

The importance of target audiences in the design of training actions

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Abstract

This paper describes the process of definition, conceptualization and implementation of a business course addressed for logistic and industrial managers. This course was designed using a blended methodology, with training in classroom, visits to enterprises and self-study, supported by an eLearning platform. The aim of this work is to create an opportunity to reflect about the decisions and strategies implemented and point future developments.

1 Introduction

In an age of fast changes, flexibility of competences and permanent retraining of human resources are valuable instruments for workers and organizations. Lifelong learning acquires a strategic importance to innovation and competition, recognized by the increasing number of initiatives to promote professional training and to combat school abandon.

With the evolution of distance education and training platforms, new opportunities were generated for adult and lifelong education, offering flexibility of time and space workers didn't have in formal education. These new methods, supported in technological systems, allow a more customized and personalized education.

Conscious of the potential of e-learning in adult education, Aveiro-Norte Program (www.aveiro-norte.ua.pt), in collaboration with regional companies from the north of Aveiro's district and with the support of regional associations and economic entities, developed a new adult course model - the Actualization and Specialization Course. This course is characterized by promoting a deep exploitation on a subject, recurring to specialists, visits to selected companies and exploitation of advanced technology, using an adequate methodology for the target audience – blended learning.

The first training action using this model was the “Logistic and Industrial Management” course. This article describes the definition, conceptualization and implementation process, as intends to reflect about the decisions taken along the training action. Course architecture was regulated by a detailed analysis of the target audience, which allowed determining the blended learning methodology as the most adequate for this training context.

2 “Logistic and Industrial Management” course

“Logistic and Industrial Management” course involved the participation of the Aveiro's University (Aveiro-Norte Program; Department of Economics, Management and Industrial Engineering and UNAVE – Association for professional training and research of Aveiro's University) and AECOIA (Business Association of Oliveira de Azeméis).

Course theme and content resulted of a work of identification of training needs carried out in a widened number of companies of the North of Aveiro's district, with particular prominence for the sector of the moulds and car components industry. This work evidenced very clearly the relevant role of logistic in cooperation networks, supply chain and provisioning, business models and in intra and inter-organizational relationships (Aveiro Program North, 2003).

The first edition of this course congregated professionals of car components companies, as well as others involved with the planning, handling, storage and movement of materials, throughout all the cycle of production and commercialization of good or services.

Two characteristics emerged from the analysis of the target audience:

- (i) These professionals have strong engagement and commitment with the activities of their organizations, and consequently, serious restrictions to attend formal presential classes;
- (ii) Many of these students have left school many years ago.

These characteristics constituted the starting point for the conception of the course architecture, particularly in what concerns to the option for a blended learning methodology.

3 Development Phases

3.1 Definition and characterization of the target audience

3.1.1 Diagnostic of training needs

The starting point to characterize the target audience consisted in the accomplishment of a diagnostic of training needs handled in diverse companies of the region. This diagnostic was carried out through a set of interviews with managers and direct observation of work-force. The main goals were:

- to identify and characterize the training needs in the local market;
- to identify the students profile (professional experience, motivation to learn, working area, etc.) and
- to identify the most adequate training method (presential, distance or blended learning).

3.1.2 Pedagogical profile of the audience

Being about professionals with strong involvement in the activities of the respective organizations, these students present serious restrictions to frequent presential lessons. Due to this limitation, when attending to a training action they expect to find a very pragmatic education, connected to their professional experience. Adult students' motivation to learn is usually high, as well as their sense of responsibility and participation in discussions and debates (Knowles et al, 1998), but sometimes they have difficulties in resign in what they think they know. Usually, they attend a training action with the purpose of getting a better job position or as a personal achievement. They may present some limitations, such as lack of academic preparation, professional vices, familiar and social limitations, or some of personal nature.

The professionals observed have shown great interest in this training action and for a hybrid methodology.

3.1.3 Characterization of the market place

The market-place analysis of local enterprises showed that the need of training actions in logistic and the industrial management area is generalized in all industries that consume and operate with logistic, but especially strong in moulds and car components industry.

