TITLE: METHODOLOGIES IN TEACHING MICROBIOLOGY IN TIMES OF PANDEMIC

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ABSTRACT:

Teaching microbiology classes during the Covid-19 pandemic is challenging, mainly due to social distance measures. However, the use of diversified methodologies became a creative possibility to build knowledge through interaction among students. Thus, this study aimed to highlight the importance of diversifying the methodologies adopted to teach General Microbiology and Food Microbiology classes during the Covid-19 pandemic, showing its relationship with how students learn. The experience was carried out with students of the High School integrated in Food Technician of the Federal Institute of Santa Catarina, through emergency remote teaching. The methodology used for data collection was the observation of the students' interaction during the course, complemented by research made through an electronic form, on how these students better learn the knowledge of microbiology. The classes was synchronously-delivered, using the google meet platform, and asynchronously, providing written material for reading, medium duration video classes (up to 20 min), and diversified assessment activities (mental maps, questionnaires, videos, written work from research in scientific materials and discussion forum). The practical activities were conducted by the professor in the laboratory and recorded, being made available during synchronous or asynchronous meetings. The main results were: 1) to diversify the methodologies that make it possible to develop the multiple intelligences of students; 2) when Mentimeter and Kahoot tools were used, more than 90% of students participated in the activities; 3) the evaluative activities, as they are diversified, were carried out by 95% of the students, indicating that the interaction allows for more significant learning; 4) the diversification of teaching resources motivates students, makes the teaching-learning process more dynamic and expands pedagogical mediation; 5) most students confirm that they learn microbiology contents better when the teacher uses written material, video classes and live classes interspersed, and evaluative activities, that is, when the teacher inverts the logic of traditional teaching, differently to make students participants in the learning process.

Keywords: Meaningful learning. Teaching methodology. Teaching strategies. Emergency remote teaching.