

## Challenge in Teaching Physics during the Pandemic: Another Way of Teaching and Learning

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**Abstract :** The objective of this work is to analyze how physics can be taught remotely through the use of platforms and software to attract the attention of 2nd-year high school students at Colégio Cívico Militar Professor Carmelita Souza Dias and point out how remote teaching can be a teaching-learning strategy during the period of social distancing. Teaching physics has been a challenge for teachers and students, permeating common sense with the great difficulty of teaching and learning the subject. The challenge increased in 2020 and 2021 with the impact caused by the new coronavirus pandemic (Sars-Cov-2) and its variants that have affected the entire world. With these changes, a new teaching modality emerged: remote teaching. It brought new challenges and one of them was promoting distance research experiences, especially in physics teaching, since there are learning difficulties and it is often impossible for the student to relate the theory observed in class with the reality that surrounds them. Teaching physics in schools faces some difficulties, which makes it increasingly less attractive for young people to choose this profession. Bearing in mind that the study of physics is very important, as it puts students in front of concrete and real situations, situations that physical principles can respond to, helping to understand nature, nourishing and nurturing a taste for science. The use of new platforms and software, such as PhET Interactive Simulations from the University of Colorado at Boulder, is a virtual laboratory that has numerous simulations of scientific experiments, which serve to improve the understanding of the content taught practically, facilitating student learning and absorption of content, being a simple, practical and free simulation tool, attracts more attention from students, causing them to acquire greater knowledge about the subject studied, or even a quiz, bringing certain healthy competitiveness to students, generating knowledge and interest in the themes used. The present study takes the Theory of Social Representations as a theoretical reference, examining the content and process of constructing the representations of teachers, subjects of our investigation, on the evaluation of teaching and learning processes, through a methodology of qualitative. The result of this work has shown that remote teaching was really a very important strategy for the process of teaching and learning physics in the 2nd year of high school. It provided greater interaction between the teacher and the student. Therefore, the teacher also plays a fundamental role since technology is increasingly present in the educational environment, and he is the main protagonist of this process.

**Keywords :** physics teaching, technologies, remote learning, pandemic

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