

# “E-Learning”

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## Abstract - Summary

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After having an overview on e-learning starting for the definition itself, we reviewed some of the main aspects, which make e-learning difficult to introduce in the current educational system, such as the old mentality and the lack of technology. We were talking about other aspects to get to know if e-learning was a real interaction, or if promoted equality. At the end we saw that not everything was positive and that there were many problems, despite of which we considered it is worth to keep on working on it, because it offers a lot of new possibilities. To solve some of the problems we came up with a scheme of what the different parts of the system (university, students and government) should do to achieve a successful project. We also left a lot of questions to be answered, like the ones related to the promotion, or how to pay for the system.

## Overview

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## Introduction

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E-learning is a rather new learning method, which is still being developed in its initial part. It consists on **learning based on Internet and other ICT methods**, but we have to describe more specifically what we understand by e-learning; what are the objectives of this new method?, where could we apply it?, should it substitute the current system, or only complement it?

At firsts, it may be clear that e-learning is very useful, and can really help in the educational process, but we have to find also the negative aspects and those which make e-learning difficult to start working. Thus, we should answer some questions: what are the benefits of different uses of ICT in teaching?, what are the threats of the use of ICT in teaching?, what additional skills does e-learning require from students and teachers?, what kind of changes in attitudes does it require?, ...

This is the background in which our discussion started, we dealt with several aspects of e-learning and especially focused our discussion in trying to identify the problems and solve them within our possibilities. We were discussing about whether the interaction was real enough, to compensate the possible problems of isolation; and also the matter of equality derived from the differences in technology among the countries, and the different regions inside the same country.

In the rest of the document we can find the discussion more detailed. First we were trying to define e-learning from our point of view; after understanding how a current distance learning method work, without any kind of ICT help, we tried to apply e-learning on it. This way helped us to see the positive aspects and the problems; then we can find an analysis of those problems, especially those related to real interaction and equality; finally we were talking about if it was worth to promote it or not, so we tried to figure out some ideas on the roles of the different parts of the system, to make it work.

## The Discussion

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### Definition

The first thing is trying to explain the meaning, what is e-learning for us?

We should make a **difference between learning and looking for information**. So e-learning could be defined as “A new **interactive** method of learning through a computer network, and other ICT (Information and Communication Technologies) means.”

A method based on electronic means, which can be used as a standard method but **can't substitute traditional methods**.

We have been discussing about the different situations in our countries, as a first view of the issue.

- The new fields of engineering have no more information on the web so it's difficult to find them.
- One of the participants of the discussion is working on a project focused on web-based learning
- In Italy the main problem could be the old-minded teachers.
- In countries like Estonia or Romania, using the web is complicated.

We can talk about several **kinds of e-learning**: the first is the communication between teachers and pupils by emails. Others could be forum and chat, or lectures on the web. And in general any communication mean where we can find an interaction teacher-student, so as to get a **bi-directional communication**.

The **goals** of this method are:

- To make the communication between students and teachers quicker and easier.
- To be accessible all the time.
- To make learning more attractive and reachable for more people.
- To enable access to a wider range of information, from anywhere.
- It can be very interesting for already existing distance universities.

### First Approach

To get to know better the way e-learning could be applied we were talking a bit about how similar systems, though without all these technologies, work. For instance, we thought of distance university and some kind of

language courses, where you meet the teacher regularly and they just give you the appropriate materials so as to guide you in your learning; at the end, you have to go physically to make the exams.

These kinds of courses are quite common nowadays; the next step was to try to imagine them with the technology we want to apply through e-learning. For everybody it seemed clear that e-learning would be of great help, and e-learning would substitute most part of the old system, whereas the exams should remained as they are (we did not manage to find a good way to make “distant exams” avoiding cheating, for example).

## Positive Aspects And Constraints

Having a good approach on how the actual system could work, we were ready to talk about the positive aspects and the constraints behind this new learning method.

<b>Positive aspects</b>	<b>Constraints</b>
- Learn new things you cannot at home.	- Tendency to print everything.
- Possibility of taking the important parts.	- No social contact.
- Knowledge faster and more spread.	- Lack of technical infrastructure.
- You can do it on your own.	- Cost for the pupil & software costs.
- Technology enables better simulations.	- No preparation -> old mentality.
- Additional learning	- Problems for recognition & accreditation.
- More objective.	- To learn how to use computers.
- No filters or barriers (not afraid to ask).	- It has to be accessible all the time.
- You can reach more students.	- It is not good for every kind of course.
- Good help for disable people.	- Problem with the language.
- Students may prefer e-learning than going to classes.	- Too much work for the professor: too many things to be put online.
- Companies can use it for knowledge management and training employees.	- No pressure.
- Teachers can follow the evolution of the students.	
- No pressure.	

