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E- LEARNING AS PART OF OPEN DISTANCE LEARNING

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Abstract: Open distance learning, a type of learning that was used for a long period of time by universities and other learning institutions, has finally developed into an efficient learning solution, by the intensive use of modern learning systems based on the information and communication technologies, also being referred as e-learning.

In present, open distance learning cannot be conceived without the use modern e-learning technologies, these two terms being highly correlated. Information and communication technologies, by the use of computers and mass media, made open distance learning as efficient, or even better than most of the traditional learning methods. The distance between the teacher and the students becomes now irrelevant, the way an e-learning course is written having now a much greater importance.

For all this reasons, the teachers that intend to develop an e-learning course must follow a certain pattern if they want to obtain the best efficiency. The use of multimedia and internet is the main cause of the differences between a traditional course and an e-learning based course that is developed for open distance learning. Teachers and course developers must be able to transmit useful knowledge to students in the most efficient way by these means and substitute the absence of traditional classes. The students must be guided through the course contents interactively, so they can learn and develop the required abilities. Once the above mentioned barriers are overcame, e-learning based open distance learning brings a number of advantages to those that take part in the learning processes.

Keywords: open distance learning, e- learning, information and communication technologies, multimedia, internet.

I. INTRODUCTION

Because students that are following distance learning courses do not have a direct face to face interaction with the teacher, it is necessary to find different approaches to fill the gap. The solution that was found to this issue in the intensive use of modern e-learning technologies based on computers and mass media communication, including the internet.

After several years of information and communication technology based e-learning techniques application both in education institutions, like universities and schools, and in other domains of activity, it can be affirmed that the efficiency of these techniques has been proven. As long as the e-learning technologies are properly applied in an appropriate environment, their results can be comparable with those of other traditional learning methods.

The key to obtaining positive results while using technology based e-learning is to design the courses and all the tools used in such a way that they supplement the lack of the student – teacher face to face interaction. The studying resources that are designed for e-learning differ from the usual learning resources, both from the point of view of the form and content and from the modality of working out. Multimedia and communication technologies and the Internet are employed, causing important changes in the field of education and leading to the reorganization and transformation of the

education system, so as to offer learning opportunities to all the people concerned by their professional evolution regardless of age, sex or geographical area.

The only limit in the development and generalization of the long distance learning is linked to the individual domain of interest, which has to allow the long distance study.

At a global level there is a generalized tendency of developing the long distance learning for all the domains that permit that. This fact brought about the development of new instruction fields that provide the necessary learning resources to all those interested in their education and professional success. The modern learning, instruction and distance learning programmes are supported and distributed through the worldwide use of e-Learning, the learning based on the information and communication technology, that covers a wide range of teaching activities, from traditional learning methods, to combinations of traditional and electronic learning methods, up to the fully on-line learning.

II. SPECIFIC NEEDS AND PARTICULARITIES OF E-LEARNING STUDENTS

Students who choose to complete their education by attending open distance learning studies have usually different views than those who attend classic courses. Even though distance learning students are most of the time young people, aged 25-35, they are usually mature, have a family, work and are more aware of the need to improve their knowledge. Distance learning students are motivated by professional ideals, and are aware that they can reach them only by studying. The adult students, in large majority enrolled in courses without compulsory presence, have a strong will to reach their proposed aims, which makes them be more than just students. Being involved in social life, as employees in a certain field of activity, they are permanently concerned with upgrading and completing their education, and are more aware that they must learn in order to get a better job and a more important role in life. Compared to the full-time students, they have more knowledge, they acquired the capacity of analyzing the principles that are the basis for the information they have already got and have the capability to establish the connections between them. For these reasons they are more motivated in their interest in thoroughly studying a domain. For them, the teacher represents an external factor of motivating the learning by communication (e-mail, letters, comments etc.), a support in guiding the whole instruction process, encouraging them and furnishing advice periodically (and at distance). At the same time, he must be the author of the teaching materials, using, for this purpose, the technical tools available.

