

**TITLE: DEVELOPMENT OF PEDAGOGICAL DIDACTIC KIT FOR THE TEACHING OF MICROBIOLOGY IN SCHOOLS OF BASIC EDUCATION**

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**ABSTRACT**

Microbiology in Brazil is content included in the basic high school curriculum. However, it is observed that, in most schools, microbiology classes are conducted in a traditional way, a fact that may not favor meaningful learning. The absence of effective teaching-learning strategies makes it extremely abstract for students to study microorganisms, which makes it necessary to develop methods that provide effective teaching of microbiology. The present work aimed to create a practical kit to optimize the teaching of microbiology in the classroom in schools without specific laboratory for this purpose. Was used a action research, carried out in two educational institutions of the Minas Gerais state. The study investigates the skills necessary for meaningful learning of microbiology in schools, presenting as an intervention measure the production of a kit of nine practical classes, composed of simple inputs for use in the classroom, three of which were chosen for use in theoretical-practical classes for 200 students. After a bibliographic search for the cataloging of records and scripts of practical experiments in microbiology, possible to be carried out in school space, an application was produced for mobile phones, where were the kit was inserted as lesson plans in conjunction with literary and mediatic findings about the subject for use by the teacher and also by the students. As a practical result, the optimization of class time was obtained, since the content of the three classes chosen was understood by the students in a reduced time, and there was a greater consolidation of the skills worked, when compared to the traditional approach. During the dynamics students perceived an increase in interest in the content and development of many curiosities that, when they were healed by the teacher, culminated in a great increase of the knowledge acquired. They presented satisfaction in the use of the method, reporting that it is more attractive and dynamic than the traditional one. Thus, as an educational product, there was the promotion of the amplification of the knowledge of high school students about the importance of microorganisms. It was concluded that the method was satisfactory and met the goal of making microbiology teaching more efficient in the training of students and that the kit can be made available to Biology teachers for use in schools without laboratories to be associated with theoretical discussions in their classes.

**Keywords:** microbiology; teaching-learning strategies; practical classes; absence of laboratory; Biology study.