3.2 Conception and Pedagogical Development

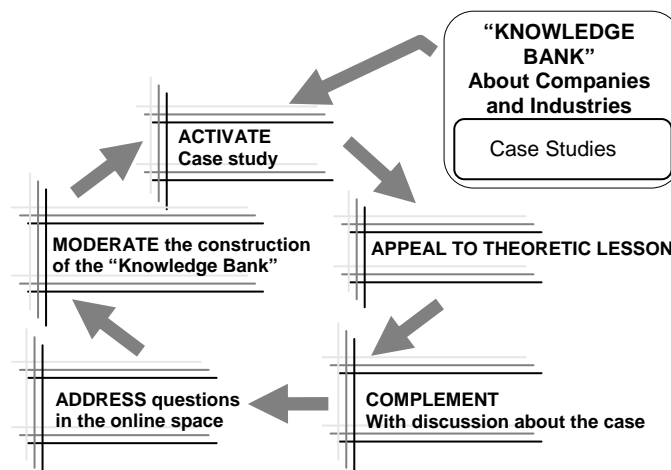
The curricular plan and the methodology were design taking in consideration the characteristics of the target audience and the identified training needs.

Two main decisions were taken:

1. the choice for a methodology based on a blended learning solution, with a component of 25% of presential classes and 75% of distance learning, supported by a telematic educative system;
2. the option for a constructivist pedagogical model, able to stimulate knowledge sharing and creation through discussions, debates and interaction between the different actors of the system, to meet the pragmatic sense of adult learners.

These decisions helped to design a pedagogical model for contents and interactions, based in the presentation and discussion of case studies about industries related to the learner's activities (especially moulds and car components). The developed model is presented in Figure 1 **Error! Reference source not found.**:

Figure 1- Pedagogical model of the course



3.3 Content development

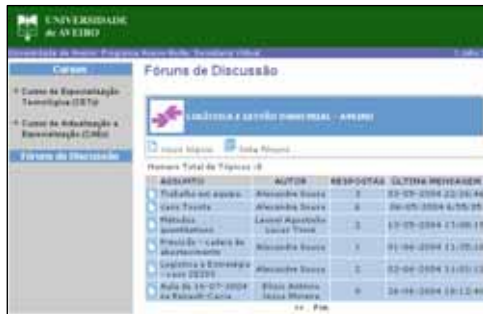
The model is based on the belief that professors are interested in the student's commitment with authentic activities that reflect their life experiences and practices (Bennett et al., 2002). This belief led the project team to develop working materials and learning objects based on the professional context of students, in order to allow its easy recognition and the acquisition of know-how. Although the pedagogical model has been designed according to the knowledge and experience of the project team, support can be found in literature to enhance the importance of using authentic cases and experiences to promote a more participative debate. According to Young (1993) and Jonassen (1999) activities of learning disclose more authenticity when they reflect the real nature of problems, promoting different perspectives and stimulating a collaborative attitude.

The pedagogical model follows, thus, a sequence of constructive blocks, eased by the previous existence of a "bank of knowledge" based in the industries and companies that constitute the market where students come from. This bank of knowledge is constituted by case studies that are distributed along the sessions of the course. For each session, the theoretical materials are prepared by the invited professor, in accordance with the case that will be argued. In the 48 hours that follow each presential lesson, the case study and the materials are placed in the web platform. After the content delivery in the web space, several strategies are performed to stimulate students to cooperate and to collaborate in the virtual space. Diverse tutors observe the events in the virtual space and help to solve the case studies in detail. After the resolution of the case study the cycle is closed (lesson, case study, knowledge construction).

