

Using Social and Mass Media to Enhance Teaching and Learning of Microbiology and Strengthen Social Involvement of IBILCE'S Microbiology Graduate Program

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Introduction In Brazil, the national plan for graduates for the period 2011-2020 seeks to promote the application of cutting-edge knowledge in social sectors where issues affect the quality of life. Brazilian Federal Law no. 9394 of 1996 determines that teaching, research and extension are inseparable activities. Research lines of IBILCE's microbiology graduate program are engaged with regional development and so experiments with social media and mass media as tools to improve the teaching and learning process are scarce. **Objectives** This project had three main objectives: (i) to enhance teaching and learning of microbiology, (ii) to engage students in training activities of microbiology and (iii) to use social media and mass media as communication tools to strength social involvement of IBILCE's microbiology graduate program. **Material and methods.** A team of students from the biological sciences, microbiology, modern languages and journalism was formed. A project including budget and schedule of activities was designed. Among mass media, a newspaper called "PósMicro" and a radio program named "On the world of microbes" were created. As social media, a site in a social network was constructed. Meetings to publicize proposed activities were held. A review of the literature and previous experiments were consulted. Three opinion polls were conducted. **Results and Discussion.** A partnership with a state of São Paulo technical school to teach microbiology was signed. 10 editions of the newspaper PósMicro with 500 copies each were designed and published. 15 scripts were written and the same number of radio programs broadcast on basic topics such as ubiquity of microorganisms, human dependence on microorganisms, microorganisms in the context of disease, environmental importance, biotechnology applications, etc. The teaching of microbiology in the public school was useful to get to know and understand the context about popular microbial myths, common misconceptions about microbes, expectations of the population in this area of science and the need for specific teaching. The use of the media showed the importance of the use of non-technical language to better reach the public in general. Polls showed that themes of medicine and the environment were among the most interesting for people. **Conclusions.** The social and mass media were important tools to enhance teaching and learning activities and strengthen the social involvement of IBILCE's microbiology graduate program.

Keywords: Microbiology Teaching Enhancement, Mass communication tools, University-company-government partnership.