7 INTRODUCTION TO MOODLE

7.1 BASIC DEFINITIONS

Moodle is a free learning management system (LMS) – online application for the administration, creation, tracking, reporting and delivery of online education courses or training programs. It is based on a scalable web-based platform.

Moodle was originally developed by Martin Dougiamas to help educators create online courses with a focus on interaction and collaborative construction of content, and is in continual evolution. The first version of Moodle was released on 20 August 2002.

The focus of Moodle is to **create new or deliver existing content** of online courses to students, while managing them and keeping track of their progress and performance across all types of training activities. Moodle performs content delivery and administrative tasks - such as reporting to instructors or interactions among students.

Moodle is designed to support an interactive style of learning called Social Constructionism. This philosophy believes that people learn best when they interact with the learning material, construct new material for others, and interact with other students about the material. The difference between a traditional class and a class following the social constructionist philosophy is the difference between a lecture and a discussion.

For example, Moodle allows you to add several kinds of static course material. This is course material that a student reads, but does not interact with:

- Web pages
- Links to anything on the Web (including material on your Moodle site)
- A directory of files
- A label that displays any text or image

However, Moodle also allows you to add interactive course material. This is course material that a student interacts with, by answering questions, entering text, or uploading files:

- Assignment (uploading files to be reviewed by the teacher)
- Choice (a single question)
- Lesson (a conditional, branching activity)
- Quiz (an online test)

Moodle also offers activities where students interact with each other (used to create social course material):

- Chat (live online chat between students)
- Forum (you can have zero or more online bulletin boards for each course)
- Glossary (students and/or teachers can contribute terms to site-wide glossaries)
- Wiki (this is a familiar tool for collaboration to most younger students and many older students)
- Workshop (this supports the peer review and feedback of assignments that students upload)

7.2 DEPLOYMENT

7.2.1 CHOOSING WEBHOSTING

First of all, if your company wants to run Moodle, you need a web hosting service.

A web hosting service is a type of Internet hosting service that allows individuals and organizations to make their website accessible via the World Wide Web. Web hosts are companies that provide space on a server owned or leased for use by clients, as well as providing Internet connectivity, typically in a data centre.

There are many webhosting companies on local or global markets and choosing the right one is a crucial decision.

When choosing web hosting company, one must ask several questions:

- Is my web host technically suitable to run Moodle?
- How many teachers and students will use Moodle?
- How many teachers and students will be using Moodle at the same time?
- Is there suitable local web host or shall I use a global one?

There are free web hosts (who offer limited services or sometimes are supported by advertisements) and paid web hosts. I strongly advise you to use the second one when it comes to running Moodle. The best way is to find a local web host who is specialized in running Moodle (although such companies are not available in each country).

A list of Moodle partners (and web hosts) can be found here: http://moodle.com/partners/

7.2.2 INTEROPERABILITY AND TECHNICAL REQUIREMENTS FOR RUNNING MOODLE

Moodle runs without modification on Unix, Linux, FreeBSD, Windows, Mac OS X, NetWare and any other systems that support PHP and a database, including most webhost providers.

Data goes in a single database, installers can choose one from many types of database servers (MySQL, PostgreSQL, Oracle, Microsoft SQL Server).

E-learning systems can have many dimensions of interoperability. Moodle's interoperability features include:

- authentication, using LDAP, Shibboleth, or various other standard methods (e.g. IMAP)
- enrollment, using IMS Enterprise among other standard methods, or by direct interaction with an external database
- quizzes and quiz questions, allowing import/export in a number of formats: GIFT (moodle's own format), IMS QTI, XML and XHTML (NB although export works very well, import is currently not complete). Moodle provides various types of questions - Calculated, Description, Essay, Matching, Embedded Answers, Multiple Choice, Short Answer, Numerical, Random Short-Answer Matching, True/False.
- resources, using IMS Content Packaging, SCORM, AICC (CBT), LAMS
- integration with other Content Management Systems such as Drupal, Joomla or Postnuke (via third-party extensions)
- syndication, using RSS or Atom newsfeeds - external newsfeeds can be displayed in a course, and forums, blogs, and other features can be made available to others as newsfeeds.

7.2.3 INSTALLING MOODLE

Users can install Moodle from source, but this requires more technical proficiency than other automated approaches (such as installing from a Debian package or using the Bitnami installer) and thus more investments.

Some free Moodle hosting providers allow educators to create Moodle-based online classes without installation or server knowledge. Some paid Moodle hosting providers provide value-added services like customization and content-development.

Some Moodle web hosts:

- http://www.arvixe.com (global)
- http://itisart.com.gr/ (Greece)
- http://www.cvaconsulting.com/ (Spain)
- http://eledia.de (Germany)