

# E-LEARNING MANAGEMENT VERSUS TRADITIONAL EDUCATION MANAGEMENT

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**Abstract:**

*In a society where the lack of time is felt by most of the people, the Internet offers new training opportunities, which are not necessarily used exclusively. Training by means of an e-learning platform is an ideal device for delivering educational contents anywhere in the world and at any time, unrestricted by geographical and time limits, the trainee benefiting from a 'virtual teacher'. The development of the technological infrastructure and the higher educational quality of hypermedia documents factor out space and time from the equation of contemporary education, having as a result flexibility unprecedented in classical education.*

**Key words:** design, control, testing, feedback, planning

**JEL classification:** I21, M53

The management of an activity carried out to complete the assignments resulted from the targets of a society/ organization/ company must point out the following important aspects:

- Projecting – a set of concepts and ideas, methods and techniques, schemes and models to elaborate a system that leads to the achievement of the declared goals of an activity;
- Planning – generating operations, actions and stages in accordance with the proper planning of an activity;
- Organizing – generating relations, structures, procedures regarding the implementation of projecting and planning with a view to achieving the goals of an activity;
- Control, testing and maintenance – activities of supervising, testing and maintaining the outcomes achieved through the action of the generated procedures;
- Feed-Back – analyzing and comparing results to the activity goals and performing changes, up-dating and improvements of the other management stages.

Performance in education is closely connected to the performance in management. IT specialists, the computer programmers that work on the development of the complex computer systems, are often confronted with such management problems.

For example, for a computer programmer, elaborating a simple algorithm requires a management of activities: projecting the inputs and outputs (I/O), the variables and the used memory; planning the methods and calculus sequences; organizing the memory usage and the representation of inputs and outputs, controlling, testing and maintaining the procedures and programs; the feed-back used to compare the results to the preset goals.

In the field of education, the management must function correctly and thoroughly at all levels, starting with the central structures – the ministry of education and ending with the basic structures (departments or research centers).

E-learning represents a means of education that allows for the learner's autonomy, based on his ability to learn independently, to manage time and motivation

effectively [1]. Autonomous learning does not mean learning alone, but being part of a virtual group where it is possible to share experience and acquire knowledge, the e-student gaining from the positive aspects of tutoring, related to learning and personal development.

We can enumerate the main characteristics of e-learning:

1. Reusable, an object that has been created and validated can be reused in different instructional contents in accordance with the training goals and the trainer's option.

2. Lasting, the objects' validity lasts in time irrespective of technological changes.

3. Interoperable, an object or a content that has been created in a location can be reused anywhere else irrespective of the work platform.

4. Independent, it represents a basic characteristic which is difficult to meet if lacking experience in creating these objects. This characteristic allows an e-learning object to exist without needing a descriptive supplement. This does not mean that an e-learning object has to be exhaustive through explanations but clearly stated.

5. Objective, this characteristic does not necessarily mean that creating and defining an e-learning object represent universal laws or general truths, but it is supposed not to give way to subjective interpretation, and thus to become non-reusable.

Obviously, these characteristics are not the only ones that form the theoretical basis that has to be considered when creating a content that has to be distributed online, but I personally think they represent the essence of it.

The tutorial activity, together with conceiving the web-course, represents the pedagogical nucleus of the e-training [5]. In this paper, the term „e-learning management” will be used to denote an activity that includes both the administrative tasks regarding the group of students, and the educational tasks. The activity of leading a group engaged in learning online is conducted by the tutor and differs from the activity of platform management which is performed by IT specialists

The absence of the trainer from the learning activity makes the web-course a strongly determined instrument, the quality and quantity of preparations directly affecting its success. A course on the web requires more preparation, analyses and subsequent improvements than a classical face-to-face course. This is necessary not only because the trainer is absent from the learning space but also because learning requires the existence and functioning of complex technology, which some of the participants are not familiar with.

From the trainer's point of view, class management activities can be divided, according to the time sequences they are part of, into activities carried out before, during and after the training.

### ***1. Activities preceding the course***

*1.1. Promoting the course.* Promotion can be done by traditional or non-traditional means that should attract users and raise interest in the virtual course. One of the traditional methods, used in face-to-face learning, is the description of the course in a course book published by the institution which is then discussed with the students. The description includes the necessary knowledge and resources, detailed information on how the teaching staff can be contacted, and also the activity planning, registration terms, training activity and certification.

The methods that are specific to online training include posting information on web pages and entering them in the metadata circuit used by search engines, posting on the web page some demo modules from the promoted course.

