



NEXT DESTINATION BALKANS: AGRITOURISM LANDSCAPES DEVELOPMENT

Moodle – a modern e-learning platform

Introduction

Rapid development of information technology in 80's and 90's changed our style of life forever. Society has adopted these technologies to all spheres of daily life. Today we cannot imagine life without computers, smartphones, tablets and other outcomes of the rapid technology research in past thirty years. This shift toward extensive use of modern technology has influenced also the way we teach students today. We cannot imagine teaching without use of computers, data projectors etc. One very important fact that is influencing the way we teach students today, is a wide adoption of e-learning. Internet based communication (e-mails, chat etc.) is frequently used by teachers when reaching their students. We, teachers, tend to use more and more internet to send students learning materials, receive students' seminar papers or solve daily basis problems arising from teaching. To give some kind of form various e-learning system have been developed throughout past couple of years.

1. Learning management system (LMS) as a new approach in teaching

Learning management system represents web-based teaching and learning. LMS are basically web applications running on servers. These can be accessed by students, teachers or other type of users using a web browser. A LMS provides educators web-based environment to create courses accessible via internet by enrolled students. There are some key elements of a good LMS (Ellis, R. K., 2009):

2. centralized and automate administration
3. use self-service and self-guided services
4. assemble and deliver learning content rapidly
5. consolidate training initiatives on a scalable web-based platform
6. support portability and standards
7. personalize content and enable knowledge reuse.

A LMS enables you upload and share teaching materials with enrolled students or any other users you want. As a teacher you have one common place to communicate with students (teachers can create various topic-based forums and chats). LMS provides enables creation of quizzes which can be graded automatically. Students can gain feedback on their progress during the semester. Teachers also have tools to create comprehensive grading system which will be accessible by enrolled students during the semester.

Using a LMS in teaching brings several advantages (Ellis, R. K., 2009):

- increases motivation of learners and encourages interaction,
- in LMS teacher can provide teaching materials to students in various forms – multimedia, video or test,
- improvement in teaching methodology,
- LMS provides various activities to choose from,
- Re-use of learning activities.

But use of LMS brings also some disadvantages which relate to this interactive type of education. These should be taken into consideration by the teacher when preparing an e-learning course for students. Among the most significant disadvantages we can specify (Ellis, R. K., 2009):

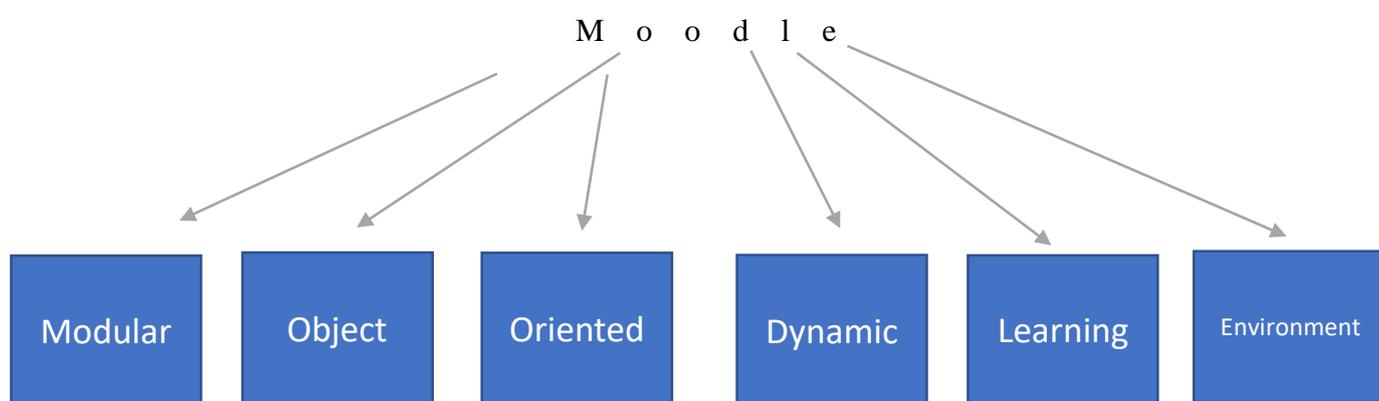
- LMSs are many times to course centered rather than student oriented,
- Weak computer and information literacy skills of teacher,
- Creating an adequate mix of teaching activities can be a challenging task for some teachers,
- Increase of teachers' workload.

