





# e-Learning Handbook

"E-Learning in school practice in modern secondary schools across Europe:

Let us take up the challenge together"

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Author: Stefan Sidonia







### "E-Learning in school practice in modern secondary schools across Europe:

Let us take up the challenge together"



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#### 1. What is e-Learning?

E-Learning represents the educational situations in which information and communication technology are used as significant means of instruction.



The computer and electronic materials / media are used to support teaching, learning and assessment or as a means of

communication (for the realization of individual tasks).

E-Learning is a type of distance education as a teaching-learning experience is planned and organized by an institution that provides material environment in a sequential order and logic to be acquired by students in their own way. Mediation is done by new information and communication technologies - especially the Internet. The Internet is both a distribution of materials and the communication channel.

Definition of e-Learning for many of those who use e-Learning is a confusing concept. It is obvious that the "e" does not mean "electronic". "E" from e-Learning must be associated with concepts such as evolution, expansion, development.







#### 2. What does e-Learning represent?

Learning, or better, the learning process is directed to the trainee and it is performed in a virtual location.

The educational resources are available on the Web and distributed by using integration, accessing electronic and multimedia materials.

The trainee receives the guidance of a tutor (instructor, moderator) who plans the activity of participants subjecting these topics from the course to debate.

Through interaction and collaboration, the group of participants forms during the course (and often beyond), a virtual community. They can be characterized by so-called "fluidity of roles", by a continually balance of the role of trainer - trainee in the learning group.

The course has a static component, the one prepared by the tutor with a specialized team, and a dynamic one, resulting from the interaction of participants -suggestions, comments, resources brought by them.

Most of the e-Learning environments permit the monitoring of the activity of the participants and some even simulations, group work, audio, video interaction.







#### 3.Benefits of e-Learning

The achievements of the e-Learning can be classified in several ways. We select two of them:

Achievements based on a CD e-Learning: learners receive courses on CD; these courses will be installed on their computer and they can start training, learning.

Achievements based on network e-Learning: courses can be accessed via network (intranet/ Internet) from a central server.

E-Learning achievements include the following elements which are grouped around student, also called the trainee, who is eager to obtain the required knowledge:

**Infrastructure** - the set of elements, hardware and software that allows the access to the information that the student wants to learn.

**The content** – the knowledge, in electronic form, covering the topics of the course (in the form of text, audio, video, simulations).

**Services** - realization of curricula, relation to traditional education, evidence of knowledge acquired by the students, trainees' capacity management: these are requirements that any e-Learning implementation will have to properly manage.







#### The main participants to the process are:

- System administrator
- Institutions
- Instructor

The e-Learning platform is a product with the following minimum set of requirements that allow:

- → the procedures for installation, configuration and administration
- → the use of a friendly interface adaptable for the dynamics of the educational process
- → the use of a logical support for synchronous and asynchronous communication
- the administration and monitoring of information
- → the management of an accessible educational content
- → the use of editing modules, the usage of educational content in various formats
- → the facilitation of offline self assessment of the assimilated knowledge through asynchronous procedures and of the online one through synchronous procedures
- → a continuous training program with partial checks throughout the educational process





- → the assistance of the users in the use of educational software
- → the recording of the feedback regarding the quality of educational services and the quality of the educational platform.

Individual benefits may be summarized as follows:

- it saves the time spent trasporting and it provides a low cost training
- people plan their own agenda, on their own learning pace
- applications are flexible in space and time
- practical repetitions are possible
- own performance can be corrected easily
- the trainee is made responsible for the act of education
- people are free to decide on the continuation or discontinuation of the training.

At the facilitator's/institution level e-Learning:

- provides speed for the development and transmission of knowledge
- → provides flexibility in learning for people with different roles in organizations and in different locations
- → is available at low cost.







#### Each course must be:

- ➤ short, within 15 minutes and resolve possible situation on the principle question- answer practice response assessment;
- available, to the choice of the one who is studying. That's modular architecture.

#### 4.Use of e-Learning

"Standards for the use of e-Learning platform in distance learning".

These relate to:

- → Services offered to students
- → Specific educational resources
- → Services offered to teachers
- → Access to services offered by e-Learning platform
- → Quality management service offered by e-Learning platform
- → Documents presented by the institution
- → Individual or group learning
- → Online learning
- → Online libraries
- ♦ Online exams









#### The e-Learning system:

- Supports the teaching/learning by means of modern computer providing complementary trainers
- Facilitates learning
- Stimulates creativity, competition and teamwork
- Uses simulation software as a substitute for expensive or hard to find materials and teaching tools.

