2. Learning geography on the cloud and outdoor learning

The interaction between the Teacher and Learner has two main characteristics: 1. The use of the OER platform, GeoVirtual Online (GEO), which is very useful for collaborative work, for learning-based projects and the flipped classroom. 2. Outdoor learning and field content is essential for spatial thinking. Mobile devices have made it possible to collect the necessary data to do Web Mapping on the cloud. It is cartographic on GEO with different story-telling topics. Some good practice was carried out with secondary school students and other work with pre-service teachers or teachers in service, who were the students.

The dissemination of all these activities and materials was performed with Web 2.0 tools such as YouTube or Dr. Laso channel on or the appmatteo of Madrid. The results have become a Web page on GEO and the OUCM virtual campus. Then, all the projects are online in a story-telling map on GeoVirtual Online (GEO) of the Compleutense University of Madrid.

The general objective of any project has been to improve geographic competences and learning area: digital competences, spatial thinking and geographical concepts focused on landscapes with an emphasis on methodology and collaborative strategies, as well as on the new educational models of teaching. The teachers are from different universities.

Well mapping created from data collected on outdoor learning and creating online timelines "Learning Spanish Geography with the Web 2.0" PINCD 14/15, where the approach to the landscape was done using timelines and contents on the image sources. We can mention the main project: "Learning Geography with Web 2.0" through the development of an agricultural landscape of Spain" PINCD 08/14, with this methodology.

Methodology used during the last cloud project: Concept map prepared by Dr. M.L. Laso with conceptual tools.

3. Conclusions

These activities have contributed to fulfilling the objective of increasing the use of the cloud to achieve geographic competences. As a result of the experience shared between the Teacher and Learner, a number of good practices were created. This experience will continue in the future, thus contributing to the aims and conclusions that are elaborated in the European School on the cloud network. Conceptual Education to the Cloud for Digital Citizenship.

Active methodology used integrating the cloud and outdoor learning has been very useful in learning geographic concepts in order to improve students’ attitudes to the present and sustainability considering the cloud digital earth and the real Earth.

Work on the cloud facilitates collaborative learning improving good practices focused on sharing and using cloud information. This is a general rule for education at all levels. University higher education, secondary or primary education. Geospatial thinking and basic competences could be improved by using connected virtual cloud computing lessons not only with educators in mind but also for developing professional skills.