The people who attend long distance learning courses usually lack the trust in their learning capacity, because they are not in direct contact with their colleagues, concerned by the same subject and cannot compare with these ones the personal results, obtained in the individual study process. In these circumstances, the teacher is given the task of replacing the classmate and, by the manner he designs the courses and the other didactic materials, and through the communication means he chooses to guide the student, the teacher conveys to the student the feeling that he was not left alone to face unsolvable problems. Teachers, more than in traditional learning methods, have to enhance the student's trust in their own capabilities and he makes them continue the study, in case the students were tempted to abandon because doubts and discouragement. For this reason, teachers of distance learning students should be more involved in the learning processes and help students pass over these barriers.

Mature people following distance learning programmes, with social responsibilities, the ones who study individually, permanently live with the fear of not learning enough to cover and understand the subject included in the educational programme they follow. As a result, they are sure that they would make fools of themselves for not being able to prepare their homework properly, or answer the evaluation questions correctly, and from here, they are afraid to submit the paperwork within deadlines and to stand examinations. To avoid such situations and to encourage the students, the teachers involved in a long distance learning educational process must conceive easily readable courses, with a complete contents and a presentation form that are to stimulate and ease the learning and have to recommend an outstanding and selective bibliography, easy to consult. To intensify the students'

instruction and to get them familiar with the exam conditions, each course must include case studies, self evaluation test samples consisting in questions clearly formulated, with no ambiguities. Through its content, structure and presentation method, every course has to provide the student with the feeling of safety needed for giving him the strength to face the final evaluation exam. Furthermore, through the chosen techniques and the communication methods, the teacher has to support the student during the whole period of studies, he has to answer the questions and to correct his homework many times up to the final term of delivery, offering him the opportunity to remake them until the requested level of knowledge is reached. The fact that the participants to such a distributed process of individual instruction, students and teachers are not face-to-face in a classroom, create some specific problems in preparing the learning resources.

Generally, since they are employed and have to financially support their families, the students who study on their own are stressed because of the way they share their time between study, job, family and other categories of obligations generated by the relationships with friends, neighbors, colleagues, bosses, etc. They often develop a feeling of guilt if they spend too much time studying. Moreover, after a workday, they are too tired to make intellectual efforts easily, the concentration time for a tired adult being approximately 20 minutes. Consequently, the courses must be structured in lessons that require a maximum of 30 minutes to be learnt and their presentation method must eliminate the monotony and keep their attention awaken, to stimulate their concentration and memory capacity. For this reason, it is recommended that the course should not contain excessively text, but alternate texts with paragraphs containing graphics, images, and sound and, especially, with interactive elements.

Those involved in the distance learning training programmes can observe that adult students are more problem-oriented than subject-oriented. As a result, the learning resources must correspond, from the presentation and detailed contents point of view, to their educational level and must improve their increased learning abilities, focusing more on logic than on memory. The authors of the courses and of the auxiliary teaching materials must take into account the previous individual experience of the adults, as being a very important learning resource.

III. E-LEARNING TECHNOLOGIES PARTICULARITIES

E-Learning means connectivity, communication, collaboration, contents, context and competence, since it relies upon the information technology, that connects one man with another man and people with information/knowledge, by means of computer networks, adequately set, offering everyone the most appropriate content, at the required moment. The participants at a distributed learning process use World Wide Web (www), e-mail, a learning management system and a collaboration system in real time- of the virtual class type - to access the available multimedia contents and to communicate among them. Typically, it includes some forms of interactivity, as, for example, the on-line interaction between the student and the teacher or the interactive television.

The e-Learning environment represents, in fact, the technical-informational support of a simple learning process and allows the elaboration of complex learning resources, easy to use, appealing to techniques and methods that eliminate the learning problems connected to the students who attend different learning forms (full-time courses, part-time courses, long distance learning courses) each one with its particular features. The modern learning resources, (meant to be used in the e-Learning background by all those who want to complete their education), implicitly solve the particular problems of the long distance learning students. The learning facilities provided by this kind of resources, permanently accessible to the e-Learning background increase the students trust in their intellectual capacities and make them continue the study, until they reach the professional level of education they aim to.

