

The Module Zero in the creation of a virtual learning community - Some Experiences in University of Coimbra Distance Learning Project

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Abstract: *In distance education it is essential that students get acquainted with the learning environment that will support the teaching/learning process. Initially, the student needs to become familiar with the learning platform and acquire online communication skills. To support this process we proposed the utilization of a Module Zero in the beginning of the courses promoted by the Distance Learning Project at the University of Coimbra (UC_D).*

In this paper we will describe the Module Zero included in two courses promoted by UC_D, analyze the results obtained and describe some improvements that will be introduced before its next utilization.

Keywords: *distance education; familiarization; engagement; learning community*

THE MODULE ZERO – THEORETICAL FOUNDATIONS

The evolution and wide availability of Information and Communication Technologies (ICT) allowed the development of teaching and learning at distance based on Internet technologies. A learning environment supported by ICT goes beyond a simple transposition of face to face contents and strategies to the distance learning platform used. Normally, it is necessary to change the teaching/learning paradigm, and to use different teaching strategies, specific contents and assessment strategies adequate to the context [1]. This lead to a situation where virtual learning communities are privileged educational scenarios. These are cooperative learning contexts where there is a clear influence of peers in the knowledge construction process.

The interaction between the various elements of the learning community (student-student, student-teacher, student-tutor, student - contents/resources) is crucial in the activation and development of learning. Collaborative activities that promote information sharing and the exchange of ideas are fundamental in these contexts. Technologies have a key role, providing tools that allow interaction (discussing and commenting), and publishing (producing and sharing information), creating a sense of belonging in the community [2].

It is important that students interact with other members of the learning community, share knowledge and resources, and together reflect critically about what they learn. Networks and virtual learning spaces supported the appearance of scenarios where cognitive and social mediation, without barriers of time and space, build new social and cognitive areas, paving the way for the development of new capacities for reflection and construction of collaborative thinking and joint implementation of learning [3].

Research shows that the use of closeness behaviors (behaviors of communication and interaction that reduce physical or psychological distance between individuals and promote affiliation / relationship) has a positive impact on the quality of the relationship between students and between teachers and students, in the affective, motivational and academic plans [4]. In the context of distance learning, social presence and behaviors of proximity between the various elements of the community is an important factor in student learning and their attitudes to the course.

It is important that students quickly become familiar with the technological tools of the learning environment, so that any difficulties in using them do not difficult learning.

According to G. Salmon [5], the process of teaching and learning at distance is facilitated if we provide to students access conditions and motivation (provide information on the use of the platform and motivate students to work collaboratively) encouraging socializing online (promote links between the various elements of the community) to, subsequently, facilitate the sharing of information and clarification of doubts, thus blaming students by building their knowledge.

The module zero aims to promote student familiarization with the learning environment, namely with the different platform tools and features that will be used during the course. Another goal is to facilitate the establishment of interaction habits and a better knowledge among all course participants.

MODULE ZERO - CONTEXTUALIZATION

In 2010 the University of Coimbra created its Distance Learning Project (UC_D), aiming to develop quality courses, mostly directed to persons who already have higher education qualifications. Working directly with the university's teaching staff from the different knowledge areas, UC_D develops high quality full distance courses to meet identified society needs [6].

UC_D depends directly on the Rector and has a coordination team that includes professors experienced in the technology enhanced learning field. The unit includes also experienced professionals in instructional design, multimedia production and course management. A subset of the team is assigned to work in each course in direct collaboration with its teachers.

One of the courses developed within UC_D focuses on Parental Education. It is directed to all professionals with interventions in families. This course objectives are: to recognise Parental Education as a measure to promote positive parenting; to foster understanding of the implications of positive and negative parenting in the development of children / young people; to help the identification of family situations most appropriate for Parental Education interventions; to develop knowledge of the political, national and international frameworks, promoting positive parenting; to facilitate the recognition of the importance of developing networks, formal and informal, to support positive parenting; to develop knowledge about the skills of the parent educator that are important to the quality of Parental Education interventions and to promote knowledge about different programs/intervention modalities in Parental Education.

