e-Learning Experience in the University of Petrosani

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Abstract: - In this paper presents a new approach to the education system through the introduction of eLearning in universities in Romania. The novelty of this system of education is a new way of looking at learning, the background elements remain the same, only the means of transmission and assimilation of knowledge is changing. For this purpose, use of information brings with it the freedom to teach in place and the right moment.

Key-Words: - e-Learning, education system means information, technology and lifelong education

1 Introduction

The notion preparation for life, which has long been a major goal in education systems around the world, has become unnecessary view of the huge changes in society open due to changes in technology and economics. Thirty years ago, lifelong education can be seen as an option for an age with more free time. Now it has become a necessity. For education and training have become fragmented and diversified, according to various demands of consumers who pay for educational modules tailored to their needs.

Distance education is just an expression of this new guidance to consumers of various training institutions Accumulation and transfer, modularization of courses are part of the same structural transformation of the educational process. Enriching the knowledge base of the individual leads to the development and maturation of its complementary systems: family, community, region and society. All this is possible in the information age through continuing education, distance education, online education or e-learning.

E-Learning is a way to present the development of education, in line with technological breakthroughs. A concise definition of the term e-learning can be „providing education, training or education by electronic means". [3] The term is used today as a unifying term for a variety of learning techniques, by means of computer-assisted instruction. E-learning refers to the use of Internet technologies to provide a vast array of solutions that enhances performance and knowledge. In general, the term e-learning is synonymous with online learning, web based learning (Fig. 1).

Fig. 1 Education in line with technological breakthroughs [2]

Are some definitions of the term e-Learning:

- *Any act or virtual process used to obtain data, information, skills or knowledge.* E-learning means so learning in a virtual world where technologies cooperate with human creativity to accelerate and facilitate deep knowledge of the area studied [2].
- *Providing opportunities for learning, training or education programs through electronic means* [5].
- *Covers a broad category of applications and processes, such as computer training, learning via the Internet/Intranet (Web based learning), education offered through the computer (computer based learning), virtual classrooms and online collaboration.* Electronic content is offered via the Internet, Intranet, audio and video

cassettes, satellite TV, CD-ROM, interactive television [6].

- *Opportunity to improve education through the use of computing devices (Eg PCs, CDs, DVDs, TV, PDAs, mobile phones) and communication technology (using the Internet, email, discussion forums or software or collaborative wikis blog)* [7].

2 Problem Formulation

A new approach in education today is focused models like e-learning, distance-learning, online-learning tele - education. E-learning does not symbolize anything but a new way of looking at learning, the background elements remain the same, only the means of transmission and assimilation of knowledge is changing. Use tools for this purpose bring freedom to teach in place and the right moment. Roots are in the educational system online distance learning practiced in some parts of the world.

Frequently the distances large or other obstacles between became student's instructors. The most used and agreed ways of sending and receiving mail and courses were subsequently radio. Although the appearance of personal computers was quite early, high costs of technology have hindered development in this direction. [6]

After significant development of ICT, educational promoters of new ideas began to put into practice projects. Springboard for e-learning but has been the Internet and World Wide Web technology. The disadvantage of distance learning with previous solutions that could find the solution: student-instructor interaction was possible. Achievements in the field of software for e-learning processes allow real-time communication, creating virtual rooms.

Worldwide, budgets e-learning sector come to form the image of the existing market, technology and e-learning concepts being circulated in other media more than academic. Adoption by organizations for profit e-learning solutions enables more effective training of their employees, in the context in which the information is the cornerstone of any business.