The benefits of implementing an e-Learning project are:

- 1. Attractive interface
- 2. Reduced costs
- 3. Customization of the learning process
- 4. Mobility.



There are countless tools, techniques, people, acronyms and resources associated with e-Learning. Below we cover some of the ones we think you are likely to come across.



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Tool / Term	Description	
Virtual learning environment (VLE)	An online space provided by the institution to support e-Learning. All forms of digital media can be delivered using its various tools. There is a wide range of VLEs on the market.	
Personal learning environment (PLE)	A concept of understanding that individuals utilise a range of networks – combining both institutional and personal networks and devices to learn.	
Blackboard	Example of a VLE that is commonly used.	
Moodle	An Open Source VLE that is commonly used.	
Podcast, either video or audio	A method of delivering multimedia content. The video podcasts are sometimes called vodcasts/vidcasts.	
RSS 9 TAKE UD PARE UD	A method used to push and pull content across the Internet. Particularly useful for subscribing to a podcast http://web2practice.jiscinvolve.org/rss-2/	
Face-to-face teaching	A method of delivering teaching and learning that is normally used to distinguish between the classroom teaching environment and online.	







Learning object	An object such as an audio file. Courses are typically made of many learning objects
Blended learning	A method of delivering teaching and learning that involves both face-to-face teaching and the use of technology together at the same time. For example the Internet may be used to support a session that includes interactive tasks for the learner.
Distance learning	Delivering teaching and learning remotely, typically using technology and the Internet. Multimedia resources are often incorporated to provide context to text-based resources.
Discussion forum	A communication tool for posting messages/work/comments/opinions. Often text-based but some do offer the ability to use multimedia.
Blog	A way of posting educational material online, normally organised by date and topic category.  Images, video and audio can be shared in this
E-learning	manner. Blogs typically allow commenting, which can be a useful feature for teaching and learning.







Wiki	An editable tool for working with others that has a trackable history of changes (wikipedia is the most popular example).  Much like a blog, its strength is that can be used to share multimedia resource.
Web 2.0	Essentially leveraging some of the more recent developments to support better interaction including social features.  Many of these Web 2.0 services provide community tools for sharing and commenting on resources, such as video.
Web service	A web delivered service that can be used for many types of activity including the storage and delivery of multimedia. Examples of web services include YouTube and web storage.
Netbook	A laptop that is very lightweight, portable and often cheaper than most laptops. In order to achieve this, typically size and power are sacrificed. They can be used to create, use, manage and deliver multimedia.







e-Book reader	Used to read digital e-books. Many of these readers can play audio books and/or read text out loud.
Flash player	A plug-in piece of software that adds functionality to the browser. Many e-Learning resources have been created using Flash and most web videos at present use this technology.
Mobile learning (use of mobile phones and other handheld devices)	Using mobile devices including mobile phones to facilitate teaching and learning.
Open-source software	Software that is provided under a license that permits the user to have access to the source code.  Open source software can be used to create, consume and deliver multimedia. An example is the audio editing tool 'Audacity' which is very popular for creating and editing audio podcasts.
Creative Commons licensing	A way to share copyrighted work within a documented license scheme. Creative Commons licenses are increasingly applied to teaching resources that are typically made available using the Internet.







HTML	The structural code that makes websites. Multimedia is typically delivered from websites that are built from HTML. Websites in turn allow us to produce e-Learning for teaching and learning.
Scripts  Control of the second	Bits of code that add additional functionality to a website or service. Scripts can be created to support teaching and learning.  For example, JavaScript is used to increase the functionality of the browser which can be used to create interactive based activity.
Web browser	A browser is a piece of software that allows us to interact with the web via a computer. Internet Explorer and Mozilla Firefox are two popular examples of web browsers that provide access to e-Learning material and multimedia resources.
Social media	Social media tools are used to communicate between people on the web and can be used to support teaching and learning. For example it is often desirable to use social media tools to facilitate online community opportunities including learner collaboration.







#### 6.Support

There is a wealth of technical and research based support surrounding e-Learning. Many institutions have some level of e-Learning support provision and it is worth seeking this out to better understand your institution's strategy and policies regarding support. Furthermore it can be helpful to find out if others in your institution or locally are working on similar things. E.g. many locations throughout the UK have regional support groups covering most aspects of e-Learning.

Support is also provided on a national basis, with JISC and JISC Advance being the largest groups working across all institutions. JISC and JISC Advance have a number of services and programmes including JISC Digital Media that support all aspects of e-Learning including topics such as: digital media, training, planning, strategy, funding and research opportunities.









# E-learn 9 One touch for knowledge