2. Moodle as a form of learning management system

Moodle was created by Martin Dougiamas, a computer scientist and educator from Australia in 1999 (first version - 1.0 - is from year 2002). He was a administrator responsible for LMS at university in Perth. Based on this experience, he realized that there is a need for a simple LMS created by educators, nor engineers. This should provide needed input which activities and resources are useful in teaching process.

Today, Moodle has more than 4,3 registered online courses around the world. These courses are provided and guaranteed by around 1,2 million teachers. There are more than 100 million users in 232 different countries speaking 83 languages.

What does word Moodle mean? It can be a verb describing the process of lazily meandering through something, doing things as it occurs to you to do them, an enjoyable tinkering that often leads to insight and creativity. Other meaning of this word is described as Modular, Object, Oriented, Dynamic, Learning Environment.



Graph 1: Moodle definition

Moodle platform brings several benefits. Maybe the most important advantage of this platform is that it is provided to its users as a free system. So, basically there is no cost of using this system. You can completely download this e-learning platform for free. You are not affected by changes in versions of the Moodle. You can use the old one or completely switch to the latest version, cost free.

Moodle is also an open source platform. That means you can access the source code of the software for free. That is a huge advantage, because your institution can modify this platform for your specific need. It allows freedom, peer review and knowledge sharing.

Moodle is, in contrast to other LMS, learning oriented platform. This is based on the idea, that people learn most effectively, if they have possibility to be personally engaged. This is provided by several types of tools Moodle provides to teachers. For example, you can organize your course based on topics, weeks or other activities.

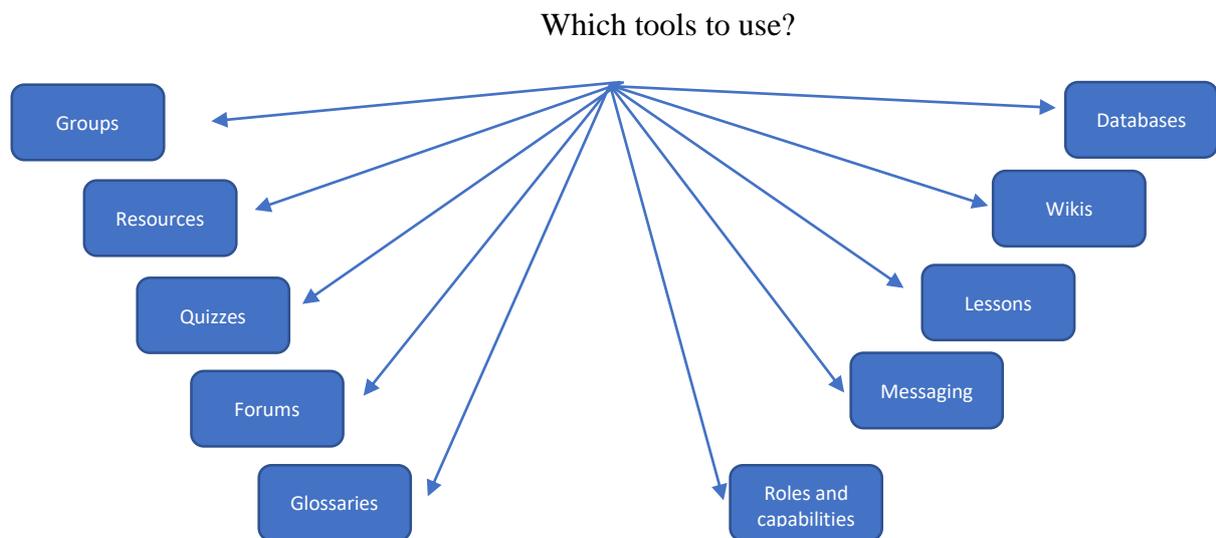
Next advantage of the Moodle platform is its large community. There are millions of users, so you can always reach somebody prepared to help you. You can access this community at <http://moodle.org/>.

