

MODULE 14

DISTANCE LEARNING

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14.01 OBJECTIVES

The aim of the unit is to show a wide view of the evolution of training, with the resources and tools used years ago up to our days, this unit will make you a clear picture of the advantages and disadvantages of every training phase and the type of learning and interaction in the various stages.

14.02 EVOLUTION OF TRAINING

Distance learning is born from resolving a time-space problem.

In areas with low demographic concentration, but good economic development – as for example in certain states of the U.S.A., many potential students could not attend lessons in a classroom due to the considerable distance from school facilities or for reasons linked to one's own job and with the conflicting of classroom hours with work hours.

The answer to this problem has evolved throughout the years.

At the start of the '40s, distance learning was carried out via radio-broadcasting. Then we moved on to television and videocassettes that reproduced self-paced lessons.

In the nineties, with the wide spreading of personal computers in families, we went to learning delivered through cd-roms (CBT) and thanks to the diffusion of internet to WBT.

At the beginning of 2000 e-learning has set the standard.

Summing up, we have moved from a static formation, where the student “passively” receives lessons without any opportunity for dialogue, to a more dynamic form – e-learning that is – where it is possible to communicate with the teacher (one to one interaction) and with the other learners (one to many communication). Communication occurs both in real time (see videoconferencing or chat lines) as well as in asynchronous modality (e-mail and forum).

The interest for this kind of training approach has become, in just a few years, very important, thanks to the World Wide Web and the use of internet on a wide scale. But not only.

The globalization of markets and the consequent need to be informed on market trends no longer at a national but international level, along with the new technologies and the need to talk at all levels eliminating time-space barriers, has brought the information economy to focus attention on acquiring know-how from real value on which to invest to be competitive.

E-learning turns out to be the best solution: it aims at diversified populations geographically dispersed, quickly and at low costs, delivering good level training compared to previous solutions, using tools for fostering communication that helps the participants feel they are part of a group.

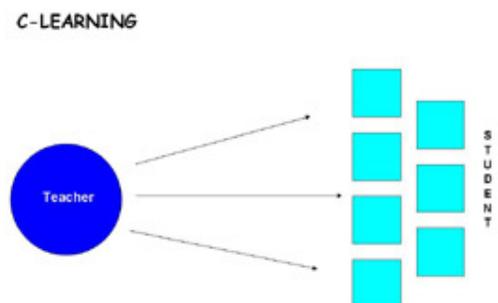
14.03 TYPES OF TRAINING:

The different types of education available, from classroom didactics till the newer ones.

14.03.01 C-LEARNING

C-learning is the acronym for classroom Learning.

C-learning represents learning in the traditional classroom (the one with desks and blackboards).



The lessons and exercises are held by a teacher that interacts directly with all the students.

Pros:

The classroom lessons allow to establish immediately an emphatic relationship with the teacher and other students. The feedback is immediate, in order to get an answer to a question weeks do not need to go by ... but just a few minutes. Communication is not only verbal, but also paraverbal (facial expressions, tone of voice, body movements).

Cons:

The essential part of learning is the interaction teacher-learner, this implies a scarce differentiation being that the role of the student is "passive". The cost of classroom training is very high since it requires the simultaneous presence of the students and a fixed number of participants (see commuting costs, number of classrooms to set up for a substantial number of participants).

Type of interaction: One (teacher) to many (students)

14.03.02 DISTANCE LEARNING

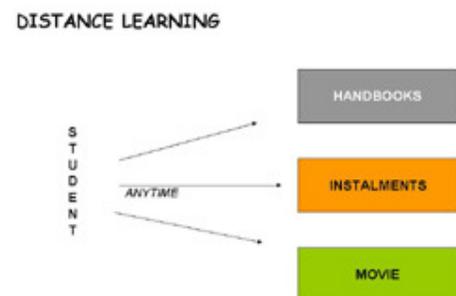
Distance learning means Distance training.

The courses are self-learning programmes sent to the student that uses them thanks to structured information contained in them.

Pros: This type of training does not require being present in the classroom with preset schedules. The students are free to organize their own personal schedule as they wish.

