Electronic learning

Electronic learning or E-learning is an general term used to refer to computer-enhanced learning. It is used differently in so many contexts that it is critical to be clear what one means when one speaks of "e-Learning".

Many technologies can, and are, used in e-Learning:

- Palm pilots
- MP3 Players
- the use of web-based teaching materials
- hypermedia in general
- multimedia CD-ROMs
- web sites
- discussion boards
- e-mail
- blogs
- wikis
- computer aided assessment
- simulations
- games
- learning management software

... and many more, and possibly a combination of different methods being used.

The term learning technology is generally used to refer to the use of technology in learning in a much broader sense than the computer-based training or Computer Aided Instruction. It is also broader than the term Online Education which generally refers to purely web-based learning.

E-learning is naturally suited to distance learning and flexible learning, but can also be used in conjunction with face-to-face teaching, in which case the term hybrid class is commonly used. Blackboard is an example of a typical Managed Learning Environment with a navigation menu and icons giving access to automated tools and content pages.

In higher education especially, the increasing tendency is to create a Virtual Learning Environment (VLE) (which is sometimes combined with a Managed Information System (MIS) to create a Managed Learning Environment) in which all aspects of a course are handled through a consistent user interface standard throughout the institution. In addition, several online student support services, such as online advising and registration, e-counseling, online textbook purchase, student governments and student newspapers are being used by colleges.

E-learning can also refer to educational web sites such as those offering learning scenarios, worksheets and interactive exercises.
Creating an Effective Online Learning Environment

An abundance of research has been done to determine the effectiveness of online learning. In reading through the research you’ll find the conclusions from one researcher to another to be ambiguous. Regardless of the research conclusions, there is agreement that the crafting of an online course is important to student success.

Key elements of an effective online course:

• As with any learning environment, know your audience.

• Develop the course around clearly defined learning objectives and goals, and clearly communicate these to the learners.

• Special attention must be given to how online courses are displayed. Artistry is not the goal. Instead, focus on organization to allow ease of navigation and learning enhancement. Graphics should present information to support learning. Attention must be given to student skill levels and equipment limitations when embedding audio, video, and web links.

• Create a collaborative community spirit by requiring sharing activities between students and instructors, ensuring constructive criticism, maintaining motivation, and providing assessment tools with timely feedback.

• Keep the learning environment flexible. Individual needs, interests, and objectives must be considered, but should not become the end in itself. Knowledge must be built on in real-time and customized to meet educational goals.

• Technical support services must be made available to train and provide ongoing support for both learners and instructor.

• Provide related links and resource listings to support and enhance the body of knowledge.

• Online learning web pages must be maintained to ensure up-to-date relevance.

Advantages and disadvantages

Advantages of e-learning often include flexibility and convenience for the learner especially if they have other commitments, facilitation of communication between learners, greater adaptability to a learner's needs, more variety in learning experience with the use of multimedia and the non-verbal presentation of teaching material.

E-Learning allows individuals to learn at their own pace and can minimize fear and intimidation in front of colleagues that could occur in a traditional class setting. Video instruction provides visual and audio learning that can be paused, and reversed for watching again.
Some are critical of e-learning in the context of education, because the face-to-face human interaction with a teacher has been removed from the process, and thus, some argue, the process is no longer "educational" in the highest philosophical sense. Supporters of E-learning claim that this criticism is largely unfounded, as human interactions can readily be encouraged through audio or video-based web-conferencing programs, threaded discussion boards, live chat, email, or other synchronous or asynchronous means.

The feeling of isolation experienced by distance learning students is also often cited, although discussion forums and other computer-based communication can in fact often encourage students to meet face-to-face and form self-help groups. Discussion groups can also be formed online. Human interaction, faculty-to-student as well as student-to-student, should be encouraged in any form.

The cost-effectiveness of e-learning is a subject of much debate as there is usually much upfront investment that can only be recouped through economies of scale. Web and software development in particular can be expensive as can systems specifically geared for e-learning. The development of adaptive materials is also much more time-consuming than that of non-adaptive ones.

**Pedagogical approaches**

It is clearly possible to apply any specific pedagogical approach to e-learning, however some approaches are more common than others. Two of the most common are those of instructional design and social-constructivist pedagogy.

There are four fundamental pedagogical perspectives which historically have influenced the approach to computer based pedagogy, distance education and continues to provide guiding principles for the pedagogy of e-learning:

- **Cognitive Perspective**
  The Cognitive perspective focuses on the cognitive processes involved in learning as well as how the brain works.

- **Emotional Perspective**
  The Emotional perspective focuses on the emotional aspects of learning, like motivation, engagement, fun, etc.

- **Behavioral Perspective**
  The Behavioral perspective focuses on the skills and behavioral outcomes of the learning process. Role-playing and application to on-the-job settings.

- **Contextual Perspective**
  The contextual perspective focuses on the environmental and social aspects which can stimulate learning. Interaction with other people, collaborative discovery and the importance of peer support as well as pressure.

From Wikipedia, the free encyclopedia