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RESEARCH ABOUT THE ADAPTATION PROCESS OF ASTRONOMY DIDACTIC MATERIAL - THE DIARY OF SKY - FROM THE CONTEXT OF THE NORTHERN HEMISPHERE TO THE SOUTHERN HEMISPHERE

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This paper describes one of the phases of a broader research carried out by the Science Education Research Group (SERG) from State of São Paulo (UNESP, Brazil), which has evidenced the distance between the academic production of the area of Astronomy Education and the knowledges and practices of students and teachers in Basic Education. In this text, we seek to investigate the singularities found during the stages of translation and adaptation of a specific didactic material, in the form of a school diary – "Il Diario del Cielo" (Diário do Céu / Diary of Sky) -, originally created and idealized to the reality of the Northern Hemisphere (Rome, Italy) and adapted to the reality of the tropical belt of the Southern Hemisphere (Bauru, São Paulo, Brazil), as well as discuss the potential of this material, to work with concepts of phenomena related to Astronomy, in a training program of continuing training for in-service teachers in Secondary and High School in the area of sciences. Topics such as: the visible horizon, the time of birth, climax and sunset and the Moon, the duration of the day according to the time of year and the latitude of the place of observation, equinoxes, solstices, seasons, phases of the Moon, among others, are approached from a sequence of didactic activities developed with students, in regular schools, according to the bases of Position Astronomy. Among the results found, it is important to note that the need to record daily data from the active and systematic observation of the sky and the environment in a diary, besides revealing an interdisciplinary character, involving different areas of knowledge, also points to the need to diagnose, discuss and reflect on the teacher's difficulties in managing the contrast between the times of astronomical phenomena (day / night cycle, lunar cycle, seasons, eclipses, ...) and those of the school, between open spaces for the sky and the confinement of classrooms in schools, making the task of teaching about astronomical content more difficult. It also points out the reduced expectation of teachers in relation to teaching about the relations of similarities and spatio-temporal differences between the realities of the contexts of the North and South Hemispheres, compromised by the way and the quality - or even by the inexistence - of the initial formation of the teachers, which leads to the incipient domain of disciplinary and pedagogical knowledges focused on astronomy and sometimes the feeling of incapacity and insecurity, when working with the subject in schools.

Apply to be
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No

Level for award
 (Hons, MSc,
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N/A

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