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# THE ART OF TEACHING USE THE ITC

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Abstract: The modern civilization is characterize by the upper continues speed to change. The economies ail now radical transformation to the single generation. Because a single difficulty to understand, appreciation and even survival to evolution, the impact of this change is name the choc of the future. In other contest, this fundamental modification is not appear sudden, but is more ample of the historical evolution of part technological development.

The students, the teachers and the instructors are preoccupied learning haw to use the potential ITC (Information and Communication Technology) to adapt new requirements. ITC instruments used in education will lead to displacement of emphases from the teacher centered learning environment to one student centered, where teachers no longer present the key source of information but their collaborators.

In the paper aims to present the five stage online learning model and the arguments use the ITC methods

*Key words: eLearning notion, communication online, online socialization, information exchange, knowledge ITC methods* 

### 1. INTRODUCTION

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The students, the teachers and the instructors are preoccupied learning haw to use the potential ITC (Information and Communication Technology) to adapt new requirements. ITC instruments used in education will lead to displacement of emphases from the teacher centred learning environment to one student centred, where teachers no longer present the key source of information but their collaborators.

There are many different varieties of and approaches to eLearning, and the eLearning world is changing rapidly. Some of the concepts we are present here. Nearly all definition refers to "electronics" or technology supported or enhanced learning, witch is actually nonsense. Electronics and technologies are just the media and virtual places, witch replace the classroom, the blackboard, the chalk, the pen, the books. Learning happens in the heads of the learners, supported by knowledge delivered in different formats – PDF, multimedia programs delivered and managed via different channels and learning environments.

Computer, information, and communication technologies certainly play a major role and are a basic requirement for eLearning, but the focus should not be on technology. The role of education, methodology and didactics is considered more crucial in the eLearning.

Another aspect is the creation of eLearning communities. Learning in groups, in victuals classrooms, plays an essential role in eLearning.

The document Better eLearning for Europe of the European Commission, "eLearning" is defined as multimedia and Internet technologies to improve the quality of learning by facilitating access to resources and services through collaboration and exchange of information remotely. There are several definitions related to the term ";eLearning"; in the literature, some more complex simplified, but all attempts to give meaning to concepts related to distance education via the Internet (Hoton, 2000).

Broadly (Iyer, 2003) through eLearning; means totality educational situations in which significant use ICT facilities. Defined so that e-education, meaning e-Learning is based on a multitude of terms that include teaching variety of experiences that could benefit from technological support (e) assisted instruction / computer-mediated, education digital/ online media instruction etc. [1].

In effect (Iyer, 2003) restricted the term eLearning; is a "type of distance education as a planned teaching-learning experience organized by an institution providing materials online in a sequential order and logic to be treated pupils / students in their own way".

System eLearning (learning through electronic means) includes methods and techniques of traditional and modern, and using IT&C technologies (multimedia processing and communication asynchronous or synchronous) drive issue it used to obtain experience in understanding and mastery of knowledge and skill in field knowledge [3].

ELearning is dynamic and has the program not content. This means that eLearning expertise to provide online, the best resources and solutions to my quick training in any field is relevant and timely. Collaboration is used in explaining and transmitting knowledge among colleagues, experts and other members of a professional field. (Figure 1)



Fig. 1. Example program for transmitting knowledge

Learning materials are smart materials, efficient, fast and easy to develop because of existing standards in the field. Content developers can convert existing materials eLearnig formats: text, video, interactive questions and more. A standard, the content of "modular," is easily built for easy use.

Electronic learning resources are used in multimedia elements in their composition, integrated learning systems, Web content, or digital text. In traditional instruction, teachers use resources as a supplement separate from on going classroom support (eg a video about the operation of a gear with gear from an hour of Technology). Learning resources are often using the Internet, multimedia elements integrated data collection and Web content in complete packages that teachers can use as course support for students. Learning is possible that resources will replace traditional books (textbooks or courses).

## 2. THE ART OF TEACHING USE THE ITC

A higher level electronic computer use in the training process is the intelligent learning support systems. They are capable of similar behaviour of the teacher, showing great flexibility in the implementation process of self.

Expert systems of education (school systems) are able not only to present content as such but to self organize activities taking into account a number of pedagogical indicators such as strides specifically trained person, the number of errors committed in solving tasks, response speed, difficulty level requested by the user or system and it sets itself.

An educational [2] expert system requires the existence of four distinct modules that make product information namely:

- *interface module* - which provides brokerage relationship between students and expert systems;

- *expert mode* - which contains specialized problems in the field of application training. He is the leading problem-solving methods and is stored, indicating the set of rules for each phase of settlement. For every problem possible to generate the module includes tree expert on the best way to solve the problem. Chosen way of solving the problem of the training is copied step and compared with that in the computer memory. Assistance program does not give ready-made solutions, but problems aids, content intermediate support. Thus the guided trained in problem solving.

- *profile student module*, containing a number of information related to the strides that the number of rules used are not optimal in problem solving, etc..

- *teaching module* includes a collection of selected educational precepts of teaching methodology works, teaching, learning theory, which are used by the expert system during training.

Multimedia Learning and default computer training remain open areas of theoretical and practical investigations which should clarify many aspects of nature educational, didactical, psychological and technical. It became clear that computerassisted instruction does not imply average empirical techniques in the teaching process without a clearly defined line teaching

#### 3. INTERACTION DESIGN STUDENT-PROGRAM

*Educational software* is software designed to solve a task / problem teaching, in the narrow sense, the term *educational software* means software designed for use in training / learning. As educational software is meeting a wide range of electronic materials developed to simplify the process of education. Software educational software is the result of a pedagogical works of scientific content (Magdas, 2007).

An issue to be addressed by the teacher is to monitor and plan training: hence the computer can retrieve a part of teacher duties as manager of training. Such software has its specifications; its use resulted in what is known as the *Computer-Managed Instruction*.

#### The interactive software.

These types of software create a dialogue (like dialogue professor - students) between students and program (environment) respectively. Interaction can be controlled by computer (tutorial dialogue) or students (dialogue investigation). Tutor software generic term designating the way; students is controlled entirely by computer. A "tutor" of tasks over a teacher, was built for driving. If a tutor requires the students to follow a path of learning, investigation software uses a different strategy: students are not already present structured information (road map), but an environment where students can to extract all the information. A tutor of tasks over a teacher was built for the already structured (road map), but an environment where students can to extract all the information (both the declarative and procedural ones) needed to solve tasks proposed or for any other purpose, based on a detailed set of rules. Thus the path length depends largely on the learner (and his level of training and learning of its characteristics)-Figure 1

### 4. CONCLUSION

The teacher must know how to differentiate educational software (to accept IAC) for one utility or presentation software (themes).

All can be used to approach training, but only educational software (IAC) and it includes a pedagogical strategy (embodied in the tasks) which determines the interaction of students with the program - this interaction, whose specificity is determined by objectives results in the production of learning.

#### 5. REFERENCES

Bal, Carmen, 2009, ITC - To theory by practice, Cluj Napoca, Ed. ALMA MATER

- Brown R., 2001, The process of community building in the distance learning classes, in JALN, no. 5(2), http://www.sloan-c.org/publications/jaln/v5n2/index.asp
- Leinenbach, Jolande, 2007, eLearning Management, A handbook of teachers, Iasi, Ed. Polirom