3. Course design patterns

Based on the type of your course there is plentiful of tools (activities or resources) to choose from. Four basic course types can be identified (Sigh, J, 2011):

- Introductory survey course
- Skills development course
- Theory/discussion course
- Capstone course

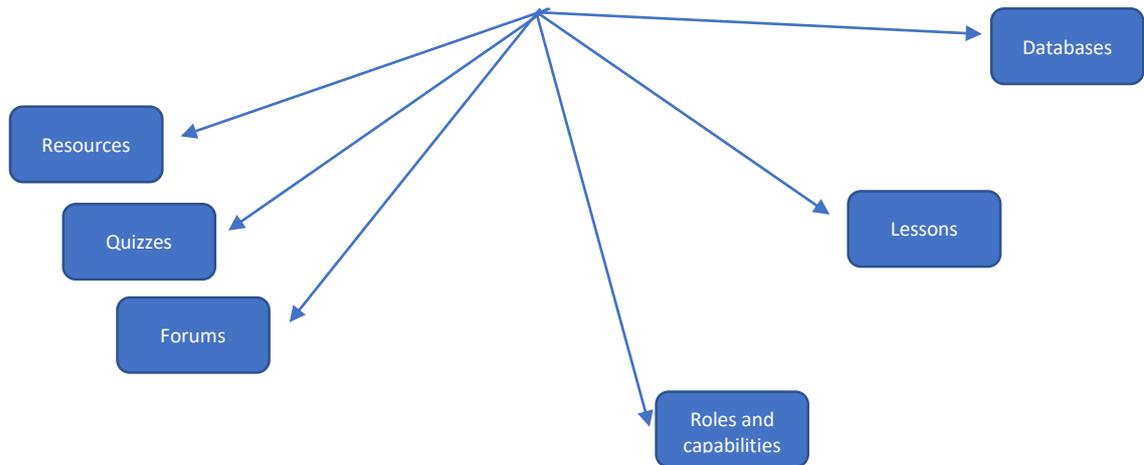
Introductory survey course is designed to expose students to basic concepts, vocabulary and foundational ideas. It is the base for additional more in depth focused courses.



Graph 2: Tools recommended for introductory survey course

Skills developed courses provide students opportunity to apply basic concepts learned in the survey course.

Which tools to use?