E-Learning is the distributed teaching method supported by the digital technology, at distance or in the classroom, which covers a wide range of applications and educational processes such as computer assisted learning, learning based on the Internet or on the satellite digital television.

E-learning can be defined from two different perspectives:

- From the pedagogic point of view the e-Learning represents a teaching, instruction and learning method, based upon computer networks and multimedia technologies, which ensure accelerated transfer of information, knowledge, understanding techniques and ways of interpreting them from teacher to students anywhere, anytime and at request, with the aim of getting performant results, speeding up the educational process.
- From the technologic point of view e-Learning represents the teaching, instruction and learning process that includes the authorization, distribution, evaluation and management of the courses' (or other didactic materials') contents achieved by using the digital multimedia and communication technologies.

From the content's point of view – the e-Learning background consists of:

- The distributed knowledge database includes the totality of the materials loaded on web sites, accompanied by explanations and interactive guidance for searching and identifying certain topics. It represents the most accessible and facile form of library or bookshop, which ensures a wide knowledge volume from all domains of activity, either for free within certain organized training programmes or against payment.
- The on-line support consists of forums, chat rooms, on-line news, e-mails or
 Microsoft or Yahoo Messenger mail applications. Being more interactive than the
 knowledge databases, the online support offers facile the opportunity of asking
 questions and getting answers, even immediately.
- The non-synchronic instruction consists of individual learning, based upon CD-ROMs or computer networks of the intranet or Internet type. It can be fully independent, through the links with the outstanding materials from the databases of knowledge or it can include the communication between the student and the teacher, through news on-line, on-line forms and e-mails.
- The synchronic instruction is achieved in real time, through the direct communication of the participants at the instruction process, in a certain interval within a preset period (weeks, months or even years), by means of the Internet, audio or video lectures, mobile telephony or interactive television.

The e-Learning background includes, usually, three elements: the e-learning platform, the e-learning resources and their users. The e-learning platform consists of the hardware and software support, essential to an electronic teaching, instruction and learning programme. The users are those who use the resources developed on the e-learning platform. The e-learning resources include all the data of interest from the e-learning background and are made up of knowledge, information and strategies.

The e-Learning resources can be classified in five large categories:

- Virtual libraries: articles databases, books, research reports, magazines, newspapers, textbooks and collections of general educational or business interest, which can be read on-line, worldwide;
- Educational products exhibition: course presentations or modern solutions for schools, education and business, of general interest or at superior level, with a view to promote them;
- e-Learning product and services offers: databases for e-Learning product and services offers, divided into 3 categories: management systems and e-learning tools, off-the-shelf e-learning content and e-learning services providers;
- Events from the educational and e-Learning field: presentations of conferences, communication sessions, workshops, traditional or on-line seminars and short courses:
- On-line bookshops: offer databases for books (or other general interest, educational or business materials) which can be ordered on-line.

Finally, e-Learning has two meanings: it designates, on one hand, an electronic-like learning method, and, on the other hand, a varied offer of courses and auxiliary teaching materials for professional instruction modules, which allow the accumulation and the know-how exchange by electronic methods. It can be defined as being the learning form based on electronic format, because it

relies upon multimedia technologies and computer networks (intranet or internet) for the elaboration and distribution of teaching materials and evaluation/self evaluation tests.

IV. CHALLENGES IN DESIGNING E-LEARNING CONTENT

Taking into consideration the facts previously exposed, it can be concluded that, the e-learning content must be adapted to the profile of the students that are following distance learning programmes while using all the facilities modern technology is offering to transmit the knowledge in the most efficient way. The authors and the editors must adapt their working methods for producing learning resources as required by the nowadays-modern education, appropriately for their use in an e-Learning environment. For this reason, it is important that in designing a course for e-learning based distance learning, there are taken into consideration a number of guidelines.

Those who prepare new e-learning resources must know in detail, both the particularities of these learning forms and the psychological profile of the students attending them.

