



## Experiential Learning in the UPM Engineering

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The implementation of the European Higher Education Area (EHEA) raises the need for teaching based on individual characteristics, and in order to meet this requirement it is necessary for students to have flexible and individualized forms of learning, which promotes learning styles (LS) should be taken into consideration. It can not be forgotten that students' EE preferences are linked to performance and satisfaction with the study (Amir and Jelas, 2010).

Given that students will work in changing situations, it is important that, through classroom and/or laboratory practices, they develop competencies that make them effective in all styles. And since a variety of styles will come together in the classroom, the teaching practice must accommodate each and every one of them. Remember that no style is better than another, and that all are complementary (Reid, 1995).

Due to certain factors and others such as the lack of knowledge of their LS, the students of the different educational institutions do not have a good assimilation of the knowledge, that the teachers in their different areas provide them, originating in certain cases, an academic low performance. The aim in this work is to identify the LS of the engineering students at "Universidad Politécnica de Madrid" (UPM) in different grades, courses and subjects.

According to Kolb, 1984, cited by Kazu (2009), LS are measured using a scale known as the Learning Style Inventory (LSI), which measures different forms of learning based on four types of learning processes related to each other. The LSI in its original format was composed of 9 items, which was subsequently modified to a 12-item version, which is what we will apply in this study. The questionnaire asks the respondents to order four final phases that correspond to each of the four LS. The scores of the instrument reflect the relative emphasis of the people in the four orientations of learning and allows to categorize according to the corresponding learning style (Cassidy, 2004).

The results of this test are showed and several conclusions are reached taking in account the grades and courses.

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