Microbiology is one of the largest and most complex of the biological sciences because it deals with many diverse biological disciplines. Interdisciplinary can be important in teaching microbiology because provides an opportunity for creative and collaborative learning. The project “Methodological Strategies of Teaching and Learning in Integrated Thematic Axis Biodiversity of Biology Course: Integration of Modules Living Beings I and II” aimed to promote interaction among undergraduate students of Licentiate in Biology-UFPA with teachers and students elementary and high schools in the Metropolitan Region of Belém as well as diversify teaching-learning activities in these modules. The methodology consisted in the organization of class in thematic groups that under the guidance of a teacher proposed pedagogical didactic activities on topics discussed in these modules/disciplines. The strategy culminated with the presentation of the activities developed in the event named “University Open Doors: Man and Biodiversity” held in physical space and university infrastructure. Questionnaires were applied with evaluative questions for participants. The undergraduates have developed didactic material about viruses, bacteria, fungi, algae and parasites. The accomplished educational activities included: lectures, microscopic observations of microorganisms and several activities of stamp ludic and the elaboration of didactic material such as folders, didactic games, musical parody and educational models. Participants included 47 (graduate students) and 177 students of elementary and secondary education, which together with their teachers were able to share diversified activities on microbiology. The graduates experienced a pedagogic practice involving teaching-research-extension. The strategy allowed these students to explore their creative potential for the development of alternative, ludic and differentiated teaching methods. Besides contributing to better understanding on the subject explored as well as their teaching formation. The elementary school students actively participated in the appropriation of knowledge about a subject often difficult to understand. The experience was motivating and useful for undergraduates, and allowed the partnership university and public school.

Keywords: Microbiology, teaching-learning, Biology

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