PÔSTER - RESUMO - DIVULGAÇÃO

SCIENTIFIC LITERACY FOR TEACHERS/EDUCATORS IN THE EARLY YEARS OF ELEMENTARY SCHOOL

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The central focus of this project is the scientific literacy of primary school teachers (pedagogues) working in the early years of Elementary Education in Curitiba, PR. A significant structural challenge in Brazilian teacher education is identified: the lack of in-depth training in Natural Sciences during undergraduate Pedagogy degrees. This gap often generates professional insecurity when addressing complex scientific phenomena, directly compromising the quality of student learning. Thus, the project is grounded in the imperative to democratize academic knowledge, transforming the university into a proactive agent of social transformation and professional empowerment. The primary objective is to provide continuous, high-quality professional development for municipal teachers by effectively integrating university research into the daily school routine. Specifically, the initiative seeks to expand the teachers' methodological repertoire through hands-on experimentation strategies, facilitating the didactic transposition of abstract scientific concepts into an accessible language suitable for children. Furthermore, it aims to foster an investigative pedagogical culture, as strictly advocated by the National Common Curricular Base (BNCC). The proposal, developed within the UTFPR Curitiba campus, utilizes active learning methodologies and experimental practices. The program is structured into four immersive in-person workshops, totaling 16 hours of direct training. The

sessions cover fundamental themes such as Optics, Electricity and Magnetism, Astronomy (scales and orbits), and the Structure of Matter. Each workshop carefully alternates between theoretical foundations and the execution of low-cost experiments using accessible materials like cardboard, aluminum foil, and graphite. This approach ensures that these innovative practices are fully replicable within the socio-economic reality of public schools. Additionally, Google Classroom serves as a vital virtual environment for the ongoing exchange of experiences and long-term pedagogical support. By providing these robust strategies based on experimentation, the project has successfully narrowed the historical gap between theoretical academic knowledge and the classroom environment. Consequently, it has established a sustainable path of bilateral exchange between the practical realities of daily teaching and high-level university investigation.

Palavras-chave: scientific literacy; pedagogues; didactic transposition.