Chapter 15
Tips Towards Tackling Distance Education Modules:
The Case of the Doctoral Program on Multimedia in Education

Lúcia Pombo
University of Aveiro, Portugal

António Moreira
University of Aveiro, Portugal

ABSTRACT

Current information and communication technologies, including the internet and its services (web 2.0, email, conferences at a distance, etc.) have opened new perspectives in the field of education, by promoting communication and interaction between all participants at a distance. It is not the technology itself that will define the quality of teaching and learning in distance education, but the methodological approach that supports it. This paper aims to propose a methodological framework to implement in distance education modules supported by online pedagogy elements linked to innovative teaching methodologies. Its goal is to bring some contributions to those who are in charge of course design, providing a useful framework to improve active and technology enhanced collaborative learning in similar environments.

INTRODUCTION

Distance education is a teaching and learning mode that facilitates the reconciliation of individual study needs and qualifications, providing the mediation of interactions between student and teacher, student and student, and student and content. As more and more higher education institutions have added distance learning courses to their curricula (Lencastre, 2012), supported by virtual learning environments and other distributed technological tools, it is important to reflect on how to prepare a module with such characteristics. Recent literature indicates that online discussion and interaction is a key issue in online contexts as they provide the appropriate stances for knowledge construction, development of autonomy, knowledge sharing, development of soft and hard skills, etc.

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Distance education modules allow interaction of learners with peers, teachers and contents through the use of computer mediated communication tools, which entails learner interaction with the technology being used. Since this education modality is relatively recent, for many students, teachers, and researchers, interaction using online tools is an innovation, with a fairly short developmental history, upon which online learning quality can be based. According to the Association for the Promotion and Development of the Information Society/APDIS (APDIS, 2007), the use of multimedia combined with the use of the Internet, to design and make educational contents available and to develop competencies at a distance (eLearning) is one of the big challenges in the years to come.

One of the approaches that can make the above-mentioned challenges possible is eLearning defined by Graham (2014) as the use of internet technologies to deliver a broad array of solutions that enhance knowledge and performance. It is based upon three fundamental criteria: (i) networked; (ii) delivered to the end-user via a computer using standard internet technology; and (iii) focused on a broadest view of learning.

Current information and communication technologies (ICT), including the internet and its services (Web 2.0, email, online audio and video conferences, the use of avatars in immersive environments, etc.) open up new perspectives in the field of education, by promoting communication and interaction between all participants at a distance. It is not the technology itself that will define the quality of teaching and learning in distance education, but the methodological approaches that supports it, namely as far as the distribution of learning groups leaderships are distributed and accepted. Those technologies may provide high interaction and communication in the educational process, expanding and reaching several areas of training and professional development.

The teaching and learning methodology should accompany this technological evolution, and should also be in line with the pedagogical principles for effective learning (D'Agustino, 2012). Therefore, two concepts are implied. One is e-learning, which regards the teacher as an instruction provider who is assisted by advanced computer techniques to deliver the information. The other is the learning workflow. This is related especially to the instruction receiver, the student, who can manage the learning activity, according to his/her own needs, skills and individual organizational models (Musuroi, Iacob & Spataru, 2011).

Whilst this fits a 'consumer' orientation of education, some questions remain: what methodologies should be adopted?... and based on what principles?, and how to plan the assessment strategies?

The constructivist perspective aligned with the distance education mode is structured mainly on the following principles: i) active learning; ii) participation and collaboration; iii) co-construction of knowledge and iv) interactions among peers and teacher-student interactions (Costa & Fradão, 2012). Thus the planning of teaching and learning situations, the assessment strategies and the methodology adopted by the teacher need to be consistent and somehow integrate these principles.

This paper aims to provide some tips supported by online pedagogy elements linked to innovative teaching methodologies observed in the span of 15 years. These are to be implemented in distance education modules by those who are in charge of online course design or tutoring, based on a critical review of literature and also on the experience of the authors as teachers of the Doctoral Program on Multimedia in Education of the University of Aveiro, Portugal. The whole program of this course is offered in a blended learning format, given the fact that, theoretically, b-learning practices encompass the great majority of the benefits of pulling together f2f contact with that of open and distance learning.

It is expected that the proposed methodological approach brings some contributions to those who are in charge of course design or to institu-