An efficient promotion of the course may follow the next steps:

- Identifying the target population and its characteristics (the type of information it is attracted to, favorite search places, the most suitable terminology to describe the course and the field);

- Projecting the site – students’ expectations of the appearance of the site, expectations that might differ, will be taken into account. A site that is not designed to match the expectations of the possible users will have a negative impact and it will discourage them;

- Choosing the best method to promote it. There are more methods that can be used to promote a course, but it is necessary to identify the best method to promote a particular course. One of them consists of answers to questions regarding: registration procedures, online payment, resource distribution, answers to questions and information on accreditation and credits. Promotion is done by means of *banner exchanges, portals, search engines, presentation services and forums*.

**1.2. Programming and planning.** Programming and planning provides the whole system used to deliver the course (network, web servers, software, and other resources) that is available for the participants. The development of the system is not the trainer’s but the platform administrator’s job, but it has to be tightly connected to the registration activities and the start of actual learning activities. This activity is also part of traditional courses, where the delivery system includes a conference room, seminar rooms, blackboard, projectors etc. that have to be functional on the first day of the course

**1.3. Student registration.** It is a complex activity under the supervision of a centralized and possibly automated administrative department that stocks on students’ data and confirms registration usually assigning them a tutor. After registration the following activities may start:

- identifying pre-acquisitions, students’ schooling line and the group’s school profile;
- checking if the preceding requirements and qualifications are met;
- providing career consultancy services.

## **2. Activities carried out during the course**

**2.1. Inter-knowledge activities for the students in the workgroups.** Online learning is still a social process that requires interaction with the other people that attend the course. The interactions between the participants help the process of learning if the participants have become acquainted with each other, and the inter-knowledge also plays a part in the students’ education and in the development of their social skills.

The first step in the inter-knowledge, taken before the actual beginning of the course, is done by asking the student to hand in their photographs in order to create a ‘photograph album’ [5]. The photograph album helps the students and the trainers to connect names to photographs, thus to personalize the relationship and to stock public information about the student. The method is useful and it is also used in face-to-face courses, but it is of greater importance in the case of online education since the students rarely or never meet.

One inter-knowledge method, specific to the virtual environment includes the pages with lectures and laboratories. These documents allow users to find in short time the personal page of a student or of a trainer; it helps users memorize the names and facilitates the counseling activity carried out by the tutor. With that end in view, they have a list of names, both for students and the teaching staff, and the links to their personal pages. These pages (lists of names and photographs) also provide a short presentation of each participant (family, hometown, their preferences in music, sports and literature etc.) that help to create a small community and a starting point for a conversation in the virtual environment.

*2.2. The management of the formative assessment.* Formative assessment could be used to find out information on certain factors that influence learning: learning methods used by students, the group collaboration, the reactions towards the formative methods used during the course or towards the tutorial activity [2].

An important element of the formative assessment is that the tasks are assessed gradually in time, i.e. the tasks with subjective items, that are provided by the web-course, but whose completion cannot be done in an automated manner. The tutor has the duty to collect such information. Individual or small group solutions are to be stocked, interpreted in relation to previous academic achievements and communicated to those who are interested: to the students, then to those who have conceived the course, to the administrator of the learning system (when they are taken into account for the final mark) or they can be used by the tutor himself. An important way to use them is to assess the progress in learning.

### ***3. Activities carried out after the course***

*3.1. The management of result assessment.* Collecting the marks of the graduates which result from the assessment based on objective and subjective items allows the calculation of final marks at the end of the course, marks that have to be delivered to the students and to the authorities. In order to be useful, the monitoring of the students includes three stages: collecting, interpreting and communicating data and decisions. An efficient system for sitting exams must meet some pedagogical requirements regarding transparency of examination (data, objectives, contents, marking scales and criteria or creating a positive effect on learning or on students' evolution)[4]. The mediating of some positive effects on learning is done in accordance with the pedagogical norms with respect to feedback, fast delivery of examination, results that indicate whether the exam was a success, an automated confirmation of the reception of the exam, automated registration of data in the centralized system. The automated registration includes: identifying the number of exams taken, and of those that have been confirmed, comparing one student's activity with the activity carried out by another, establishing the individual progress, extracting the exams that have been passed and those that have been failed. The existence of the two marking methods – automated and non-automated – raises problems that might slow down data centralization and feedback, problems generated by difficulties in the separation of the information and its analysis, human errors, problems in the distribution or in accessing all the data a student might be concerned in. Monitoring students' progress and performances allows the tutor to make decisions with respect to the success of the methods that have been used during the course and to see how many resources have been used.

Monitoring students can be done individually or the tendencies shown in a class or a certain group can also be monitored. In face-to-face formation monitoring students is done manually, on an attendance sheet or analyzing students' performance in tests or evaluations, activities that are time consuming. In a web-class, where student's actions are mediated by a computer, the amount of data that can be stocked and the accuracy of the statistical methods are higher, while the analysis is much faster [3].

