



I Congresso Internacional Mulheres em STEAM

WIS, A MENTORING PROGRAM FOR WOMEN IN SCIENCE: AN EXPERIENCE REPORT

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Abstract. "Women in Science: UK-Brazil Gender Equality Partnerships" is a mentoring program proposed by the British Council in Brazil with the collaboration of three main institutes: Pró-Reitoria de Pesquisa of the Federal University of Rio Grande do Sul (UFRGS), Pontifícia Universidade Católica do Rio Grande do Sul (PUCRS) and King's College London (KCL). With focus on the STEM areas, and a 6-month duration, the main goals of this program are to (i) strengthen the female participation in research, (ii) discuss the main challenges faced by women that hinder their career progression and undermine gender equality, and (iii) encourage the networking as well as the exchange of experiences between the Brazilian and British institutes. The mentors are Brazilian postdoctoral researchers, while the mentees are undergraduate or MSc. students from STEM areas. In this work, we present the topics that have been addressed so far by this program, and the methodological framework employed in our discussions.

Keywords. STEM, Gender equality, Mentoring program

1. INTRODUCTION

Women in Science (WIS)³ is a project developed by the British Council, an international organization for cultural relations and educational opportunities, in which King's College London (KCL), Pontifícia Universidade Católica do Rio Grande do Sul (PUCRS) and Universidade Federal do Rio Grande do Sul (UFRGS) are joining efforts with the purpose of engaging more girls and women in fields such as Science, Technology, Engineering and Math (STEM). This constitutes a matter of great importance due to the loss of talent and reduced productivity and innovation that can result from the lack of sufficient female participation in STEM.

A selection process was applied to choose mentors and mentees working within the STEM areas so that the final list of participants comprises 3 postdoctoral researchers and 15 graduate or Master's students from each Brazilian university. This selection was based on their field of research and academic qualifications. The program has a six-month duration, ranging from May to October 2022. During this period, topics like female leadership, stereotypes, harassment and impostor syndrome ought to be discussed.

This program aims at reducing the gender gap in the STEM areas, promoting a support system for women in science, making the participants acquainted with the

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³ <https://www.pucrs.br/mulheresnaciencia/>



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challenges faced by minority groups and discussing strategies on how to overcome them.

2. METHODOLOGY

In this section, we outline the methodological approaches employed in the WIS mentoring program. It consists of weekly or biweekly online meetings among the mentors and their respective mentees to discuss a theme related to gender inequality and/or any personal or professional issues that the group may find relevant. The group discussions are thus largely based on the three C's methodology: clarification, communication and commitment (Ohmae 1991), in which the mentors make an effort to create a positive, trustworthy environment where feelings can be shared, ideas can be flourished, and a fairer working reality can be idealized.

In the first half of the program, the discussion topics were focused on gender stereotypes and harassment, which are obstacles to the advancement of women occupying leadership positions, affecting their self-esteem. For these discussions, we employed two types of materials: (i) articles, podcasts, videos; and (ii) narratives. The second part of the program will be focused on career development, through advice on how to improve soft skills, counteract imposter syndrome and expand our professional networking. The same methodology will be employed as before, and we will also receive some guest speakers - women who stand out as leaders in support of female empowerment.

Finally, the pod fiction "A saga de Carlota - A ciência como ela é"² guided most of our discussions because it portrays thoughtfully and entertainingly the most common disrespectful situations faced by women throughout their careers. Most of these situations resonate with the narratives collected from the participants from the WIS program.

3. FINAL CONSIDERATIONS

The reduced number of women in STEM is a result of multiple variables, including negative stereotypes. As early as second grade, girls carry stereotypes that associate boys with math (Cvencek et al. 2011), a serious issue, given that girls' perception of their mathematical abilities is shown to hinder their math performance (Huguet & Regner 2007). Cheryan et al. (2015) discussed at length how cultural stereotypes might also discourage girls from considering joining the STEM fields, listing issues such as discrimination in the field that prevent qualified women from receiving the same opportunities as men and girls being discouraged by teachers who might think a STEM career is more suited for boys.

Hence, it is crucial to create and maintain mentoring programs in Brazilian institutes focused on guaranteeing gender equality in STEM areas, and equal career opportunities for men and women. Such programs will prepare us to intervene when we see any situations involving bias and/or harassment against our peers, and develop the confidence to act. By targeting the female researcher community we aim to make it harder for the perpetrators. We are aware that other minority groups could also benefit from having more representation, but in this sense the WIS program already constitutes a milestone toward diversity in STEM and female empowerment in Brazil.



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