

Knowledge Management Track
Research in progress

Towards a knowledge-based society: the need for a continuous life-long learning programme – the PRILHE project¹

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Introduction

The development of a knowledge-based society requires the contribution of a technological infrastructure as well as a workforce with the necessary skills, knowledge and competences, supported by a well-structured initial education and a continuous learning program. The individuals in this workforce must be autonomous, independent and reflective learners, because this is the only way to take advantage of a life-long learning programme and, in so doing, remain in employment at a time of global change. How can we help our students to become more autonomous, reflective and independent? What kind of strategies should be used in the classroom? What are the best practices? This paper sets out to answer these urgent, contemporary questions.

Project PRLIHE – Promoting Reflective Learning in Higher Education [113869-UK-2005-G1] was developed under the framework of the European Commission Socrates Programme. Its aims were:

- to identify the learning processes which enable adult students in Higher Education to become independent and reflective learners,
- to identify how this process could be better supported in terms of materials, systems, staff, lecturers, web support, peers, family and friends,
- to examine the interface between learning from experience and academic learning as well as how experience may help academic learning and future learning, including in the workplace,
- to identify models of good practice in higher education institutions across Europe.

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To achieve these objectives, a consortium was formed, with partners from Germany, Sweden, Finland, Portugal, Spain, Poland and UK. All these partners belonged to higher education institutions. The project lasted from September 2004 to October 2006.

Methodology

The methodology used was a combination of a quantitative and qualitative approach. In a first stage, the consortium developed a questionnaire and distributed it to students and lecturers. In a second stage we did face-to-face interviews also with both students and lecturers.

Questionnaire

From the literature review we identified eight categories that have impact / importance in the learning process, helping or preventing the student to become more autonomous and independent. For each category we prepared some statements and asked the student to classify each statement according to a 7 point Likert scale, ranging from "totally agree" to "totally disagree". Failure to answer was also noted.

These 8 categories are detailed as follows: (ver bullets; tempos dos verbos; já acabámos o trabalho; parece-me dever ser passado; umas vezes está presente outra passado...

- Role of work/life experience in the learning process – we mean specialized knowledge (related to the profession) and competences (e.g. talent for organization, ability to be critical, team spirit...). We wanted to know the role of the above-mentioned work experience in the learning process.

- Individual organization of learning – On the one hand one might say that learning is an individual issue; on the other hand one might have a clear idea of how learning should be undertaken. Here, we were interested in the point of view of the student.

- Reflections of contents – The statements reflected the importance of sharing of opinions and comments from lecturers regarding their performance and participation in critical debates.

- Framing of the learning process – The statements dealt with contexts of learning. To what extent is learning influenced by prior life experience or by specific learning situations?

- Dialogue in the learning process – The statements dealt with the relevance of communication with other people during learning.

- Learning motivation – Here, we asked which motives and expectations caused the student to take up his / her studies and how they influenced their learning process.

- Learning approach – Everybody develops individual approaches to learning in the course of his/her learning life. Here, we were interested in the personal way of learning as well as the aims pursued with it.

- Instructions versus space for personal organization – For some people it is helpful to get clear instructions on how to organize their learning process; while others need space to proceed individually. In the following, we were interested in the learning conditions the student prefers.

Interviews

We interviewed adult students and lecturers. We did in-depth biographical interviews to elicit information about the biography of the interviewee, the learning and teaching methodologies that lecturers use with them, which they prefer, what kind of assessment the lecturer uses, suggestions on how to help adult students to become

independent and reflective, along with other issues related to the topic. The interviews were taped and fully transcribed. After that we did the content analysis

Portuguese Case study

Target-population and sample

The adult student is considered to be a person over 25 (23 in Portugal) years old who left school with few or no qualifications, who have been out of the educational system for a long time, have no previous higher education experience, and come from a disadvantaged group (one or more of these conditions may apply) (Bourgeois, Duke, Guyot, & Merrill, 1999). In Portugal, the numbers of students, fitting this description, have been much reduced (in 2005 only 3776 adults applied to enter to HE and only 901 have been admitted. Knowing that the number of traditional students who enrolled for the first time in HE in the year of 2005 was 86 000, one can see that the number of adult students represents around 1% of the total number of students in HE (Correia and Mesquita, 2006)).

