

# Teaching Physics in Middle School

Lopez Lopez, Julio (School: Preparatoria UAS Guamuchil)

In Mexico, there is an aversion situation of middle school students towards science. The above is reflected in the failure rates according to PISA (Program for International Student Assessment), where our country obtained 416 points in sciences in 2015, ranking at level 2. In average, the OECD countries (Organisation for Economic Co-operation and Development), obtained 493 points (level 3) (INEE, 2016). The central point of this problem is that the student is not achieving the meaningful learning; Therefore, the main objective of the project is to improve the teaching of Physics in middle school. The research is qualitative with a phenomenological design. The sample was 8 Teachers of Physics, 4 women and 4 men of a public middle school in Guamúchil, Sinaloa. Were used a qualitative observation, a semi-structured interview analysis, perception analysis by categories and surveys to students. Combining Piaget, Vygotsky, Ausubel and Bruner theories, with didactic resources: technological, playful and experimental, a book of didactic sequences based on the inquiry model was designed, as well as a workshop for physics teachers, with the purpose of using in their classes the proposed methodology. As result, the teachers applied the methodology instructed in the workshop and argued that their students participated actively and achieved meaningful learning in classes. Some of the most impressive responses offered by teachers are: "My biggest satisfaction is being able to involve students in the learning of Physics" and "I have found the ideal method to teach Physics".