Promoting Gender Diversity in STEM Education

**Strategies and interventions designed to address gender disparities in STEM education including mentorship programs, curriculum reforms, outreach efforts, and initiatives to combat gender bias and stereotypes.**

* **Introduction: Background and the Concept of Gender Disparity in STEM Education**

Racial and gender disparities in STEM education persist in spite of mentorship programs to improve recruitment and retention. Careers in STEM subjects are of vital importance for strengthening national economies. Tzu-Ling (2019) is of the view that a strong foundation in STEM education is essential for the progress of students in university as well as for career advancement.

* **Goal of the Project**

The goal of the project is to explore factors that lead to gender disparities in STEM education and to find out strategies and programs to address those gender disparities.

* **Literature Review:**

Currently, there is a global concern over the decreasing interest of youth in pursuing careers in STEM subjects (Wan and Lee, 2017) and the decrease in test scores of sciences and mathematics in OECD countries recently (Jeffries, Curtis, & Conner, 2020). This situation raises concerns globally and demands the implementation of measures to counter this decline. This lack of interest and decline in scores is due to multiple factors including gender stereotypes, students’ self-concept, and lack of motivation in STEM education (Bayanova et al., 2023).

* Our **intended audiences** include students, family, peers, faculty, and administrators as they are the ones who can help to reduce gender disparities in STEM education through collective efforts.
* **Description of Approach:**

Mondisa, Packard, and Montgomery (2021) developed a STEM Mentoring Ecosystems (STEM-ME) framework that attempts to better understand and improve mentoring systems required to ensure change with regard to racial and gender disparities in STEM subjects. The framework requires a shift in perspective, expansion beyond individual mentors and mentees, and dedicated mentoring programs in order to assess the mentoring ecosystems where STEM mentoring takes place. The project may also explore other interventions such as curriculum reforms to promote gender diversity.

* **Discussion and evaluation of the Project:**

This section would include real-world examples and evidence to evaluate the success of the project. It would also include limitations of the study and implications for future research.

* **Conclusion**

It would summarize the factors leading to gender disparities in STEM education and strategies to combat those disparities and promote diversity in STEM subjects.

**References**

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