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One project of Educational Innovation applying news Information and Communications Technologies (ICT): CyberAula 2.0

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The main objective of the CyberAula 2.0 project is to support, record and validate videoconferencing and lecture recording services by means the integration of the Polytechnic University of Madrid (UPM) Moodle Platform with both the Global Plaza platform and Isabel videoconference tool. Each class session is broadcast on the Internet and then recorded, enabling geographically distant students to participate in on-campus classes.

All the software used in the project is open source. The videoconferencing tool that we have used is called Isabel and the web platform to schedule, perform, stream, record and publish the videoconferences automatically is called GlobalPlaza. Both of them have been developed at UPM (Universidad Politécnica de Madrid) and are specifically designed for educational purposes. Each class session is broadcasted on the Internet and recorded, enabling geographically distant students to participate live in on-campus classes with questions through a chat tool or through the same videoconference. In order to provide educational support to GlobalPlaza, the CyberAula 2.0 project has been proposed.

GlobalPlaza (Barra et al., 2011) is the web platform to schedule, perform, stream, record and publish videoconferences automatically. It is integrated with the videoconferencing tool called Isabel (Quemada et al, 2005), which is a real-time collaboration tool for the Internet, which supports advanced collaborative web/videoconferencing with application sharing and TV like media integration. Both of them are open source solutions which have been developed at our university. GlobalPlaza is a web application developed in the context of the GLOBAL project, a research project supported by the European Commission's seventh framework program. Students can review the recording lectures when needed through Moodle.

In this paper we present the project developed at the Escuela Técnica Superior de Ingenieros Agrónomos (ETSIA), Secondary Cycle free-elective-subject, which is currently in process of expiration with the introduction of new curricula within the framework of the European Higher Education Space. Students participate in this subject with outstanding interest, thus achieving transversal competences as they must prepare and present a report in the last week of the Semester.

The Project development background was the inclusion of the subject Plants of agro-alimentary interest. It has a quite remarkable, attractive practical deal within the Subjects Offer by this Center and it is one of the most demanded subjects of the free elective ones by students, whose active participation can be highlighted, either in practical workshops or in their individual presentation of reports. In the workshops they must identify, describe, classify and even taste several species of agro-alimentary interest (fruits of tempered or tropical regions, aromatic plants and spices, edible mushrooms and cereals and pseudocereals), many of them formerly unknown for the majority. They are asked to fill some questionnaires in order to consolidate concepts and to evaluate their personal participation in the subject development.

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