



THE INVERSION

How to Flip the Classroom with Moodle
A Guidebook on e-Learning for Teachers

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Burgas
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**Promoting European
Awareness and Key
Competences**



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For Whom Is This Guidebook Intended?

The Guidebook was written as an output of the PEAK Project No. 2015-1-IT02-KA201-015149, funded by the Erasmus+ programme of the European Union, Key Action 2 Strategic Partnerships.

The overall project aim is to contribute to the process of modernisation and strengthening of the system of education and training by improving the quality of teaching through a more strategic and integrated use of Information and Communication Technologies (ICT), and further developing teachers' professional, social and civic education skills.

The Guidebook was designed and developed by a team of experts in Foreign Language Teaching (FLT) and ICT, at Burgas Free University. It is a collection of electronic-based teaching materials using the Moodle Learning Management System (LMS), aimed at the teachers, participating in the Project activities for the purposes of improving their competences for applying ICT in the teaching of various subjects and foreign languages in particular, updating their skills for using innovative techniques.

In a long term perspective, this collection of training materials will be suitable and available to educators interested in implementing e-based training and teaching, thus multiplying the project impact over a wider audience of specialists.

This Guidebook consists of six chapters, each engaged with discussing various aspects of e-learning. It begins with providing information on e-learning and distance learning essentials and some theoretical aspects of the use of educational technologies and digital resources in the creation of e-learning courses. The chapters that follow focus on the use of Moodle, as an e-learning platform, and practical aspects of developing Moodle courses. A detailed survey of Moodle 3 resources and a comprehensive list of activities are also presented. The final two chapters are concerned with Moodle 3 course administration specificities and the use of some extra applications for creating teaching resources.

It is strongly believed that this collection of e-training materials will account for the project sustainability, giving the teachers the opportunity to share the expertise developed during the project and disseminate the project outcomes, by using the professional network designed and established through this PEAK Project.

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Chapter 1. E-learning Essentials

1.1. What is E-learning?

There are various definitions of the term e-learning. According to the definition of the European Commission from 2001 [7], e-learning is the use of new multimedia technologies and the Internet to increase learning quality by easing access to facilities and services, as well as distant exchanges and collaboration. According to Dublin [6], the existing definitions vary depending on the specialization and interest of their authors. E-learning as a concept covers a range of applications, learning methods and processes [20]. Nowadays there is even no common definition for the term, according to Oblinger and Hawkins [16] and Dublin [6].

In its essentials, e-learning includes the application of any electronic products - audio or video records, hardware, software, etc, for the purposes of teaching and learning. The contemporary meaning of this term refers to delivering learning materials by computer (desktop or Web-based) or mobile applications, usually via the Internet or a computer network. The use of Internet technologies enhances the quality and performance of computer-based and computer assisted training and learning and brings an added value to traditional education. It grants the teacher the opportunity to control the training content, learning scenario, speed and time of learning and allows the learners to adjust the training process to their personal learning needs and objectives.

In traditional class-based, face-to-face learning, the teacher has the opportunity to change the pedagogical approach dynamically according to the specific circumstances - students' attention, previous knowledge, the degree of difficulty of the material, etc. In e-learning these variations are not always possible and easy to conduct, which causes the necessity of initial design planning of the e-learning content according to the best pedagogical principles. These principles, however, should be adapted and extended to meet e-learning specific requirements and constraints. Pedagogically-designed learning content increases the interactivity and hence improves retention [10].

Closely related to e-learning is **instructional design**, also referred to as instructional system design (ISD), which is the art and science of creating an

instructional environment and materials that will bring the learner from the state of not being able to accomplish certain tasks to the state of being able to accomplish those tasks [22]. This approach is based on the idea that before starting to make learning content, the learning objectives should be defined and ranked according to their importance. When these prerequisites are available, the trainer could proceed with the educational content creation [3]. The effectiveness of the approach depends, as well, on appropriate planning, and so the instruction has to be planned if it is to be effective and designed in some systematic way [5]. Instructional and learning theories describe and explain various points of view of the nature of learning and the methods, facilitating the process. This includes the features of learners, their cognitive and educational abilities, the purpose of training, etc.

The most successful approach of e-learning implementation in school education is not replacing traditional classroom training but acts as a complement to it, resulting in blended-learning strategy.