In this context, the Romanian market by opening manifested surprise. In addition to the large number of universities and organizations adopt such a solution is Internet infrastructure that promises a spectacular development. Beyond technological support, the essential element is the psychological aspect involved: applying a clear methodology and professional work, projects implemented will enjoy great responsiveness from users. [5]

E-learning is a relatively new and unexplored INDUST which involves covering a broad set of applications and processes with computer-based learning. E-learning means information electronically distribute content, and more precisely defined than distance learning:

- e-learning is the convergence of learning and Internet;
- e-learning is the use of ICT to build, deliver, select, administer and extend learning;
- e-learning is learning through the Internet and can include information in multiple formats and network communication between all those involved;
- e-learning is the fastest way of learning, with the lowest costs, enabling increased access to education for all participants. [3]

There are many meanings for the prefix "e" where e-learning paradigm, of which the most important are:

- exploration - learners use the Internet as a tool for exploration to access a wealth of information;
- experience - www allows online discussion between participants in courses;
- commitment - www captivates the students, giving them the opportunity synchronous learning, collaboration and exchange of ideas;
- ease of use - allows even the uninitiated in surfing accessing information on any technical platform.

It can be said that e-learning is technology-based learning as a way to disseminate sound information using all electronic media, outright fixed, including Internet, intranet, extranet, satellite communication, video tapes, audio programs, interactive TV and CD-ROM. Concepts such as e-learning, Web-based learning are defined and used differently by organizations and users.

3 Problem Solution

New technologies will be used to reduce costs and increase opportunities for access to information. Promising technologies are especially video interactive, networking and collaboration software tools and virtual hardware.

Computers can play the role of teachers surprisingly patient, urging the creative thinking and promoting entrepreneurship. The major

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advantage that it involves computers is to eliminate the state of discomfort, providing learning opportunity without feeling the compulsion coming from the mind of others. Computers will become a kind of electronic mentor.

3.1 Benefits of e-Learning

The main advantage of an e-Learning system consists of flexibility that encourages learning style of the student. Recently, traditional education was faltering, leaving computer-aided education, mainly due to reduced costs. [6]

The main benefits of e-Learning:

- *Technology has revolutionized business, and now we have to revolutionize education* - need to transform the organization of learning in a more modern, efficient and flexible led to the concept of e-learning.
- *Anywhere, anytime, anyone* - it is estimated that a fairly large percentage of employees use computers in their work. Technical barriers such as access, standards, infrastructure is not a problem, at least in the near future. Development of www, high capacity computer networks and allows for learning 24 hours a day, 7 days a week.
- *Lower costs by eliminating travel expenses* - great benefit is the elimination of the costs and inconvenience which consisted of instructor and student need to be in one place.. Studies show that U.S. organizations have reduced costs by 50-70%, when delivered electronically replace traditional training courses.
- *Possibility of modifying the distributed information* - Web products allows instructors to update lessons and materials across the network, with automatic recovery business information and student access to the latest data.
- *Increase collaboration and interaction between students* - Distance learning can be more stimulating and more encouraging than the traditional because it allows interaction between groups. Students who use this type of education have more contact with colleagues, spending more time with training materials, a better understanding of issues.
- *E-learning is less stressful than the traditional* - This type of education eliminates fear of making mistakes in front of a group of people. Students can try new things can go wrong and I know where they went wrong, and learning what they did well and what does not.
- *Supervised learning* - Technology enables individuals to organize learning module no need to attend classes organized in class.
- *Presentation module* - Information architecture is modular, it is progressive learning.
- *Possibility to measure the effectiveness of the program* - e-Learning students are easily monitored and can be traced number of downloads made, the number of test data. It also can assist those in need.
- *High storage capacity* - the Internet has a much higher storage capacity than HDD individual sites. It allows users to access more products and can see presentation for a range of courses from which they can choose at least one.

3.2 Types of forms for e-Learning

The e-Learning educational process in society knows information at least three manifestations: distributed classes, independent learning and distance learning (ODL). (Figure 2)

3.2.1 The classes distributed, includes the following:

1. Features - Time course and effective communication involves both students and teachers must have at least once a week to get together in a physical space, number of participants in the current location can vary from two to five or more.