The idea of a Module Zero was developed during the Parental Education course design phase. The first motivation was to facilitate the adaptation of the students to the technology mediated learning context that would be used during the course. However, it was easy to recognize that this module should also be a good opportunity to stimulate group knowledge and cohesion and to the development of a sense of belonging to the learning community.

Initially the module zero was designed and implemented only for the Parental Education course. However, as we received a very positive input from students and teachers, it made sense to use the same strategy in other courses, namely the second edition of Parental Education and the first edition of a very different course: Indoor Environmental Comfort in Buildings.

The activities included in Module Zero aim to:

- Familiarize the student with the learning management system used (Moodle) and its basic tools.
- Explore and get familiar with some web 2.0 tools used in the course.
- Create a common knowledge base about learning, and online work and communication.
- Foster collaborative knowledge construction and the development of a learning community including all course students and teachers.
- Encourage the utilization of online communication and interaction norms.

This module is organized into two main themes: Theme 0.1 - The group as a learning community and Theme 0.2 - Setting and using the virtual learning environment. In these themes, the student is expected to engage in activities that allow her/him to understand the importance of developing a collective and collaborative learning, using the technical features of the platform.

The proposed activities include each student presentation to the group in a forum, talking a little about themselves and their expectations regarding the course. Then they must download a file from the platform, with a text about the role of the student in virtual learning environments. After reading this text they have to write a critical analysis and upload it to the platform. Afterwards, students are asked to organize themselves in groups of 2/3 elements and chat in a chat room, so they can know each other personally. Later they have to produce a course book for the group using the wiki tool (this activity starts in Modulo Zero but spreads to other modules). Module Zero also includes support contents, such as information about the navigation and usability of the course and a set of tutorials that facilitate the use and browsing of the platform.

METHODOLOGY AND OPERATIONALIZATION

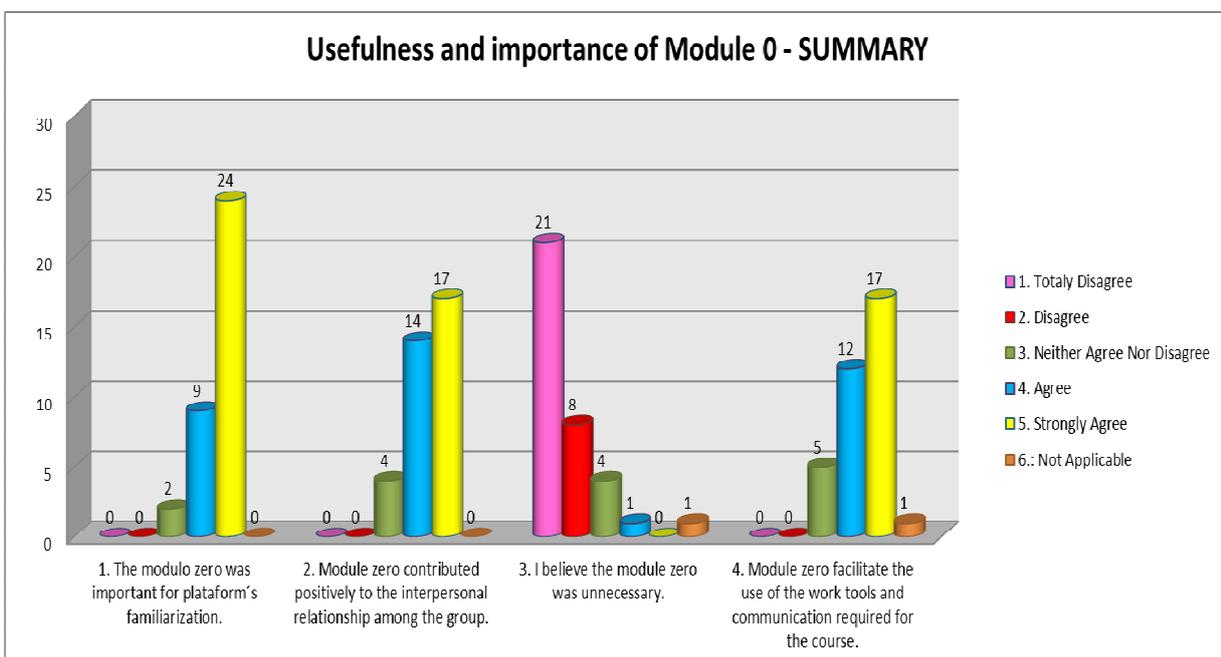
To assess the work done we tried to know the student's opinions about Module Zero and its usefulness for them. We also presented and discussed the idea with the other members of the distance-learning project (considering them a focus group).