This approach has the following major advantages:

- **Cost-saving.** The created learning materials will be available at any time and from any place (24/7), reducing the necessity of travelling of both learners and trainers. In addition, once created, they are reusable for a long period and may be edited and expanded, as needed.
- **Flexibility.** The students can choose the time and place for learning and the adoption of e-learning provides the institutions and their students with the greatest flexibility of time and place of delivery or receipt, according to the learning information [21].
- **Interactivity.** E-learning provides some social and communication options for learners to communicate with each other and with the trainer, in addition to pure educational functions. It stimulates learners to remove barriers among them and facilitates collaborative work. E-learning motivates students to interact with each other and makes available extra prospects for interactivity between students and teachers during content delivery [23].
- **Personalization.** The e-learning approach can take into account the individual peculiarities of learners such as speed and intensity of learning, ability of concentration, etc.

There are also various classifications of e-learning. Some of them are based on the extent of their engagement in education, others on the timing of interaction or on the applied technologies. The computer-based learning includes all types of hardware and software implementation into e-learning and also each component can be used in either of two ways: **computer-managed instruction** and **computer-assisted learning** [1]. In computer-managed instruction the learning process is led by the software by storing and delivering learning materials on demand, whereas in computer-assisted learning the software is a supplement to the traditional education (for example interactive exercises, done by students as a practical implementation of the lesson).

E-Learning classifications are of interest, since they can aid researchers in identifying learning effectiveness for specific formats and how it alters the student learning experience. According to the degree of physical presence and timing of learning, the following concepts should be discussed: self-learning content, synchronous or asynchronous communication with/without tutors and peers and a face-to-face consulting [18]. **Self-learning content** assumes the learner is the leader of the training process and determines the pace and intensity of the learning. This requires some previous experience and self-motivation, which makes the approach more suitable for students in high schools, who are skilled enough in technology and learning or in some trainings of skilled and talented students in a specific subject. The self-learning content approach is related to the **student-centred approach**, where students are both creators and recipients of the information. They decide, for themselves, which information to collect and share with other students and the teacher is much more a mediator or facilitator of the process. This approach has many different names and forms, the best known of which are discovery, problem-based, inquiry, experiential and constructivist learning [12]. This point of view is considered in **constructivist** theory, where the learning process is primarily under the control of the learners [11]. Students are presented as collaborators in a common enterprise and the teacher is not the only source of knowledge, but usually takes a mediator role. Students are both consumers and producers of learning content and learning is closely connected with practice.

On the other pole is the **teacher-centred approach** where the agent is the instructor or teacher who constructs the learning environment and specifies

what the students should do and how they should do it [4]. This approach involves methods, activities and techniques, through which the teacher delivers the learning content to students, i.e. he/she is the only source of information. The students' progress is considered by their ability to repeat the material in the same manner. In its electronic variant this approach is represented as a linear sequence of often static materials, designed top-down with easy to follow logical structure. This method is suitable for novice learners in order to provide direct instructional guidance on concepts and procedures in a particular discipline [12].

Gagne's events of instruction are principles, defined for support in instruction creation for preliminarily described learning objectives and for different types or levels of learning [15]. The assumption is that learning activities should be hierarchically structured according to their complexity with the purpose to achieve the learning goals and to improve the individual's skills. Learning instruction hierarchies are considered as a basis for the sequencing of instruction [9]. Gagne's events of instruction are as follows:

- **Gain attention.** Students' attention is crucial for every kind of learning, so in e-learning approaches it should be provoked by every available means - multimedia presentations, interactive lessons, a thought-provoking question or an interesting fact. Curiosity is an important motivating factor.
- **Inform the learners of the objectives (expectancy).** Students should be aware what the purpose and the objectives of the learning are, as well as the final knowledge and skills they are expected to gain. This information increases their motivation.
- **Stimulate recall of prior learning (retrieval).** An association of new knowledge with prior information can facilitate the learning process. This could be achieved by asking some questions about previous concepts or experiences.
- **Present the stimulus material (selective perception).** The learning material should be presented as appropriately sized pieces of information and organized meaningfully. It is a good idea to apply a variety of media and formats.
- **Guide learning.** The learning content should guide the learner through the learning process, starting from simple to complex tasks.

