8 - Scientific Literacy and Socio-scientific Issues | Empirical

SP - (16385) - CONCEPTION OF BIODIVERSITY VALUES IN PRE-SERVICE SCIENCE TEACHERS ON A SOCIOSCIENTIFIC DISCUSSION

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Short Abstract

This study aims to assess pre-service teachers' values of biodiversity during a training course. The focal group was used as the methodological approach for stimulating the debate about the disappearance of bees, a socioscientific problem. This topic of discussion was chosen because it is caused by the indiscriminate use of pesticides in agriculture, and we are experiencing a moment of flexibility in the use of these chemicals in Brazil. Considering this context, it is necessary to highlight the discussion about the values of biodiversity, especially in a pre-service science teacher preparation course. The discussions were mediated by the questions: 1) What is the importance of bees for the environment and society? 2) What causes the bees to disappear? 3) Legislative aspects on the production and commercialization of pesticides in Brazil - What are the consequences for the environment and society? The participants' speeches were recorded, transcribed, and analysed according to four categories of biodiversity values: instrumental, eudaemonic, moral intrinsic, and absolute intrinsic. After the analysis, a total of 76 occurrences of values were identified (instrumental - n = 22, eudaemonic - n = 2, moral intrinsic - n = 25 and absolute intrinsic - n = 27). Scientific education plays an important role in the acquisition of biodiversity values, especially moral and absolute intrinsic ones. Hence, it is important to foster high-quality teacher training so that pedagogic practice promotes biodiversity values in children and teenagers. This study may contribute to educational propositions based on citizen empowerment for more just, ethical, and responsible actions regarding biodiversity issues.