



Integrating different knowledge sources and disciplines for practical applications in Forest and Agricultural Engineering

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One of the aims of 'The Bologna Process' is to promote among the students the acquisition of practical, social and creative skills to face real-life situations and to solve the difficulties they might find during their professional life. It involves an important change in the educational system, from a traditional approach focused on teaching, towards a new one that encourages learning. Under this context, University teaching implies the design of activities addressed to the dissemination of "know-how" to solve different problems associated with two technical disciplines: Forest and Agricultural Engineering.

This study presents a preliminary experience where a group of information and communication technologies (ICT) such as, audiovisual resources (videos, reports and photo gallery), virtual visits to blogs and interactive activities have been used to provide a comprehensive knowledge of the environmental and sociocultural components of the landscape in order to facilitate the decision-making process in the engineering project context. With these tools, the students must study and characterize all these aspects in order to justify the chosen solutions and the project design. This approach was followed in the analysis of the limiting factors of practical cases in projects about forestation, landscape restoration and hydrological planning.

This communication shows how this methodology has been applied in Forest and Agricultural Engineering and the students' experience with these innovative tools. The use of ICTs involved a friendly framework that stimulated students' interest and made subjects more attractive, since it allowed to assess the complex relationships between landscape, history and economy. Furthermore, this type of activities promotes the interdisciplinary training and the acquisition of creative and autonomous skills which are not included in many cases into the main objectives of the subjects.