A student's satisfaction survey is administered immediately after all courses promoted by the project. In this case we added a section about Module Zero, in which we sought to assess the usefulness and importance of the module and collect general suggestions for improvement. This survey is answered anonymously and voluntarily; we collect socio-demographic information, and opinions about the platform usability, contents and activities, multimedia resources (videos, animations, images, etc.), bibliographic resources (texts, articles, books, etc.), teaching team, interpersonal relationships established, expectations fulfillment, course strengths and weaknesses and we also ask for general suggestions for improvement.

The focus group with UC_D staff was held at the weekly meeting. After a formal presentation of the work done and the results from the students' satisfaction survey, we held a comprehensive discussion involving all present, debating the possible usefulness of the Module Zero in other courses, and how it could be implemented and adapted to fulfill specific needs.

PRELIMINARY DATA

The data presented below refers to the students' satisfaction survey in the editions 01 and 02 of the course of Parental Education and in the edition 01 of the course Indoor Environmental Comfort in Buildings. In total we obtained 35 responses.



Analyzing the data in the chart we conclude that the Module Zero was considered important by most students to get used to the platform. Also, most of them answered that it contributed positively to the establishment of interpersonal relationships between the students and facilitated the use of the tools required for the course. A general positive view about the module comes from the fact that 29 of the 35 respondents disagree or disagree completely with the statement "I believe that the Module Zero was unnecessary."

These results are consistent with the theoretical literature in this area, highlighting the importance of early interactions and moments on the platform for the achievement of learning and student success in the course [5].

Through the focus group we gathered the opinion of the UC_D team about the importance, applicability, goals, themes, resources and activities related to Module Zero, as well as other general suggestions for improvement and designation. All team members agreed with the importance of this module as a form of integration in the courses, a contribution to the construction of the learning community space, and as a space to clarify questions and level knowledge. Most UC_D team members considered that the module zero could be used in other courses, although one of them expressed the opinion that the applicability depends on the structure and methodology of the course. Some suggestions were also received about objectives and activities that might be included in future versions.

CONCLUSIONS AND FUTURE WORK

This first phase of this work allowed us to validate the Module Zero as a space and time for students to adapt to a technologically mediated learning context that is new to many of them. The results obtained in this study confirm the contribution of this module for the construction of a learning community and a better use of the different tools available in the learning management system.

The analysis of all expressed opinions reinforces the idea that most courses can take advantage of the inclusion of a Module Zero.

The next step in this work consists in the development of a Module Zero version 2. This will include several adjustments in its structure and organization, activities, and resources. These adjustments results from the work described above and also from our own observations.

We consider important to organize this module according to 3 major thematic bases: the group as a learning community; students in virtual learning environments; navigate and communicate in the virtual learning environment. Each of these themes will include specific activities and resources. Some of them already exist, but we consider important the development of a student guide that helps them to understand their role as online learners and work methodology that they should adopt in this context. On the other hand, module zero can also be used to trace the profile of the online students involved, allowing a better adjustment of the tutoring that will be done throughout the course.

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The paper has been reviewed.