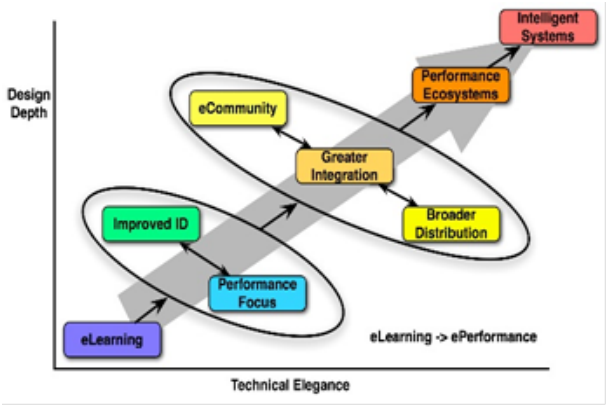

Fig. 2 Performance offered by the e-Learning [7]

Students can attend the course in convenient locations (home or work place) institutions serve small numbers of students are in different locations.
2. Technologies support classes - Bidirectional video dialogue, dialogue unidirectional video and bidirectional audio, audio conferencing, Videoconference.
3. Technologies support outside the classroom - Phone, fax, snail mail, PC.

3.2.2 The independent learning, include the following:
1. Features - no classes and students studying independently, following instructions received, students can interact with the teacher and in some cases with other colleagues, course materials offered can find written form, on diskette, CD-ROMs, videos, course materials are used for long periods of time, and their implementation requires a complex process that involved besides Specialists specialist teachers and media specialists in the training process, linguists.
2. Technologies support classes - none because there is no lesson.
3. Technologies outside the classroom support - phone, voice mail, snail mail, personal computer.

3.2.3. IDD model includes the following:
1. Features - course material is presented in printed form, on floppy disks, CD-ROMs, videotapes, allowing them to study students individually or in groups, usually course materials specific to the teacher, depending on material taught; students periodically meet in a location that can support a teacher in the classroom through interactive technologies, like distributed classroom model; common classes are for students to discuss and clarify certain concepts or ideas, conduct certain experiments, simulations and other exercises applied.
2. Technologies support classes - video systems connected bidirectional dialogue, dialogue unidirectional video, audio and bidirectional dialogue, audio conferencing, video conferencing.
3. Technologies outside the classroom support - phone, voice mail, PC. This e-learning system does not want to replace traditional education systems, but wants to reinforce learning.

3.3. Requirements of online learning

Complex systems of communication put in huge capital movement, sophisticated technical equipment, human resources and its beneficiaries huge billion.

✓ *Virtual training institutions*

The term virtual education is becoming more common, directly related to the increasing presence of ICT in distance education methodology. Evolution occurs in the context of virtual institutions a broad spectrum of conditions that, on the one hand, lead to the need for change, and on the other infringes change or slow pace. Conditions range from regional to some acting globally, each differing in relative importance to the socio economic state-specific consideration. A virtual education institution can be defined as: an institution engaged type of educational activities and promote curricula, syllabi and courses expanded via the guiding principles of those interested in ICT and providing tutorial support or an organization created by the partnership to facilitate teaching and learning without direct application as a provider of educational programs. Virtually institutions include public sector and private elementary level, gymnasia, secondary, undergraduate as forms of non-formal education, continuing education, vocational education improvement. Emerging virtual institutions has four different sources:

- institutions that were involved in open and distance education;
- traditional institutions, from schools to universities who have never been involved in distance education;
- corporate sector or large organizations develop training programs for internal use, with the support and means of distributing ICT and wearing virtual label;
- individuals who for reasons ranging from altruism to profit use ICT to create opportunities for anyone interested in creating.

Term virtual is used broadly and indiscriminately worldwide and is interchangeable with other similar

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terms: open and distance learning, distributed learning, networked learning, learning and learning through a computer web.

Although there are very few examples of virtual institutions in terms of pure numbers such activities in all forms and at all levels of educational organizations, public or private, is considerably worldwide. No one seems to doubt that ICT development will have a profound impact on access, institutional operation and teaching and learning processes.

Development of virtual institutions is still in the experimental phase in most countries. Usually, the World Wide Web is used only publishing environment without resorting to true potential of technology, lack of importance of providing staff training and staff development. Emergence of virtual institutions is directly related to development and access to ICT infrastructure. Most socio-economic and geographic disparities resulting from such access and constitute the critical point of distance education as lack of access disadvantage becoming more skill and knowledge acquisition. Despite this direct relationship, it seems that strategic plans for the development of ICT infrastructure do not take into account practicality in education.