Cons: There is no type of interaction with other "human" figures. The risk lies in the loss of motivation for the student, who has no external feed back. Printed material or videocassettes reproduce the interaction of c-learning that is the teacher explaining and students listening.

Type of interaction: in this case the interaction is of course: student- teaching material (generally videocassettes or reference manuals)



14.03.03 CBT

CBT is the acronym for Computer Based Training.

The courses are designed in “selfteaching” modality, that’s to say the final user does not interact with the teacher, but rather has at his disposal a product that provides by itself all the information to reach a preset objective. The means by which the student interacts is the computer, and the course – generally – is on CD-ROM.

COMPUTER BASED TRAINING



Pros: Courseware developed on cd has a very appealing graphic appearance, various hypertextual links, a glossary It is decisively a remarkable breakthrough when compared to books and videocassettes! Practical and manageable, it contains an incredible amount of information. It can be brought everywhere and read on any PC. It does not require a network connection. You can insert tests with automatic answers.

Its cost is limited.

Cons: There is no possibility to interact with the outside or with other students that follow the same course, for exchanging of opinions. The course structure is pretty general and does not take into account the peculiar characteristics of the individual user.

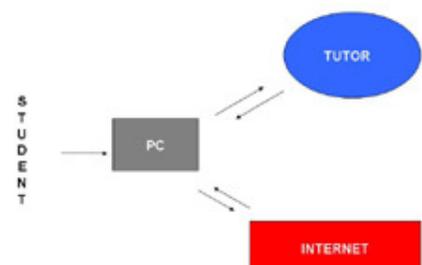
Type of interaction: one (student) to one (computer).

14.03.04 WBT

WBT is the acronym for Web Based Training.

As for CBT the courses are designed in “selfteaching” modality but in this case the user has the opportunity of using certain support tools such as the teacher or the tutor through e-mail, teaching materials downloadable directly from the network, and remote resources.

WEB BASED TRAINING



The means through which the student interacts is the computer and the course can be used from the network.

There is also asynchronous support by the teacher or by the tutor.

Pros: The time-space barriers are eliminated. In order to follow the course you only need a PC and a telephone hook-up. There is finally an interaction with a human referent (tutor, teacher). You can exploit the network and download material or visit the suggested sites to view certain applications.

Cons

Difficulties in adapting to the new training method

The student should break down technological barriers.

Generalised, but not personalised training (the teacher cannot take part immediately to solve a doubt)

Possible lack of motivation

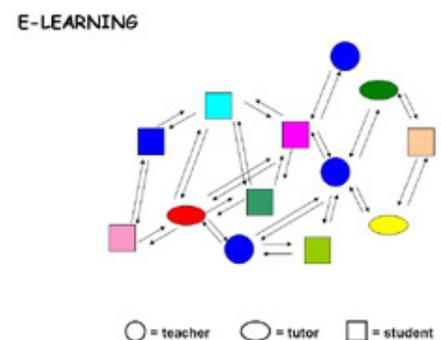
Type of interaction: One (student) to one (teacher, tutor)

14.03.05 E-LEARNING

This represents the virtual alter ego of the classroom. The students, instead of being physically in the same place are connected by a network.

Teaching is centred on the group. There is a dynamic interaction (both one to one, as well as many to many) and communication is both synchronous (for ex. chat), as well as asynchronous (for ex. forum). First generation e-learning steps away from WBT: the type of communication, thanks to new technologies (see videoconferencing) is direct, feed back immediate – or almost!

Second generation e-learning represents a further step ahead not only for the use of better performing technologies but also for understanding the main role of the classroom and the will to keep it alive. According to the latest studies accomplished by Marc Rosenberg, “second generation” takes turn with distance work periods with training moments in presence. Training is therefore defined as “integrated”, even if in certain cases the “in classroom” part is limited. In a case cited for example for a distance course lasting three months one, at most two meetings are envisaged face to face. In other cases the classroom has instead a comparable weight with distance activity. This is



because certain aspects of classroom training (such as socialization of knowledge, work group, direct contact) are necessary for reaching the final goal.

