



Collaborative Learning for ICTs in Agro-Forest Engineering Studies: a study case based on workshops carried out by undergraduate students

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Collaborative learning continues to attract interest because it offers to the students opportunities to acquire valuable interpersonal and teamwork skills and active engagement in the study subject (Barkley et al., 2014). The current environmental challenges and the characteristics of labor market associated to Engineering and Geosciences must also promote the learning of technical knowledge and training aimed at solving real professional situations (Taguas et al. 2014).

In this work we present an evaluation of a series of workshops carried out during two academic courses (2017 and 2018) by undergraduate students to explain their peers how to handle Information and Communication Technologies (ICTs) which they considered helpful. The workshops were associated to the subject “Computer tools in Forest Engineering Projects” corresponding with the last course of the degree of Forest Engineering of the University of Cordoba (Spain). The aim was to present practical sessions about softwares and technological tools, not included in the teaching guide but helpful in improving their professional backgrounds. Although the participation as attendants and speakers was voluntary, the students who contributed to present practical session were awarded with additional scores on the final mark. In addition, a merit certificate and the opportunity to get involved in the present communication were other incentives for the success of the both workshops. Despite the lack of quantitative indicators about the experience, all students and teachers valued enthusiastically the usefulness of the tools and the applications presented, particularly, LaTeX (<https://www.latex-project.org/>) and R (<https://www.r-project.org/about.html>) languages for the preparation of their degree thesis.

REFERENCES:

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- Taguas E.V., Falconer R., Tarquis A.M. 2014. Engineering education on geosciences in a changing world. *European Journal of Engineering Education* 39 (5), 463-466.