Here there are some comments to the chart:

- We were able to find a lot of positives aspects that made e-learning attractive, for both students and teachers.
- Beside there are some constraints we still have to find the solution to. Some people insisted a lot in that the main problem is the old mentality, due to the previous system.
- We can also appreciate one common point for both positive aspects and constraints. We were talking about pressure for doing things. From one side we can say that you can do everything better and more relax, but on the other hand students could turn more careless.

## Two Questions: real interaction and equality

After analysing some positive and to-be-solved aspects, we focused in trying to answer two questions, if e-learning was a real interaction, and if promoted equality.

### **Real interaction**

The first step is to get to know why this aspect can be important. We thought that it has to do with the **isolation** problem and the **fear to use** this new system.

We agreed it is a **real interaction** because every interaction is real, like the telephone is. And you are getting something out of it. Among the positive aspects of this interaction are the **more possibilities** offered by e-learning, for shy people, for disable people, and giving the opportunity of thinking better. Thus, the interaction is higher than with other systems (e.g. only telephone) because you can use all your senses.

We can also think that the isolation is not such, because you are increasing the communication indeed, but we have to think not only of the quantity of the communication, but also of the quality of it.

The contact with other people is very important, but on the other hand, we think that both systems should overlap, not just reduce it to e-learning, avoiding isolation as well.

On the other hand, some **misunderstandings** can arise from the misuse of the system, this is one of the weakest points of this interaction. It can also depend on the cultural background, if we are used to the system or not; and the problem of language shows here its importance: if it's restricted to English, for example, misunderstandings can appear because our English is different from one person to another (with the common tendency of making structures closer to the own language).

### **Equality**

We cannot forget we are talking about both economical and cultural equality.

- **Between countries.** We think that in this aspect e-learning would prohibit equality, because third world countries would have a problem with the transition from one system to the other, mostly because current infrastructures are very deficient.

Even between European countries the "equality gap" will be increased.

We can see here a need of governments' investments.

- Also **inside the same country**, we meet the problem of the infrastructural difference between rural and urban areas. We will have a similar problem as before.
- So e-learning probably would not be applied at first globally.
- We can also see a positive aspect, information can be theoretically accessible to a wider range of people all over the world, so **cultural equality** is in this way promoted, but we go back again to the **economical inequality**, because not everybody could have the physical access to that information.

### **Needs For A Successful Project**

We think that everybody has to put something from their part to make e-learning possible, thus we can divide the needs in the parts:

#### **University side**

- The university should provide the necessary **technical infrastructure** to make e-learning accessible to all the students. So it has to provide good computer rooms.
- We were talking several times about the old mentality of the teachers, so it's important that the university give **trainings to the teachers**, to change this mentality and also to give them the necessary technical skills.
- Three people should be in charge of any e-learning course:
  - A **content expert**, who knows what to teach.
  - One dealing with the **pedagogical support**, which knows how to teach.
  - A **technical expert**, who knows how to use the technology.

#### **Students side**

- The students should have a **training** at the beginning of their studies to realize of the importance and the possibilities of this new learning method, and also to get the necessary skills, no matter which studies you may be doing.
- Also an important point is that **students should demand** themselves the changes, this way the transition is easier and it is better than to be just "submitted" to a new system.

#### **Government side**

Mainly the government should provide the **money**:

- For software development.
- More money for teachers, because the work is larger.
- Scholarships for students, to make it accessible to everyone.

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## Conclusions & Future Work

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### Conclusions

The goal of this discussion group was to present e-learning as a new method for teaching, and to get to know the main aspects of it, so as to figure out the way it work, and which changes in the society should be required to achieve it.

We started from known points, and current systems that have a lot to do with e-learning, except for the technologies applied, and finally we defined e-learning from the own experience of the participants on the discussion.

We found e-learning very useful but with some problems to change the systems that work nowadays. The main problems appeared to be the old mentality and the lack of technology, but we also identified some others, together with the positive aspects. When we focused on the interaction of the system and on the equality, we arrived to the point that the interaction was real, but the equality was prohibited more than promoted.

Despite all the disadvantages and problems we finally concluded that **e-learning should be promoted**, because it offers a great amount of new possibilities which could complement the current system, with the only restriction of the needed money for achieving the project. The system can be achieved with government investments, good interfaces that make the system attractive, with trainings to change the mentality, etc.

As a final view of this system, and after all the discussion about it that we had, we make a little survey among the participants of the discussion, to see if they were willing to participate in it, either as teacher or as student. Most of the people said that it was a very interesting system and stressed on all the possibilities that it offers, but not everybody from both sides: teachers' side presented a lot of extra work; and on the other hand, the students' side had the risk of losing the interest in studying.

### Future Work

- We were slightly talking about who should **pay for the system**, should it be completely free?, should students pay for all they information they get from the net?, if so, how can we pay?; in the end we left this matter for further discussions.
- We agreed that we should promote e-learning, but we did not talk about **how we could promote** it. It's another interesting aspect to deal with.
- **Companies** can also have a lot of interest on this project, we should also see up to which point they could be interested, which advantages can present for them, if they could take part in the costs of the system...