Pros :

Breaking down of time-space barriers;

Economies of scale (the cost in organising and delivering the course allows for considerable savings compared to classroom training)

User reactivity is increased

Globalness of information

Flexible and collaborative learning

Assisted learning

Increase in user performance

Speed: cyclical times

Personalization

Integration with company systems

Competitive/strategic Orientation

Cons

The student should break down technological barriers.

Difficulty in adapting to a new training method

Risk of isolation, in the face of chat and forums (the user does not participate)

Difficulty in keeping up with the pace of the class (the person rarely remains behind with chat and forum content ...)

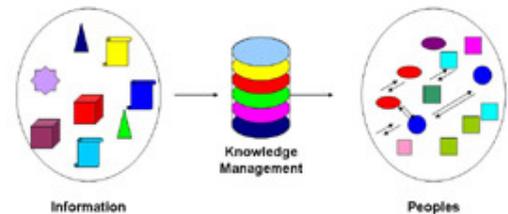
Possible lack of motivation.

Type of interaction: many (students) to many (teacher, tutor, student, student....).

14.03.06 KM INTEGRATION

KM is the acronym for Knowledge Management. In this context we mean “knowledge” as intersection between people and information. KM identifies therefore the creation and filing of data and above all the sharing of value information, within and throughout a community of people and organizations with similar needs, whose objective is that of building a competitive advantage and added value for the community, allowing a flow of “vital” information for the group. The medium-long term trend on large organizations is that of integrating, with modalities that are still in the experimental phase and/or in the developmental one, e-learning and Knowledge Management.

KNOWLEDGE MANAGEMENT



14.03.07 NETWORK LEARNING

Learning in a network is like taking part in a long-distance race.

It is a marathon of messages, that must be read and absorbed.

Everyone can take the time that he/she believes to be necessary. There is no speed involved like in a traditional classroom setting.

Everyone can connect when he/she believes it to be best or just listen to others speak. It is easier this way for the students to find answers to their own questions (deliberate and not immediate) and become further subject for debate.

Everyone contributes that way in the manner he/she believes to be best.

Online learning is decisively more congenial to motivated people that find constant stimulus from the lesson and debates in progress. There are however some people that are afraid to write for fear of being judged, or that cannot keep up with the various forums because they do connect with sufficient frequency. There is, in addition, those who have difficulty in finding the right words to convey their thoughts.

The facilitator will have to recover these resources and help them to fit into the virtual classroom.

Network learning is characterised by two learning methods:

- immersive learning;
- collaborative learning.

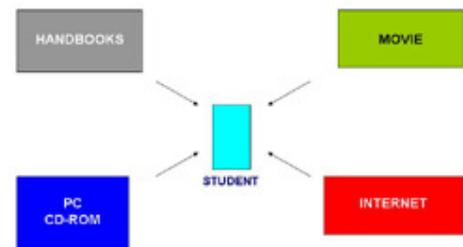
IMMERSIVE LEARNING

The telematic system is used to transmit knowledge.

In the first and second generation FAD systems-learning, distance learning, CBT, WBT) didactics is based on **immersivity**, that is on the student that studies and acquires information from the material placed at his disposal having as support an external help (which in time has evolved going from the "telephone" to e-mail, forum).

The computer becomes the means of teaching that facilitates simulations of reality and therefore the study of phenomena through the immersive experience of hypertextual tracks. As much as the hypertexts are designed ad hoc and prove to be very innovative compared to the traditional manner of transmitting information, the responsibility of reaching the result is all centered on the student that does not have the opportunity of reaching the result that is all centred on the student who cannot relate to a class and share his own experiences and problems with peers.

EMBEDDED LEARNING



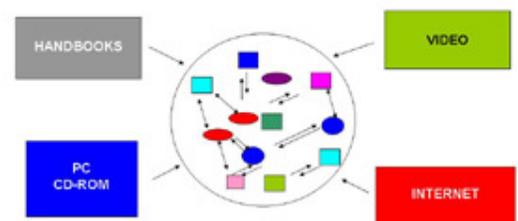
COLLABORATIVE LEARNING

The telematic system is used for cooperating.

The spreading of internet, in homes, schools, offices, cities (internet-café) has made the "network" a very interesting world, affordable to all. Third generation didactics, e-learning that is, uses like its utmost premise the world wide web because it allows a large number of interactions, both synchronous and asynchronous, that are fundamental for distance learning.