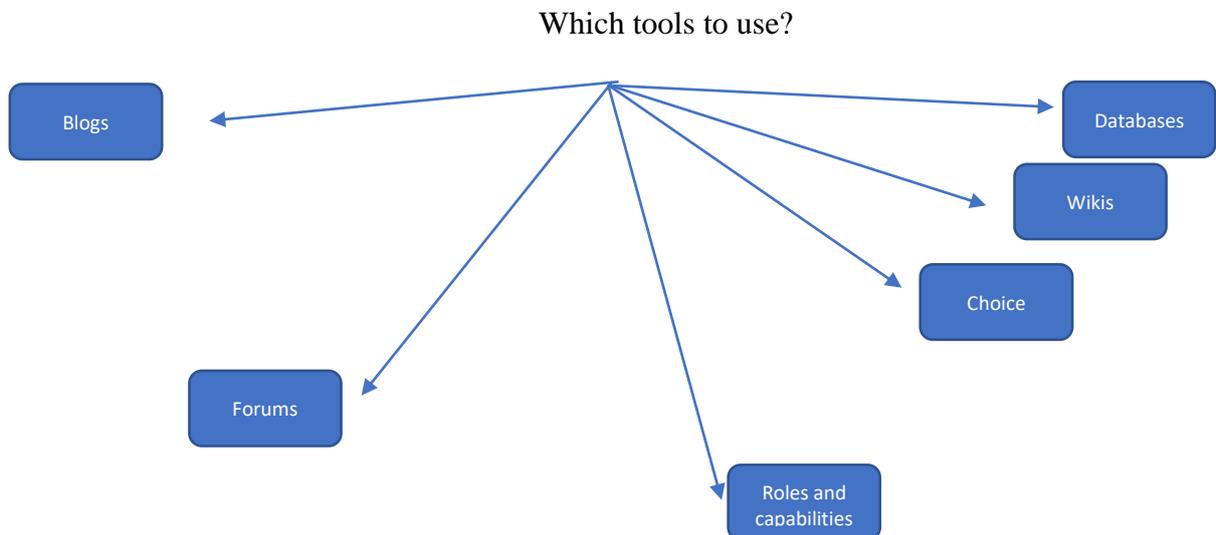


Graph 2: Tools recommended for skills development course

There are basically two types of skills development courses:

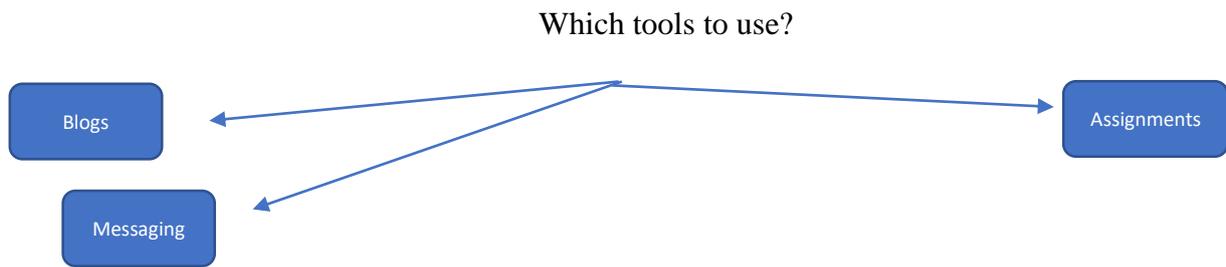
- Workshop courses,
- Lab courses.

Theory/discussion courses represent usually courses developed for graduate students. They are used to discussion on theoretical and research problems. There is almost no practical applications, in these courses.



Graph 3: Tools recommended for theory/discussion survey course

Capstone courses are project oriented challenging students to demonstrate what they have learned during their course of study. They can focus on dissertation thesis, for example.



Graph 4: Tools recommended for capstone course

4. Creating a new course in Moodle

If Moodle is located on the server of your institution, you will need to contact the administrator responsible for this e-learning platform first. To login you will need a name and password. After permission to access Moodle will be granted by the administrator, you will gain possibility to access the e-learning platform. But this is not enough to run own course.

Usually within a university, a teacher has no possibility to set up a new course. Teacher usually asks administrator to set up a new course. These are basic information a teacher should provide to the administrator:

- Name of the course
- Location of the course (faculty, department)
- Provide information about students who will apply for the course (optional).

When the course is set up successfully you can start creating your own course. You can choose from following formats:

- Single activity format – the course has only one section allowing teacher to add one activity to the course
- Social format – the course is oriented around one main forum
- Topics format – course is divided into separated topics
- Weekly format – course is organized week by week, with clear start and finish date

5. Resources in Moodle



In Moodle you can add following types of resources:

- URL
- Page
- Label
- IMS content package
- Folder
- File
- Book

URL enables you to add any content you want. By adding an URL to your course, you have possibility to add text, image, YouTube video or Wikipedia content.

Adding a **label** to your course will create a banner on the main page of your course. You can add additional text or even graphics to your course this way.

When you add a **page** to your course, you will basically create new web page. On this new page you are able almost any content you want in one of following forms – text, images, sound, video or web link. Compared to a file added the course a new page has some advantages. A new page creates more accessible resource which is easier to update. On other hand, large content should be organised in a book rather than on a single page.

When you want to display more files in a single **folder**, Moodle provides you resource called folder. These files must be compressed. After students download you folder, they will need to unzip this folder.

Adding a **file** as a resource is useful, if you want to provide students only one specific file. This file can have almost any format – Word, PowerPoint, PDF, image or other. You should keep in mind that students need to have appropriate software.

