Supporting Electronic Collaborative Experiences at Universities Based on Learning Spaces and LAMS

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ABSTRACT

The development of networks and web based environments combined with modern learning theories compose the new area of Learning Spaces aiming at enhancing interactive processes between educators, the Net generation’s learners and the educational content. Collaboration at a distance (e-collaboration) supported by advanced learning technologies is today feasible and effective at a large scale opening up new perspectives in higher education. The paper presents a case study at the Hellenic Open University regarding the development of a learning sequence aimed at achieving high degrees of interactions among students, students and educators, and also at guiding them between face-to-face meetings when they prepare an essay. The Learning Space of the case study is realized by authoring sequences of learning activities using an LMS LAMS. Extending the case study, a methodology is illustrated to author collaborative sequences using LMS addressing to Open Universities in particular and also to conventional Universities in general.

KEYWORDS
Connectivism, e-Collaboration, Hellenic Open University, Learning Analytics, Learning Design, Net Generation, Online Communities of Practice, Sequences of Learning Activities, Ubiquitous Learning

INTRODUCTION

Today’s students, an expression used by Marc Prensky in his paper “Digital natives, digital immigrants” back in 2001 represent the Net generation having grown up within digital technology. To use his own words, Prensky said for them they have spent their entire lives surrounded by and using computers, videogames, digital music players, video cams, cell phones, and all the other toys and tools of the digital age… computer games, email, the Internet, cell phones and instant messaging are integral parts of their lives.

Hence, students of the Net Generation (Net Gen) need a greater flexibility in their studies and studies strongly connected with current technologies. These needs of students today lead to the increasing importance of redefining educational physical & online space. On the other hand,
Universities are facing the experiment to make the shift from face-to-face learning in the campus to a blended environment of combining face-to-face and online activities.

The paper proposes the use of a Learning Management System (LMS) to support Learning Spaces in Universities and illustrate a guide to design and develop collaborative sequences of learning activities as a catalyst to enhance the learning process. Students implementing the sequences on their own or in Campus supporting by facilitators can accomplish specific educational goals in a flexible educational setting. A case study in the Hellenic Open University regarding the development of a learning sequence on the topic “Implementing essays” highlights the advantages, the requirements and the relevant constraints. The case study can be extended in all activities of supporting learning at a distance both in Open and in conventional Universities optimizing the experience in distance education, which Open Universities have conquered until now.

In particular, this paper emphasizes in the development of electronic collaborative experiences at Universities based on Learning Spaces and LMS to support both students and educators in their complex work. The second unit presents the methodology and also the experience gained by Open Universities so far to support electronic collaborative experiences. The third unit defines and approaches the concept of Learning Spaces and how they can contribute to support e-collaboration. Next, in the fourth unit the Learning Activity Management System (LAMS) is proposed as an appropriate open Learning Management System which serves the adopted pedagogical framework. A Repository of LAMS-sequences has the potential to become an innovative Learning Space (e-Campus-LS) combining students’ work inside and outside the Campus. The fifth unit describes an exemplar LAMS sequence aiming at supporting students who are implementing an essay as a case study in the Hellenic Open University and presents the preliminary findings from evaluating the sequence. Furthermore, the sixth unit proposes two levels of extension of the case study towards a methodology of developing collaborative sequences using LMSs in Open and conventional Universities too. Finally, the paper highlights discussion themes raised by working with Learning Spaces in Higher Education. Proposals for further use of Learning Spaces and conclusions are drawn and commented.

SUPPORTING ELECTRONIC COLLABORATIVE EXPERIENCES

Supporting Students at a Distance

The integration of the Information and Communication Technologies (ICT) has changed radically learning and transforms education. Advanced technologies support learning in the 21st century following all three generations of pedagogy: behaviorism, constructivism and connectivism. Universities today approach more and more distance and flexible forms of education since learning is possible to happen in areas outside the traditional campus, occurring anytime and anywhere.

The Distance Learning methodology aims at activating students guiding them towards an exploratory approach to knowledge and ensures the maximum possible flexibility in space, time and pace of learning. Most students in Distance Learning (Kokkos, 2001; Hatzilakos, Papadakis, & Rossiou, 2007):

- Need human support in order to use the educational material;
- Cannot approach it critically since they have not cultivated the appropriate study skills;
- Are not familiar with the ways of approaching in depth the learning objects and using alternative learning resources;
- Are not familiar with writing essays;
- Haven’t cultivated appropriate self-organization and learning autonomy.

These multiple levels of support are provided by educators in Distance Learning. Educators need to combine multiple roles as facilitators, coordinators of learning experiences, developers of
Individual Reasoning within a Reasoning Community
www.igi-global.com/chapter/individual-reasoning-within-reasoning-community/67322?camid=4v1a

Towards a Collaborative Educational Game Model
www.igi-global.com/chapter/towards-collaborative-educational-game-model/12493?camid=4v1a