
eLearning and Traditional Learning Methods

Introduction

An effective educational scheme must prepare the student to think by himself, to be creative and original, to solve problems and to interact with his surroundings in a collaborative way. The Web Based Model is a natural choice for developing these objectives because of its flexibility, accessibility and convenience to almost everyone. In this article we'll present our view on the subject and a basis for analyzing Web Based educational models.

Active Learning

eLearning requires the learner to be more intensely involved in the learning process than usual. This arises from the use of a computer, which requires a physical involvement in sending information, but it is mainly a result of the need to discuss with and respond to the other learners participating in the process, which calls both for social and cognitive involvement of the student.

Active participation in the learning process enhances and magnifies the acquisition of knowledge; the need to give reasoned answers requires the learner to organize and analyze the information. In an active learning process many students can contribute there share to the discussion and express their opinions, compared to traditional learning in which only a single student can express himself or herself at a given point in time. Moreover, many discussions can be held simultaneously and the learner can be concurrently involved in several subjects and express his opinion. The continuity of the discussion over time contributes to the learner's ability to develop complex concepts.

In eLearning, the amount of interaction among the learners increases compared to traditional learning, and this is also reflected in the volume of messages exchanged between the students in the study groups and in the student's reports, where they claimed that the computer mediated communications media is more comfortable for expressing oneself. The student's ability to control the learning

process, and to log on at convenient times, as well as at times when he or she feel themselves better able to receive and process information.

There are several elements of active learning:

- The student's responsibility and initiative for advancing in the learning process and forwarding knowledge
- Project based learning and problem solving, with valuable products
- The teachers serve as guides of the process rather than as fonts of knowledge; discussions are held between students and teachers
- The learning is based on authentic material connected to the real world
- The products' appraisal is also authentic and based on real world abilities, as well
- Collaborative learning among the students.

Creative Thinking

The Web is a tool that supports the student's creative thinking on subjects such as his or her ability to seek out gaps in information, to propose ideas and examine them, to examine and improve ideas and to discuss the results. The teacher's role is to support the student and direct him on his way by providing comments and advice, which support the student's creative thinking process.

The Web is also a tool, which supports the students' risk-taking, their commitment to tasks, curiosity, and openness to new ideas and to a large collection of subjects, all of which are among the fundamentals that make a creative person. The teacher can also encourage the students' creative thinking processes by using asynchronous tools such as study groups and other tools which enable each student to react at his or her leisure and after devoting thought to the matter. The students dare to express themselves more in computer mediated communications environments, and they're free of many inhibitions that exist in the traditional classroom.

Creative thinking can also utilize the Internet's developing technology through tools which will enable presenting new information against older accumulated information, random presentation between different approaches to problem solving presented by different students at different times. These tools can help the student discover new patterns and connections and improvise.

Critical Thinking

There are various techniques, which have been put to use in learning through the Web which encourage the development of critical thinking. Critical thinking was intended to enable a choice of information, the ability to choose among several solutions, the ability to assess the force of a given argument, and the ability to reach decisions. The critical thinking grows stronger also following use of graphics and hypertext, which refine the hierarchy and logical structure of the concepts on the Web.

The process required from the student when searching for information on the Web, which includes defining the query, carrying out the search operation, examining the results and sifting and pinpointing the question, also refines the student's critical thinking.

Any other operation by which the student identifies main points, searches for cause and effect, finds patterns and relationships between data, creates a timetable, examines costs versus products – all these are also actions which refine the student's critical thinking.

Collaborative Learning

Collaboration is the process of shared creation: two or more individuals with complementary skills interacting to create a shared understanding that none had previously possessed or could have come to on their own. Collaboration creates a shared meaning about a proces, a product, or an event. In this sense, there is nothing routine about it. Something is there that wasn't there before.

Schrage, 1991

A computer-mediated communications learning process makes it possible to perform educational tasks, which include exchange of information and collaboration among several learners. The media also makes it possible to overcome logistic obstacles, which include the need of a face-to-face meeting between the learners, and enables flexibility of time and place in all matters to do with collaborative learning. In the reorganizing process of the syllabus to adapt it to eLearning, the

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teacher is required to emphasize the integration of elements of collaborative learning. Collaborative learning changes the relationship between the learners among themselves and between the learner and the teacher; the teacher is transformed from the authority to a guide and font of knowledge. Student in computer mediated communications courses reported an increase in the amount of knowledge they had accumulated during the course as a result of the interaction with a variety of other learners through the work groups.

The learner is also given the opportunity to develop writing skills in e-content. On the Web, writing is a central medium, but it is different from typed writing. While the latter isolates the learner from the learning group, the first contributes to the group cohesiveness, which holds up the communications interaction.

Learning Communities

Conferencing as a course vehicle promotes more equal interaction among participants, dropping barriers pf geography, urban/rural styles, social skills, mannerisms.
Harasim, 1987

Virtual Communities are social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationship in cyberspace.
Rheingold, 1993

Building up the Learner's knowledge is done more intensely as part of the learning community in which the learner can exchange opinions with other learners.

The community with is created out of the communications network's users is a social support and an important source of knowledge for the learner. The community is constantly available and in existence, everyone has the right to express him or herself, and any question will find an answer. The learners are free of social inhibitions of gender, race and external appearance, which sometimes encumber them in the traditional learning process.

Additionally, in the learning community, the learner encounters a multiple perspective, which enriches the accumulated knowledge. Compared with the traditional classroom, in which the student usually encounters no more than the teacher's opinion, the online environment enables him or her to read the opinion of many learners.

One of the factors contributing to this is the absence of physical and social representation of the participants, which makes it possible for them to express themselves freely and uninhibitedly. There being no need for the different participants to compete for "air time", each participant's ability to determine the amount of time in which he or she wishes to participate, the independence of the participant's verbal prowess and his or her ability to express himself or herself quickly in the language in which the discussion is held.

Learning communities which bring together learners from different backgrounds and geographic locations give the learner relative advantages, including: the desire to correspond and to express oneself in writing so as to learn more about one another, creation of a collaborative product requires the learners to hold discussions, to read and to edit material, in academic institutions where the students are not regularly on campus and do not live there, learning communities provide a place for exchanging information and knowledge and also contribute to improving the social relationship among the students.

The unlimited, round-the-clock access to the medium provides the students with freedom of action and with maximal convenience in accessing the medium, which contributes to the desire to use the medium and to the convenience of so doing, and it also enables disadvantaged students to participate.

Project Based Learning

Project based learning includes several goals, among which are those of inquiry-based education and cognitive and social goals. A student who is required to carry out a project also needs critical thinking in choosing and processing information, and an ability to carry out collaborative learning in order to optimize the information he has chosen. Project based learning intensifies the student's motivation in the learning process.

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The capabilities of the Web world, which make it possible to present texts, pictures, graphics and sounds, make it a suitable tool for project based learning. Using media can help project based learning, but one must also have knowledge and experience in managing project based learning in a computer mediated communications environment, as well as using proper and efficient communications tools in the process.

Shneiderman (1998) proposes a scheme called Relate-Create-Donate, which describes the process of carrying out projects using the Web. Within this scheme, the students create projects related to the community in which they work or to which they are connected, and then “donate” their project using tools available on the Internet, so that all of the Web’s users can view their project and use/enjoy it. Further, the ability to construct open projects which enable the students to transfer information to each other and to discuss each other’s results intensify the process rather than detract from it, as some teachers fear. Finally, Shneiderman argues that the Web’s power is also in the facility and simplicity, which make it possible to create and publish information almost as simply as it is today to work with a word processor. This of course contributes to the power of project-based learning.