THE ASSESSMENT PROCESS AS A CORNERSTONE OF QUALITY ASSURANCE IN HIGHER EDUCATION: THE UOC CASE

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Introduction

The accreditation system of Higher Education degrees is currently being shaken by new types of learning resources and educational courses. Internet has long since opened a new scenario for teaching and learning processes which are promoting rethinking of, and new insights about quality assurance. Universities are analysing the impact of new net-based course formats and approaches such as MOOCs, and their corresponding certification. Blended or fully online learning environments are being extended across educational institutions. This requires, then, that the educational system ensure the quality of these new learning processes.

Although teaching and learning processes are being analysed, the impact of the e-assessment has not yet been satisfactorily scrutinized. The assessment process should be considered as the core element for credibility and accreditation of Higher Educational institutions. The assessment process is the road map for accrediting and ensuring learner competences. Universities are nowadays certifying degrees based on quantitative and qualitative scores, without considering assessment and ICT opportunities as factors that can contribute towards the evolution our system.

According to the Bologna competence-centred model, the assessment process will be the challenge with respect to previous stages of the European educational system. The Information and Communication Technologies that teachers are employing in their daily tasks are enhancing learning methodologies; nonetheless, new approaches need to be considered from the perspective of e-assessment.

The Assessment Process as a Quality Accreditation

In this paper we propose to analyse the assessment process as a quality accreditation tool based on two main premises: the educational and technological ones. Both should be the indicators for assuring and increasing the credibility and quality of the educational system.

On the one hand, a formative and continuous assessment model is the most suitable approach to analyze competences acquired through learning activities or examinations. On the other hand, technology can help us improve the assessment processes by introducing new resources and tools from other industry sectors. We believe that ICTs can make the educational system

more reliable and credible as their use can improve the authentication and authorship of learning acquired over the net. This is why we believe that the e-assessment process is a cornerstone of European Higher Education.

The Universitat Oberta de Catalunya (UOC) is an Internet-based university with a virtual campus which offers the entire span of higher education degrees – Bachelor's, Master's and Doctorates – fully online. The UOC was born 20 years ago with the mission of providing people with lifelong learning and education opportunities. The institution's mission is to help individuals meet their specific and ongoing learning needs, and to provide them with full access to knowledge, overcoming the usual time and location constraints. Our learners are disseminated across the world. The main goal of our case study is to define and to analyse an e-assessment system, focusing on the process of learner's authentication and activities' authorship in online and blended learning environments. The conducted pilots reduced some face-to-face examinations and allowed for an increase in our on-line learning activities based on a continuous assessment model, while ensuring the quality of the assessment process itself.

During two academic courses several methods and techniques were applied in two pilot studies involving 200 students in a real environment. The first pilot proposed a continuous assessment model with new tools and resources in learning activities. These tools added some new techniques to capture learner data. They were based on learners' authentication elements (such as learners' identity, personal digital certificates and facial recognition) and learners' authorship identification through activities (textual forensic analysis, plagiarism from the net, keystroke patterns…). The second pilot included the previous models and techniques in an e-assessment prototype for performing activities and final examinations. To sum up, we analysed whether our learners are who they claim to be and if the activities were indeed executed by them in a virtual learning environment.

Preliminary Results

Results from our study can be analysed from three different points of view: the student's, the teacher's and the university's. From the students' point of view, preliminary results indicate that they feel more comfortable with a fully online assessment instead of moving to physical university premises. For that reason, they feel comfortable in providing the personal data needed for personal authentication (photograph, voice recording and a keystroke record). Furthermore, the verification techniques included in the pilot reinforce the student's trust in the rigour of the assessment system and, subsequently, in the degree certification.

Teachers, on the other hand, realize that in order to reduce the face-to-face processes of assessment, learning activities and assignments should be carefully designed with this goal in mind with the help of adequate ICT tools. Furthermore, teachers also notice that the possibility to collect evidence and additional information on the academic progression of their learners allow them to assess their improvement ways even better than available in face-to-face scenarios, where some of this information cannot be obtained.

From the university point of view, adding student authentication tools and authoring analysis to an e-assessment process improves the quality of the assessment and allows the university to truly verify that competences are acquired by the learners being awarded academic credentials through activities. The tested e-assessment system provides increased credibility to the university and greater recognition from both the educational community and society.

UOC wants to share with EDEN audience its study cases and their results, which are the basis to a Horizon 2020 proposal on e-assessment quality lead by the UOC, and jointly presented with 18 partners from European universities, quality agencies, research centres and businesses. The proposal has been selected for funding, thus underscoring the importance that this issues holds in HE. The awarded project is called Towards an *Adaptive Trust-based e-assessment System for Learning* (TeSLA)