3.4 Telematic platform preparation

The used platform to support the distance component is Aprend.E, a platform developed by Aveiro Norte Program. The main characteristics offered by the platform are: a presentation area of the course; the curricular plan for each discipline and the content area. The first presents the generic information of the course, target audience, nature of the course, requirements of entrance, promoting entities and the date of beginning. The Curricular Plan presents the list of disciplines that integrate the course, the number of hours for each discipline and the respective professor. In the detail of each discipline is possible to accede 3 areas: the students, the planning and the summaries. The planning presents the script of the discipline, objectives, program, methodology, evaluation and recommended bibliography. The content area is where

Figure 1 – Printscreen of Apend.e Platform



case studies and the materials to support to the training are available, as well as other documents of interest (calendar, entertaining documents, etc.). With the intent to promote learners' interaction, three ways of communication were adopted: e-mail, discussion forum and a collective portfolio. The mailboxes offered by Aveiro's University allow students and teachers to talk to each other, exchanging information in a more personal and private way. The discussion forum is used to promote public discussions and allows maintaining a historical register of the group. The collective portfolio allows students to share one another interesting documents they found somewhere or they produced.

3.5 Recruitment and Diffusion

The diffusion of the training action was made near several regional enterprises in the north of Aveiro's district. The course was also promoted in the web site of Aveiro-Norte Program (<http://www.aveiro-norte.ua.pt>), where interested people could find a general presentation of the course, the methodology and the list of disciplines and could fill an application form to demonstrate their interest in participating.

Figure 2 – Printscreen of Aveiro-Norte Program web site



3.6 Implementation and Monitoring of the training action

The training action began with a formal presential session presenting the course, methodology and organization. The first lesson integrated a demonstration of the web platform, course procedures and technical contacts. The schedule was presented to reinforce the presential and distance components.

This course lasts for a period of six months, with approximately twelve presential sessions, and involves invited teachers, the moderator, trainees, tutors and technical and administrative team.

The technical team has the responsibility to provide every technical support to trainees, trainers and tutors in the content digitalization, web publication and platform management. The administrative team takes care about all the administrative process, like registration, financing, etc. Teachers are usually market specialists that are invited to come to presential lessons to

The role of the tutor and trainer are explained in the next topics.

3.6.1 Tutor

It is more or less consensual that, more than the content distributed online and the use of highly advanced technology, successful distance learning activities depend on the promotion of communication and collaboration between the community members. The tutor of this community has the main responsibility to promote this interaction.

His fundamental tasks are to:

1. Select, evaluate, recruit and maintain students engaged with their learning activities;
 - Select student according to a pre-defined profile;
 - Maintain students motivated along the training program, guaranteeing that the program follows the defined parameters and pre-defined objectives;
2. Be familiar and understand the organization responsible for the training action;
3. Be familiar and understand the subjects and disciplines that integrate the training program;
4. Be responsible for ethical and social questions associated with students expectations:
 - Provide the necessary physical infra-structures for each session;
 - Be sure that training sessions are adequate for the audience;
 - Evaluate continuously the way students participate in learning activities;
 - Promote voluntarism among the group;
 - Establish an alternative action plan to solve any unexpected situation;
 - Maintain and moderate communication inside the community.

3.6.2 Moderator

The moderator concentrates his work especially in the asynchronous tasks. He dedicates most of his time in the discussion forum, one of the most important tools of the distance component. This tool allows the work team to understand who is participating, the value of participation, the number of interventions, but more important, it allows promoting the collaborative work between students. The idea of the discussion forum is to stimulate students to question and debate their own opinions. The subjects that the moderator promotes are aligned with presential sessions, theoretical contents or case-studies.

During this first experience the work team has been avoiding to impose many rules in the participation of the forum. Priority has been given to the free expansion of student's ideas and concerns and not to the compulsoriness of participation. Even though, the moderator followed an established plan, which can always be reconfigured. This plan was designed according to: Case studies; Debates on presential sessions; Subjects related to student's professional reality and other students concerns.

The moderator should be someone that understands very well the audience he is moderating, so he can be prepared to moderate students' concerns and professional reality demands. He must respect students' opinions, but at the same time, he must be prepared to break consensus, with the objective of promoting discussion. For the work team, one of the most important observations of this first edition is that students are very reluctant to criticize their work, their methods and their companies.

Due to this observation, the moderator needed to be careful with certain aspects, like not referring directly to a participant, but concentrate in the subject he is talking about.

The main task of the moderator is to help students to build contents and find solutions in a cooperative way.