Collecting information on students' attendance includes, besides sitting the exams and posting the exam results, taking part in discussions, filling in questionnaires about the collaborative learning, the tutorial activity, and aspects of the web-course. Data analysis and interpretation is necessary because raw information is not very useful, it has to be analyzed in order to identify tendencies and make decisions.

The statistical analysis of the data resulted from different examinations is a task that computers can accomplish very well and very fast, depending on the software they use. Collecting and analyzing information makes sense only if the information is used. The resulting information can form part of students' evaluation, and is used to justify

the required resources, to find out if the students have met the preliminary requirements, to identify the problems that occur at the site or web-course level.

The decisions made based on the analysis and interpretation of the data resulted from evaluation concern learning and students' personal development, the efficiency of the web-course, of the provided activities and of the work groups.

Here are some situations and the appropriate decisions.

1. The identification of problem areas in the web-course is possible by registering the number of visitors of a web page or by analyzing the errors committed by the students. If the students constantly open a page that describes a particular issue or if all student give an incorrect answer to a particular question it means that there is a problem of understanding or distribution. In this situation the page/ question is analysed, rectified or removed.

2. The identification of collaborative learning problems is possible if the tutor monitors the participants when working on the suggested tasks, the differences between their solutions, the pace of work, and the conflicts that might appear on the chat or on the forum, or the participants' direct statements. If the group lacks cohesion, and if there are conflicts, the tutor has to analyze the group dynamics and to stimulate the students to solve the problems.

3. When students' personal data is stocked and communicated there are some aspects regarding data privacy and security as well as students' free access to information that must be considered. What characterizes most of the sites is the presence of a page that presents the recorded data regarding the usage of the site, including the number of visitors, the most popular pages, students' notes etc. Attention should be paid when placing personal information on the computer, because some of it may affect the student's public image and infringe the laws of the country. Once the information is stocked on computers connected to the network, the issue of unauthorized access must be considered. This is the task of the platform administrator.

The tutorial activity is a complex one, situated on the borderline between automated and subjective activities [5], the tutor being the interface between the student and the machinery, almost the only human presence in the cyber-space that can support the student who might feel not only lost in space but also alone to face his problems, his multiple needs and difficulties. This presence must always be available and competent. That is why, e-tutors' training remains a challenge for any training system, and even a greater challenge for the Romanian system.

There are a number of risks associated with using Information and Communication Technologies (ICT) in teaching and learning. The following summarizes some of the main risks, their likely impact and the associated risk management strategies being established.

<b>Risk</b>	<b>Likely impact</b>	<b>Risk Management Strategies</b>
Unsustainable resource requirements for faculty ICT goals	High	- The proposed reporting mechanisms by the central/college model of ICT services support. - Resource allocation mechanisms for faculty ICT goals
Duplication of key services for ICT support	High	- Usage regulation (approval study contract) - Unit of Study Website tracking system
Use of ICT not led by a focus on learning outcomes	High	- Team-based approach to the development of units of study using ICT - University evaluation service
Wastage of staff time in	Medium	- Web helpdesk,

development of websites		-Staff development workshops
Access problems for enrolled students	High	-Web helpdesk
Poor navigation design for unit of study websites	Medium	- Continous development aplication
Unsustainable student support required for online learning	High	
Technically unstable websites	High	
Copyright issues	High	- Library digitisation service
Acces to restrictions' information	High	- Making accounts with passwords

*Table 1. Risk management in E-learning*

## CONCLUSIONS

In comparison with the traditional education, some of the distance education advantages can be set off, being applicable, at least for the moment, at the higher education level and in permanent education, following the model of the distance university in the high-technology countries.

- Firstly, all the resources which are the course objectives are accessible.
- The purpose of the course will be more detailed than the actual one, providing multiple ways of the highest acquisition in any cultural domain.
- The audience is considerably high, the distance education being able to include students who cannot attend the traditional system courses. The access to the local, regional and national networks connects students belonging to different social, cultural, economic environments and having varied experiences.
- Learning at your own pace is facilitated, in a personal style, studying or attending the courses can be done step by step recurrently. The computers include varied and extremely flexible soft packages, the students having maximum control over the content information.
- Synchronized and asynchronized teacher - student interaction can be complementary. An important issue could be the possibility of making up a team teaching in order to transmit certain domain knowledge and to involve in these activities certain trainers who are not available, otherwise, for certain reasons.
- The technologies are interactive, allowing a total feedback in real time and the formative or summative evaluations, quantitative or qualitative, in an easy way, performed by the most qualified trainers.

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