These interactions allow to especially make up for the physical distance between teacher and learner and between learner and learner. Internet favors the creation of actual virtual classrooms resolving the problems linked to isolated fruition.

COLLABORATIVE LEARNING



The learning process proves to be cooperative when various figures - the tutor, teacher, co-ordinator of the training intervention – act at the same time to support the student in his learning track, but especially because every learner can bring a considerable contribution to the building of knowledge, communicating with the support figures, and with the other learners. Communicating one's own experience, in addition to exchanging opinions, leads to further knowledge and produces added value.

14.03.08 B-LEARNING

Blended learning, teaching is a blended, meaning that a course in this format will include both classroom and e-learning activities.

This model of training using the advantages of 100% education and on-line training, combining them into one type of training that facilitates the work of both the trainer and the student. The instructional design of the academic program for which it has decided to form a b-Learning activities should include both online and face, pedagogically structured so as to facilitate learning sought to achieve.

The advantages that are often attributed to this mode of learning is the union of the two combined:

- which are attributed to e-learning: reducing costs, usually caused by displacement, accommodation and so on. The removal of spatial and temporal flexibility, because to carry out most of the activities of the course requires that all participants agree on the same place and time.
- and the presence of training: physical interaction, which has a substantial impact on the motivation of participants, facilitates the establishment of links and offers the possibility to carry out more complicated to make something so purely virtual.

It is the combination of multiple approaches to learning. The B-Learning can be accomplished through the use of virtual and physical resources, "mixed." An example of this would be the combination of technology-based materials and face to face meetings, together to achieve effective teaching.

Pros: This kind of learning includes the advantages of all models of learning.

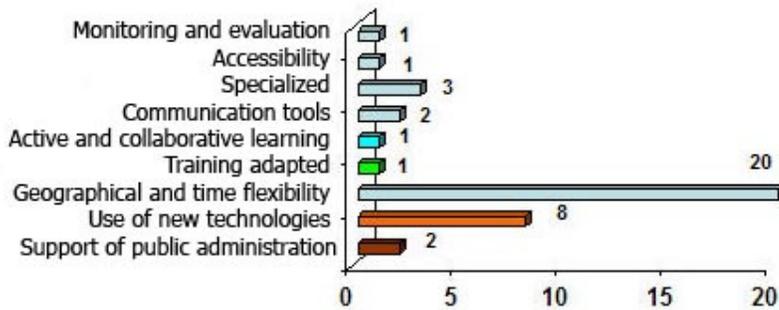
Cons : suposes a small part of the c-learning and possibly, small difficulties in adapting to the new training method

Type of interaction: all

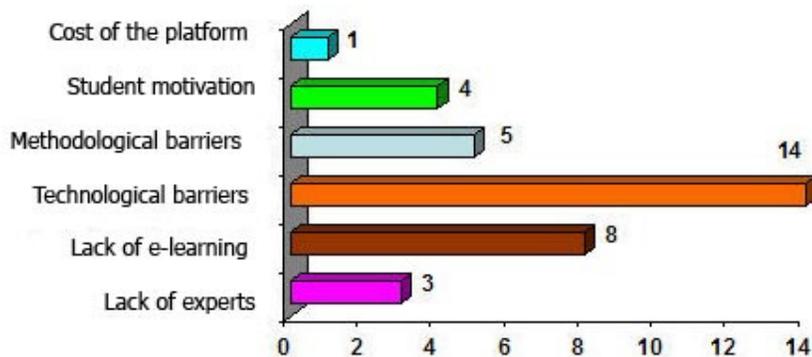
GENERAL CONCLUSIONS

Advantages and disadvantages of distance education behind the traditional education.

best of e-learning



worst of e-learning



The advantages are obvious:

There is no need for a specific geographic location or schedule.

Possibility of a greater exchange of information between students and a better knowledge manager, either via email, blogs, forums, communities, wikis, play learning, webinars, etc.

Costs are often lower than those courses.

Online training has a lot of potential, as well as differential element can always supplement the training.

The training will be towards the online system, where online tools continue to grow at this pace, it soon will not be a technological barrier, but a comfort.