IMS content package represents specific unified format that can be used in different LMS without converting dedicated files.

Adding a **book** is probably the most comprehensive resource available for the Moodle platform. You can divide content into chapters and subchapters. When creating a new book in Moodle there are again different available format of files you can attach as a content:

- Text
- Graphs,
- Images,
- Media.



6. Activities

Activities represent dynamic content of the Moodle platform. You can choose from different activities available in your course:

- Assignment
- Chat
- Choice
- Database
- External tool
- Feedback
- Forum
- Glossary
- Lesson
- Questionnaire
- Quiz
- SCORM package
- Survey
- Wiki
- Workshop

We will describe only the most valuable activities based on our experience in the following text.

Assignments are specific activities used to collect student work. Teacher can allow students to upload essays, spreadsheets, presentations, audio or any other content. But not always you have to force students to upload their own content. Moodle allows you create offline assignments, too. There are following types of assignments, in the Moodle platform:

- Upload a single file
- offline activity
- Online text
- advanced uploading files

Glossaries represent very useful activity available for your Moodle course. Basically, you are creating a vocabulary of specific terms. This helps students in better understanding of your course. Glossaries are especially useful, if your course incorporates many Latin words, for example. There are two different types of glossaries available for the Moodle platform:

- main glossary – editable only by the teacher,
- secondary glossary – editable also by students.

Wikis represent a set of collaboratively authored web pages. There is one main page and many dedicated links to other pages.

Table 1: Wiki types

<i>Wiki Type</i>	<i>Group Mode - No Groups</i>	<i>Group Mode - Separate Groups</i>	<i>Group Mode - Visible Groups</i>
Teacher or Trainer	Only one wiki is created, and only the teacher can edit it. Students can view the wiki and all contents.	One wiki is set up for every group, but only the teacher can edit the wikis. Students from other groups cannot view the page.	Each group can create one wiki, but only the teacher can edit the wiki. All groups can view the wiki.
Groups	One wiki for the whole course is set up. The teacher and all students can edit the wiki.	One wiki per group is set up. Students can edit the wiki in their group only. Other groups can't view the wiki.	Each group has its own wiki, which the group members can edit. Other groups can view the wiki but can't edit it.
Student (Individual Learner or Trainee)	The wiki is student-teacher-based. Only the student and teacher can view and edit this wiki.	Each student has her own wiki, which only the student and you can edit. The wiki can be viewed by other students in the group.	Each student can have her own wiki, which only the student and teacher can edit. The wiki can be viewed by all students in the course.

Source: Source: Dvorak, R. (2011)



Forums and chats are activities dedicated to ease communication between the teacher and students or between students. Forums represent an asynchronous and chats a synchronous way of communication.

Quizzes enable you to create diverse types of questions. The quiz in Moodle is represented by quiz body and question pools. **Choices**, on other hand, enable creation of simple questions with choice of responses.

Database activity enables you to create:

- Course database - everybody can make contribution to the database and use it
- Group database – used specifically for dedicated groups
- Individual project database – database used by student or shared between a student and teacher.

You can store files of almost any format in your Moodle database. For example:

- Images,
- Files,
- Audio and video files
- Contact data

References:

1. Cole, J. R., & Foster, H. (2008). Using Moodle:. Farnham: ÒReilly.
2. Dvorak, R. (2011). Moodle for dummies. Hoboken, NJ: Wiley.
3. Ellis, Ryann K. (2009). Field Guide to Learning Management Systems. ASTD Learning Circuits. URL (last checked 10 April 2012) http://www.astd.org/NR/rdonlyres/12ECDB99-3B91-403E-9B15-7E597444645D/23395/LMS_fieldguide_20091.pdf
4. Rice, W. H. (2011). Moodle 2.0 e-learning course development: a complete guide to successful learning using Moodle. Birmingham: Packt Publishing.
5. Singh, J. (2011): How to use Modle 2.7. Available online: <https://moodle.org/pluginfile.php/.../How%20To%20Use%20Moodle%202.7.pdf>