

TITLE: PLAYING AND LEARNING: THE USE OF THE "MICROBIAL BINGO" AS A STRATEGY FOR TEACHING-LEARNING MICROBIOLOGY

AUTHORS: BRITO, A.B.; FELIX, I.C.G.; NUNES, B.E.B.R.; MELO-NETO, R.D.; TAVARES, B.E.D.; OLIVEIRA, T.F.; SILVA, L.A.; LIMA, J.V.M.R.; QUEIROZ, A. C.; DUARTE, A. W.F.

INSTITUTION: UNIVERSIDADE FEDERAL DE ALAGOAS, *CAMPUS* ARAPIRACA, AL (AVENIDA MANOEL SEVERINO BARBOSA – CEP 57309-005, ARAPIRACA – AL, BRAZIL)

ABSTRACT:

Microbiology is a fascinating science and present in man's daily life. However, the didactics used in this science are often abstract, without a meaningful comprehension by the students. The reason of this difficulty is because this science studies the organisms that can only be seen with the help of microscopes, and sometimes, the subject matter is covered in the classroom with a theoretical approach and away from the reality of the student. One of the methodologies that contributes for a meaningful comprehension is the gamification, since it values the participation of the student in the process of teaching and learning and makes it fun. Therefore, the objective of this work is to report the experience of hosting a "Microbial Bingo" with students from the 4th grade in an elementary public school from Arapiraca, Alagoas. Initially, the bingo cards were made using didactic, easy-to-understand and enumerated images in order to facilitate the association. Among the images, there was yogurt, cheese, vaccine and tooth decay. Sentences related to the enumerated images replaced the conventional balls with the bingo numbers, so that the students could associate the information with the corresponding image. Different bingo cards were distributed to students and the academics of medical school and biology from the "Microbial World" Project selected and read the sentences associated with the cards' contents, one at a time. The students had to understand the sentence and associate it with the informations of the cards. One of the sentences was "I am a good bacterium and I produce cheese and yogurt" and the corresponding image was a bacterium with the name of *Lactobacillus*. The "Microbial Bingo" proved to be a very interesting tool in making the comprehension of Microbiology easier, besides stimulating students' curiosity and being able to increase the cognitive capacity of its participants. This particular type of gamification in Microbiology makes classes more dynamic and comprehensive, being a differential in motivating the study of an often abstract and distant world. Besides that, the contribution of the University in the community is also evident, having an effective social and educational role.

Keywords: Gamification, Children education, Experimental activities

Development Agency: Pró-reitora de Extensão da Universidade Federal de Alagoas