

ORIGIN OF THE UNIVERSE: SPEECH BY TEACHER GRADUATES IN PHYSICS

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This presentation reports on work in the context of a Master's thesis whose research aims were to investigate and analyze the discourse of teachers, graduated in physics, on the theme "origin of the Universe", aiming at increased understanding of the processes of teacher training and their practice in the classroom regarding this subject. The data were collected through interviews with teachers who graduated from a physics course at the same public university, with the same curriculum.

The research included questioning about the autonomy of teachers graduated in Physics to approach the theme "origin of the Universe" in the classroom, both in relation to the teacher's knowledge on the subject and in relation to the possible epistemological and cultural conflicts that may arise with the discussion. The semi-structured interviews were conducted through open questions that guided the dialogue in aspects of teacher training and practice.

The theoretical premise of the research was based on authors who are a reference in the discussion of the nature of science, the most accepted theories about the origin of the Universe, and areas of knowledge and teacher training and practice (Bock et al., 1999; CERN, 2022; El-Hani & Bizzo, 1999; Freire, 1996; Sepulveda & El-Hani, 2004; Souza, 2007). The data analysis was performed based on the Pecheutian Discourse Analysis theory (Orlandi, 2015).

The analysis of the interviewed teachers' discourse allowed conclusions that are directly related to the research objectives. Most teachers showed a lack of approach to the theme "origin of the Universe" in their academic training, since they consider the approach to the topic in Basic Education interesting, and would need specific secondary training to plan the discussion with their students. In addition, it was possible to identify in the conversations with most teachers interviewed, the imminence of cultural and epistemological conflict in relation to the positioning of students, teachers and educational institutions, demonstrating insecurity in approaching the topic due to lack of knowledge and the need for skills that would provide conflict management.

From the inferences on the interviewees' discourse, we can identify the search for impartiality of the teachers in the discussion of the theme and the care for the approach of different theories for the origin of the Universe, demonstrating the intention to allow space for different personal manifestations of the students. It is also worth mentioning the preference of most teachers for the approach of the theme focused on the epistemological discussion of science, and not just a specific scientific study on the physical aspects of the origin of the Universe.

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