Diversity Initiative in Computer Science Project Proposal

Chapman University
CPSC-298-06: Minorities in Computer Science

Project Title: Exploration of Gender Segregation Among those in the STEM field

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Problem/Opportunity:

- Gender-based employment segregation

Identify the statistics supporting your problem claim

- According to the National Science Foundation, the average percentage of incoming freshmen pursuing a STEM degree in 2009 was 29% men and 15% women.
- Only 13% of engineers are women
- Only 26% of computer scientists are women
- Female engineers earn 10% less than male engineers
- In the U.S. in 2019, 21%of bachelor's degrees in engineering were attained by women, and only 20% in computer science.

Project Type

- Club with mentors that come in and address different issues within gender-based segregation
    - Mentors covering topics of wage gap, inequality, etc

Main Goal Statement

- Our goal is to reduce gender disparities in the STEM field by offering a program which encourages women to pursue a STEM career.

Objective(s)

Objectives are specific, measurable, and timed outcomes of the project that are stated in terms of the problem solutions or opportunities users will experience. You won't be implementing these but plan as if you were.

- At least one mentor to speak per week
- Social development and educational support
- Gender mainstreaming

Project Leadership

- Kashish Pandey: Project steps, functional team/other resources, dependencies and risks, statistics
- Andriana Agrusa: Research, statistics, main goal statement
- Nasser Aljasser: Problem/ Opportunity, main goal statement, objectives, statistics
- Jadyn James: Project type, objectives, main goal statement, statistics

Project Steps

Clearly state the major steps necessary to complete the project goals and objectives. List steps sequentially.

Example: 1) Identify different issues within gender-based segregation

2) Conduct research and find statistics

3) Bring in various people from industry who talk about the importance of these topics

4) Hold club meeting weekly

5) Conduct survey after each speaker to collect feedback from club members on what they learned and how they can apply what they learned

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6) Analyze feedback to gauge what kinds of other speakers to bring in

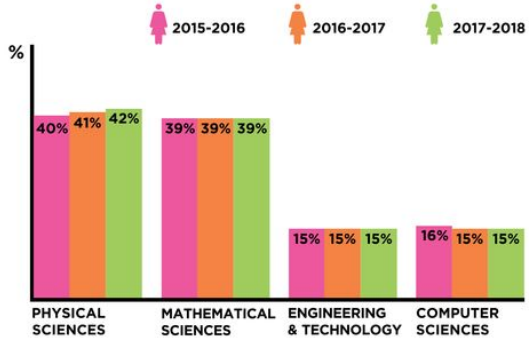
Functional Team and Other Resources

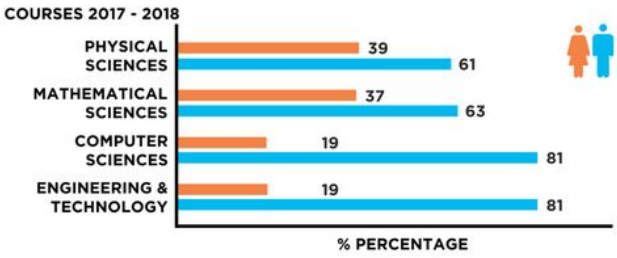
- Connections to people in the industry
- Researchers to help collect data
- Survey software

Dependencies and Risks:

- The success of this project is dependent on other factors such as the availability of speakers, our own personal networking connections to people that are in the industry, the time needed to gather data/statistics, availability of team members to meet each week and the conduct club meeting
- The significant risks to proper completion of the project or objectives would be Coronavirus. It might be difficult to line things up with 5 different schedules and the inability to physically meet up/plan things out.

Please feel free to add any other information or attach documents which will be helpful in understanding the project.





Sources:

1. Swafford, M., & Anderson, R. (2020). Addressing the Gender Gap: Women's Perceived Barriers to Pursuing STEM Careers. *Journal of Research in Technical Careers, 4*(1), 61-74.

2. Rincon, R.(2020, February 8). *SWE Research Update: Women in Engineering by the Numbers (Nov. 2019).* All Together. https://alltogether.swe.org/2019/11/swe-research-update-women-in-engineering-by-the-numbers-nov-2019/

3. Gender segregation at work: "separate but equal" or "inefficient and unfair" - Equitable Growth. (2021). https://equitablegrowth.org/gender-segregation-at-work-separate-but-equal-or-inequitable-and-inefficient/

4. Women in STEM: Percentages of Women in STEM Statistics. (2019, September 26). https://www.stemwomen.co.uk/blog/2019/09/women-in-stem-percentages-of-women-in-stem-statistics

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