3.7 Evaluation and Impact

Evaluation is a very important phase of all training actions and should be concentrated, especially, in students' satisfaction (e.g. knowledge acquisition, relation with trainer/moderator, relation with the community). The evaluation of "Logistic and Industrial Management" course was done during the training action through the analysis of the contributions in classroom and in virtual space, and also at the end of the training, through the distribution of questionnaires to students.

The questionnaire was organized in nine parts: Expectations, Objectives, Contents, Methods and Means, Trainers, Telematic Platform, Competences, Schedule and Technical and Administrative support. Here are presented the most important results of the questionnaires.

Expectations and Objectives: objectives corresponded, generally, to the expectations of the trainees. They considered that the course was adapted to their professional activities and that contents were suitable to their previous knowledge.

Methodology: the majority considered that the case studies methodology has facilitated the understanding of subjects and that the blended-learning approach was beneficial to their participation, and allowed to create the spirit of community. Only the evaluation methods haven't been considered appropriated by all.

Trainers: relatively to the teachers and moderator, trainees considered that demonstrated good knowledge on subjects, communication and dynamization capabilities and that they developed, with them, a good interpersonal relationship.

Platform: in regard to the telematic platform, Aprende.e, trainees considered that it was very useful and easy to use. However, many considered that they needed more practice and help to better use it. In fact, the majority of them didn't use, even once, the discussion forum or the collective portfolio, which impoverished tremendously the potential of the community. The e-mail was considered the most important and useful communication tool, perhaps because it is the tool students are more used to work with in their professional lives.

Competences: The course was considered relevant to the student's profession, who considered having acquired or renewed personal knowledge and abilities.

Schedule: In relation to the schedule of presential lessons, they considered it appropriate, although some think that the number of presential hours should be greater, as well as the time for evaluation.

Technical and Administrative support: everyone considered the logistic and technical support efficient and enough, and equipments and installations adjusted.

Relatively to the presential component the main improvement proposals were related to the promotion of a bigger participation of trainees, through work group or individual presentations. Some students have pointed the need for a more transparent and important continuous evaluation.

In relation to the distance component the main improvement proposals were related to the promotion of a greater interaction between students. Other suggestions relate to some improvements in the platform and the use of simulators.

4 Considerations about the impact of this project to future training actions

The work team considered this study as a first phase for the consolidation of some ideas about the way Aveiro-Norte Program should carry out training and educative initiatives.

We can conclude that the responsible aspects for the success of this initiative were the execution of a plan based on collaborative learning models and credibility gained by the authenticity of the case-studies built with regional industries. The conception of each lesson goes through the design of the triangle case-study, theoretical lesson and debate on the web space, which appears to be a satisfactory methodology for our students.

The evaluation of the course showed that the web space was the more fragile component of the course. Students have participated more through e-mail than through the other collaborative and community tools, in a more reactive than active attitude. In future courses the team project believes that some efforts need to be done in the development of creative strategies to make students feel more comfortable one another, so they can communicate easily and in a more interested way. We also believe we need to promote a better connection between the presential and distance component, with activities that involve the participation in both spaces. Finally, we believe some improvements need to be done in what concerns to the platform look and feel, and some more support must be offered to students, such as a paper user guide for them to be able to accede more easily to the platform.

Some other components of this process are also being analysed and represent one of the focus of the work group at the time, namely: level of homogeneity of the group; professional experience and structure of the documental support.

We acknowledge the support of

- Programa Operacional para o Emprego, Formação e Desenvolvimento Social (POEFDS), through the project nº 58-EI-2002 “A inovação no Entre Douro e Vouga: estudo prospectivo das necessidades de educação e formação”;
- Programa Operacional para o Emprego, Formação e Desenvolvimento Social (POEFDS), through the project nº 092-EI-2003 “O sistema de educação e formação face aos desafios de produtividade e inovação no Entre-Douro-e-Vouga ”;
- Programa Operacional para o Emprego Formação e Desenvolvimento Social (POEFDS), through the project “Aprend.e – Sistema electrónico de aprendizagem para o ensino e formação profissional ”;
- Programa Operacional para o Emprego Formação e Desenvolvimento Social (POEFDS), through the project “Cursos de Logística e Gestão Industrial”.

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