GENDER ISSUES IN SCIENCE FOR PHYSICS TEACHER EDUCATORS: THE CASE OF ANTONIA MAURY AND HER STAR CATALOG

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KEYWORDS: Gender Issues, Nature of Science, Science teacher educators

In the initial and continuous training of science teachers, the importance of addressing issues associated with the Nature of Science (NOS) is recognized. However, these issues are not usually incorporated into classrooms. This is often because Science teacher educators do not consider it necessary to make explicit the content of NOS, and the choices they make about these are influenced by beliefs, philosophical and socio-cultural issues (Wan et al., 2013). Particularly, in recent years, and thanks to the advance of gender studies in science and technology (Blazquez Graf & Chapa Romero, 2018), androcentric biases, among others, that subordinate and/or exclude people from production, education, and formation in science, due to their identity and/or sexual orientation, race, social class, age, etc., have been unveiled. In this sense, what is sought with the inclusion of gender issues in teacher training is to understand and transform practices and discourses of science teacher educators and future science teachers, with the commitment to promote and advocate for scientific and technological education for all.

The aim of this communication is to develop a proposal for Physics teacher educators, using the contributions of History, Philosophy and Sociology of Science in Teaching, with a socio-political perspective (Moura, 2021) and one that contributes to addressing gender issues in the initial and continuing teachers' training. Through the analysis of the exemplary historical case of the astronomer Antonia C. Maury (1866-1952) on spectral classification, which is considered the basis for the construction of the H-R diagram and the development of Astrophysics, the division of scientific work in Astronomy is problematized. This review led to a scientific narrative (Adúriz-Bravo, 2014) to take to the classroom. The documentary analysis reviewed the stellar catalog published in the annals of the Harvard Observatory: *Spectra of Bright stars* (Maury & Pickering, 1897), which is one of the first publications in which the authorship of a woman is recognized, and some second-source historical texts (Sobel & Pacheco González, 2017; Vieira et al., 2021). The scientific narrative incorporates discussions on 1) the gender division of scientific work, 2) the lack of an "objective" criterion for accepting certain methodologies and observations 3) the role of spectrometry in Astrophysics, and 4) communication and popularization in science. Finally, we conclude that these types of narratives are susceptible to be analyzed and adapted by science teacher educators, broadening the images of science, and making explicit questions about the NOS and Technology in initial and continuing teacher training.

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Proceedings of the IUPAP International Conference on Physics Education, ICPE 2022 5-9 December 2022, page 52, ISBN: 978-1-74210-532-1.