

THEORETICAL-PRACTICAL INTEGRATION IN SUPERVISED INTERNSHIPS: STRATEGIES FOR DEVELOPING CRITICAL THINKING IN SCIENCE AT THE ELEMENTARY SCHOOL LEVEL

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The supervised internship for Biological Sciences licensure students is an essential and mandatory component nationwide, as established by the law Diretrizes e Bases da Educação Nacional (LDB) N°. 9.394/96. According to RESOLUTION No. 7/2015 – CONSUNI/CGRAD, the conception of the internship, as described in Art. 3, defines that "The Internship at the Federal University of Fronteira Sul is conceived as a time-space for guided and supervised theoretical-practical formation"¹ involving the mobilization of a set of academic and professional Knowledge. This provides a unique opportunity for academic, professional, and social reflection. The experiences gained during the initial classroom management process allowed me to adopt a more critical perspective on teaching practice. In this context, I identified that science education should meet two main objectives: to promote the understanding of the interactions between Science, Technology, and Society, and to foster the development of critical thinking skills in students. This enables them to make informed decisions and solve problems, particularly in personal and social contexts. This study aims to present an innovative methodology adopted during the supervised curricular internship in Science at the Elementary School level, with the purpose of enriching experimental activities and expanding the understanding of natural phenomena. The central focus is on promoting investigative thinking among students, emphasizing the formation of critical, conscious citizens capable of making informed decisions about social, scientific, and environmental issues. The proposed methodology is based on the use of paper strips containing problem-based questions, distributed over seven sessions for 6th and 7th grade classes. A total of 105 strips were distributed for the 6th grade, addressing the theme "Experimental Practices in Natural Sciences," and 140 strips for the 7th grade, addressing the theme "The Composition of Air." These strips allowed students to individually record their hypotheses, encouraging critical reflection based on the complexity faced by each student. The methodology followed four main stages: (I) presentation of a problem situation; (II) execution of practical activities; (III) conduction of dialogued expository classes; and (IV) analysis of physical, chemical, and biological processes, considering their social, environmental, and technological impacts.

¹ UNIVERSIDADE FEDERAL DA FRONTEIRA SUL (UFFS). **Resolução nº 7/2015 – CONSUNI/CGRAD**. Aprova o Regulamento de Estágio da UFFS. Art. 3º, Chapecó, 13 de agosto de 2015. Disponível em: [[RESOLUÇÃO Nº 7/2015 – CONSUNI/CGRAD Aprova o Regulamento de Estágio da UFFS. A Câmara de Graduação do Conselho Universi](#)]. Acesso em: [15/08/2024].

The results showed active participation from 70% of the students in discussions, as well as the production of reports demonstrating the correct application of the scientific concepts addressed. The methodology proved effective both in content assimilation and in the development of critical skills among students, highlighting the relevance of experimental activities in scientific education. When based on solid foundations, these practices allow for the understanding of complex phenomena and the enhancement of critical thinking. In light of this, the supervised internship is presented as a crucial stage in teacher training, providing experiences that enrich professional development and knowledge construction. The main focus is on the effective integration of theory and practice, which has proven successful in promoting a critical and emancipatory education, aiming to form autonomous and reflective citizens.

Keywords: Supervised Internship; Innovative Methodology; Critical Thinking; Scientific Education.

Field of Knowledge: Biological Sciences

Origin: Teaching.

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