The major components of a modern course are:

- Course notes: made up as lessons, easy to learn; each one contains key words, lessons or courses that must be read before, presentation of the subject, case studies, homework proposals, self evaluation tests and questions, selective bibliography;
- Auxiliary teaching materials, necessary for completing the information and achieve the study in that field: hardware kits / software, audio/video tapes, TV shows, etc.;
- Educational services: evaluation and self evaluation techniques, commentaries of the teachers regarding certain subjects, technical guidance during the studies;
- Specialized assistance: to enrol for a course from an organized learning programme or to take a good job, after finishing the courses.

Considering the interest of large amount of students for its content, each course must be conceived so that all those who have the previous professional education required could study it in any circumstances. Moreover, the objectives of every course that can be used in the e-Learning background must follow carefully the objectives of the people interested in its content and have to correspond to the established aim.

Only courses without applicative content that do not require the compulsory presence of the students in specialized labs for acquiring practical abilities under the direct guidance of a teacher, can be used for distance learning. The courses usually included in the distance learning programmes usually belong to the humanistic, economic and judicial fields. On the other hand, medical or technical courses, which have a direct applicative content, it is better to be attended in an "in class" way.

Every course designed for e-learning must contain all the information that is essential to understand the field of interest it represents, and to reach the level of education set by the learning programme to which it belongs. Through such courses, the student must have permanently the feeling that he is supported by the organizer of the instruction programme to which he belongs to.

The author of an e-learning course must produce it in a way that it represents the source of the minimum necessary knowledge for understanding the presented domain of interest, and it, additionally, replaces the teacher or the classmate, plays the role of a work agenda and is the major element in motivating the process of learning. The course must teach, explain, and anticipate questions, to which it also gives the answers, encourages the student and stimulates him during the study period, in order to get him more motivated than a full-time student.

A good course must contain reading text (knowledge), graphics, schemes, images, homework, evaluation instruments and learning methods that determine the students to go on studying. It has to keep the good students interested, but, also, be useful to the least endowed ones. They have to learn the essential, the basic notions, skills and abilities that must lead to the learning objectives they aim to.

For the students worldwide, who study whenever they can, the written materials are essential. So is the use of auxiliary materials. All these must be adapted to the new study conditions and to the psychological profile of the students, and, furthermore, they have to be available for all the interested

persons. Only thus they do become really useful and efficient in an educational process distributed in time and space.

To get the students familiarized with the new searching techniques in virtual libraries on the websites, the courses must contain definitions of the specialized terms, instructions of usage for the techniques needed in the e-Learning background. The materials should be very attractive in order to awake the student's interest to consult supplementary teaching materials and to encourage the Internet communication.

V. CONCLUSIONS

It can be concluded that, the e-learning content must be adapted to the profile of the students that are following distance learning programmes while using all the facilities that modern technology is offering to transmit the knowledge in the most efficient way.

The authors of e-learning content for distance students must adapt their working methods for producing learning resources as required by the nowadays-modern education, appropriately for their use in an e-Learning environment.

At the moment, the efficient learning instruments cannot be accepted without using the highest performance communicational and multimedia techniques and, consequently, without using the computers that ease the learning process. In this respect, the modern universities, recognized worldwide must assume the responsibility of the implementation of modern technologies in the educational process and must adopt the learning methods based on the new technologies, more efficient than the traditional ones.

References

- [1] Andronie Maria, Andronie Iustin, *Measuring the Performance of e-Learning Systems*, The 17th International Conference The Knowledge Based Organization, 2011;
- [2] Andronie Maria, *E-Learning Course Guide*, International Scientific Symposium- Quality Management in higher education- Spriru Haret University- The Faculty of Marketing and International Economic Business", 2006;
- [3] Clive Shepherd, E-Learning's Greatest Hits, Fastrak Consulting, 2003;
- [4] Harrison Hao Yang, Steve Chi-Yin Yuen, Handbook of Research on Practices and Outcomes in E-Learning: Issues and Trends, 2010.