Furthermore, students can choose to enrol in a Technological School, which gives them a certificate of level 4 (more practical courses) or to enrol in a Higher Education Institution (polytechnic or university) which offers courses of level 5. Taking this into consideration we decided to have 2 samples: one from technological schools and the other from HE institutions. Although in the project we also collected information from lecturers to compare the results with those coming from the students, in this paper we will only present the results from students.

Data collection and processing

A Web-based system was developed to collect the data and to do the statistical analysis. As studies on Adults in HE in Portugal are a new area of research, the Portuguese team felt that they should be in control of data entering the system. This enabled them to direct PRILHE project promotion and control the issue of questionnaires to those HE institutions that were being expanded and their programmes reorganised to address the needs of adults returning to HE.

The system incorporates several modules: online questionnaires; interactive database and email sender service (Correia *et al.*, 2006). The system objectives were:

- To facilitate the project dissemination and to promote, in the period allocated for data collection, the highest number of responses from the target-population (adult students in HE and their lecturers);
- To make the questionnaire completion task as user-friendly as possible, with the data being entered automatically into the database in real time, or in printed format, according to users' needs;
- To reduce the costs – both time and effort – associated with questionnaire completion, as respondents could review their answers online before submitting them electronically;
- To increase data storage and downstream processing efficiency in the database supporting the system – this contributes to a reduction in errors and other problems traditionally associated with manual data introduction;
- To make available an automatic procedure, alerting the introduction of new questionnaire answers in the system, through the automatic sending of email messages to the system and project managers; this protects data base integrity in real time.

In order to increase the rate of questionnaire return, we made presentations of the project in some HE institutions (both technological schools and universities). After the presentation we asked the students and the lecturers to fill the questionnaire online as

soon as possible. We also sent emails directly to students in HE institutions or we sent those emails to someone in the institution and asked that person to send it to the maximum number of students.

Results

Some of the results reveal that students learn better when they are able to build bridges between life / work experience and the topics to be learned, when they share different points of view, when they discuss with others, when the learning process occurs in a supportive environment, when there is teamwork / interaction, when they see the practical use of what is being taught. For some of them, the guidance or instructions are an important issue; for others, it is important to be on their own. They prefer to explore the topic alone. One can also say that some of the students prefer to work alone while some others prefer to be in groups and discuss the contents with their colleagues. Anyway, there are different routes to become an independent, reflective and autonomous learner. One step in the right direction involves the discovery by the student of his / her best way to learn (and be conscious of that) as well as the help of the lecturer in a supportive environment. Of course, we realize that this process is not easy. Lecturers are, generally speaking, aware of this problem. They try to bring the experience of the students into the curriculum and use it to make the learning process more successful. However, there are difficulties that prevent success. Some of these are:

- as students work, they do not have a lot of time (time to study, time to attend classes, to be with the family, ...), they are not able to arrive on time to classes or they miss classes. They have some difficulties reconciling family, profession and studies.
- difficulties related to their academic background – they have a lack of knowledge to understand the subjects, they have bad learning habits (acquired in the past) which prevent their progression, they are more sceptical in relation to what the teachers say and so they have more difficulty in changing their opinion.
- they have more enthusiasm than the traditional students but they give up more easily, it is difficult to help them to change their study habits, some have lack of motivation, lack of objectives. They work at different rhythms and have different objectives; the standardization of subjects and contents do not meet all the interests of each individual. It is difficult to initiate them into critical reflection.

Conclusion

Although we realize that some of these difficulties are real, we also observed that there are lecturers who do not try to change the way they lecture – maybe because they have a lot of work (lack of time to prepare new lessons) or just because they are lazy (they have been in this profession for so long that they just repeat the contents without updating it). Anyway, we feel that there is still a long way to go in preparing the workforce for the knowledge based society; this involves students, lecturers and the institutions.

References

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