- ✓ *Distance learning environment on the Internet*

Because many aspects of distance learning behavior similar to traditional learning environments, there are few significant differences giving it a unique look.

The study found that staff involved must meet the same objectives as shape, orientation and making sense of conventional learning situations, but separation of pupil/student work teachers do certain tasks take special forms. The introduction of the Internet in schools has precipitated the emergence of new methods in education. Amid major changes in social, convergence of factors such as technological development, new technologies and shared responsibility for education teaching in various institutions lead to highlighting certain features that give the measure method:

- fluidity of roles;
- oriented curriculum of the student's particular needs;
- distributed resources;
- virtual facilities;
- asynchronous lessons.

Currently, an important aspect of national policies in shaping the new generation is the use of computers to support learning. It should be stipulated and directed by revealing the impact of ICT on learning outcomes expected. ICT should not be regarded only as one element of learning content, and also as a teaching tool, integrated in teaching various subjects, with an important role in improving quality and improving of educational process.

As a result of using ICT will develop skills for creating, processing, obtaining, and selecting and recovery information and will develop structured creativity and thinking ability. It will create new average individual and group learning. Another possible effect would be converted model student-teacher interaction in a triangular pattern teacher - student computer.

3.4. Competences of students

Distance learning environment has the main features available resources and means of contact and all contact between or among students. Peculiarities require that both educators and students to demonstrate specific competences in written communication and mastery of the means of transmitting the information used in the program. Expression graphic, textual, is a complex phenomenon rather than tackled.

Textual communication is subject to the same sequence of preparation techniques, preparation, adaptation and interpretation of the material forming the choir messages. Each technique in different parts but, more or less, to the extent that different aspects of graphic oral communication phenomena message same message.

In support of the idea that the issue is more complex than a simple articulation and perception of agreement beyond a simple stimulus, researchers in the field of psycho-linguistics emphasizes the message that is constructed so as to support and significance.

Efficient communication requirements:

- perception of different levels of abstraction of the various types of language;
- understanding the relationship between values lexical and syntactic;
- knowledge and appreciation of punctuation and other graphical means;
- surprise and to accurately assess contextual value;
- distinguish between essential and accessory in a written text;
- learning techniques based on information written work;
- mastering techniques of formulating questions, based on Information;

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- ability to summarize and formula a conclusion;
- integration of knowledge gained through personal experience written information.

A model of competence in using computers for education include online information and research skills necessary for each student and each instructor while studying participant in a distance education program via the Internet:

- Defining task. The first step is to recognize the need for information, defining the problem and identifying the type and amount of information required. Students and instructors must be able:
  - to use e-mail and online discussion groups to communicate about the content of the materials, for information, to initiate talks between the specific themes and subjects to perform tasks;
  - to use online conferencing, e-mail and software for local networks to communicate;
  - to use special computer programs to define or redefine the problem.
- Information search strategies. Once formulated task, to consider all possible sources and have developed an information search and selection;
- Access and location information. After determining priorities search, the information should be identified in a variety of forms of storage and access.
- Using information. After identifying potential resources needed, students and instructors must go through the materials to determine their importance for the topic and then extract relevant business information.
- Synthesis. Teachers and students must know how to organize and communicate the results of the information.
- Evaluation. Students and instructors can assess their own work or be evaluated by others.

4 Conclusion

As a general conclusion, we can say that an effective distance education program requires a team effort and sustained enrichment of each learner's learning experience matter. With this assumption are evaluated various aspects thanks to a wider range of signals.

The student is free to define its own way of learning and use free resources offered or available, limited to the course material that can be used equally important with other materials.

In this type of education system for students is important to have the ability to create new objects and change their properties. Therefore, the system must save the state of static educational materials and manage their condition dynamics.

Online training applications are of great importance, especially in terms of service and remote interventions in different locations. Online training is defined as a relationship where a coach supports, collaborates and facilitates client learning.

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