INTERACTIVE APPROACH OF MICROBIOLOGY

Authors: Cagali, G. C. ¹, Peçanha, M.P. ¹,², Moraes, S. G. ¹, Grince, T. ¹

Institution: ¹ PUC SP- Pontifícia Universidade Católica de São Paulo (Rua Joubert Wey, 290- Jardim Faculdade- 18030-070 – Sorocaba- SP) , ² UNISO- Universidade de Sorocaba (Rod. Raposo Tavares Km 92,5 - Sorocaba São Paulo).

Introduction: In a scenario where it’s allowed the approximation and integration of subjects, there is real fostering of the involvement of the students the process of sharing and collective construction of knowledge valuing their role as protagonists of their learning, which happens through their active participation and the sharing of their life context with the others. The technological tools can favor this innovation and get into action in the educational process for the construction of experiences that, otherwise, would be of impossible or difficult realization. Therefore, facing this context the learning environment should be updated accordingly incorporating the technological tools.

Objectives: To elaborate educational software as a facilitator of teach-learning in Microbiology.

Methods: It was developed a basic module of Microbiology, approaching the historical aspects of Microbiology, the taxonomic aspects and morphological characterization of microorganisms, emphasizing the techniques and microscopy types. Later it was created a database of information and images to subsidize the presentation of the content through the software. Programs of image, illustration and animation editing from Adobe Photoshop CS5, Adobe Flash Professional CS6 were used for the elaboration of the software. After the construction of the learning tool, this was used in Microbiology classes from majors in environmental and health areas from Sorocaba University and then evaluated by the students through a questionnaire. Due to this, the project was first presented to the Ethics Committee on research from the FCMS of PUCSP.

Results: The software was applied in two classes of Microbiology. In the first group students were taking a specific Microbiology class and had already been to a basic Microbiology class and the activity was applied as a review of the content. In the second group student were in a Microbiology class in the first time. Its use was considered positive, although the evaluation varies according to the profile of the user group.

Conclusion: The teaching of Microbiology needs innumerous information and images that illustrate an abstract content and that needs to shape to be understood by the student. The incorporation of technology to learning strategies help in this process.

Key Words: basic microbiology, educational software , technological tools .