

The role of the lab tutor: a positive experience in the Physics Laboratory for incoming students in 1st year courses.

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This work is part of a study which main aim is to gain knowledge about students' learning in a physics laboratory where we strive to use effective, interactive learning techniques to engage students in Physics. The present work was carried out during three consecutive academic years with students in their first year of Industrial Engineering degree (University of Malaga) and is based on the lab tutor role for helping students during the laboratory sessions scheduled for the *Physics II* subject. First year students tend to be particularly difficult to teach and the lack of experience in practical work and problem solving and a lack of mathematical skills are the greatest cause of difficulty for incoming students. This study highlights the importance of training tutors for the laboratory sessions to effectively deal with this unique cohort. Taking into account the survey results we have collected on the students' perception of the value of laboratory work and the role of the lab tutor, we can conclude that the proposed activity was well received by the students and it has proved to be a valuable experience for both tutor and tutee. Furthermore, the lab tutoring approach can be implemented with a minimal financial cost or staff time, except for the initial training of the tutors.