in-stem/#:~:text=Only%20About%20a%20Quarter%20of%20STEM%20Workers%20Are%20Female&text=However%2C%20STEM%20jobs%20are%20still,opposed%20to%2072%25%20of%20men.>

<https://www.engineeringforkids.com/about/news/2016/february/why-is-stem-education-so-important/>

https://www.google.com/search?q=how+much+of+STEM+workers+do+woman+take+up&rlz=1CAOUAQ_enUS916US916&oq=how&aqs=chrome.1.69i59l3j69i57j0i131i433i457j0i131i433j69i61j69i60.2219j0j7&sourceid=chrome&ie=UTF-8&safe=active