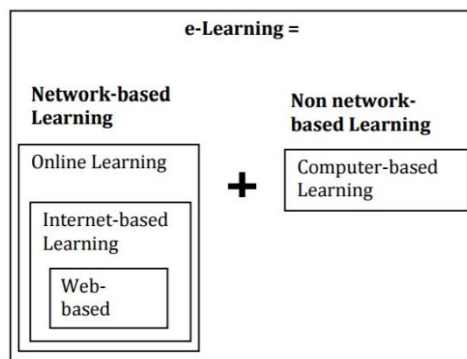
Guidance strategies include the use of examples, case studies, practical exercises, graphical representation, etc.

- **Elicit performance (responding/practice).** Students' active participation, like questioning or discussion, in the training process facilitates learning and gives the teacher important feedback to confirm that they understood the content correctly.
- **Provide feedback (reinforcement).** The teacher should provide learners with feedback when they solve interactive exercises or quizzes.
- **Assess performance (retrieval).** The students' progress should be assessed both during and after the course completion.
- **Enhance retention and transfer (generalization).** The obtained knowledge and skills should be applied in a real world exercise, provided as an assignment or course work.

1.2. Educational Technologies and Digital Resources (Integrated Technologies)

Educational technology is referred to as the study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources, according to the definition of the Association for Educational Communications and Technology [24]. Since contemporary students are "*digital natives*", born in a digital age, technology is a part of their everyday lives. They are familiar with information technologies like keyboarding, word processing, Internet browsing and searching skills, multimedia design and production, social sharing and navigating interactive digital content. Therefore, digital technology is proving to be valuable in support of training processes such as reading and writing materials, universal access to instructional materials, assessment, professional collaboration and home-to-school communication [19].

Educational technology applies both the ICT approach and learning theories to the educational process with the purpose to facilitate and enhance learning. From the technological point of view, e-learning could be broadly divided into two major categories: **network-based** and **non network-based learning** [8]:



Digital learning includes various types of ICT applications in the educational process:

- blended and virtual learning - the terms implementation depends on the degree the learning process is shifted into the virtual environment;
- game-based learning - the so called serious games, aiming at learning by achieving a preliminarily defined goal (as opposed to the traditional ones, the purpose of which is entertainment);
- collaborative and cooperative work on projects, as well as online communication between the students and the teacher and among the students;
- progress assessment and grades creation in autonomous and automatic manner;
- using technology to connect, collaborate, curate and create.

Virtual learning allows students to access digital materials in various formats (text, images, audio, video, etc.), to connect and interact with each other, to create and share their own content with other students and audience outside the class. Virtual learning can be synchronous, where all students log in at the same time in a virtual classroom, or it can be asynchronous, where students access session recordings in their own time. It encompasses various technologies, supporting the educational process in different aspects:

- face-to-face teaching online in addition to face-to-face teaching in the traditional classroom. The online teaching could be conducted in

real time (synchronous) or self-paced (when needed), for additional explanations or project preparation support;

- video or audio recordings of teaching or live chat sessions could be stored for future accessing when needed, for example as a reminder of the most important topics, or before a face-to-face traditional training, as a preparation activity, which can be repeatedly viewed as a review activity;
- online collaboration, exploration, project preparation and problem solving, where the teacher can offer more personalised or individual guidance and interaction with students, using virtual conferencing tools such as Cisco Webex, Adobe Connect, Microsoft Lync, Skype, etc.;
- self-assessment and feedback tools like interactive tests, quizzes, crosswords, etc., students could prove their knowledge level with;
- additional online resources, where the students could enrich their knowledge.

Virtual learning enhances and facilitates the learning process by providing the students with access to learning and training content (webpages, images, audio, video and other online resources) and interactive activities, available at any time and from any location. This approach also widens the teachers audience, since it removes the physical barriers and limitations of traditional training and allows teachers to exchange good practices with their colleagues.

Virtual conferencing could bring an added value to the traditional education by giving the opportunity to interact with leading experts in specific subjects or to follow cultural, scientific and literary events without leaving the classroom or from home, to create their own network of students and learners, to raise European awareness and inter- and intra-cultural understanding.

Assessment tools and methods allow the students to rapidly track their progress during the training and to receive a feedback on their achievements. The tools could support a single assessment by the teacher, as well as a wider variety of participants in the assessment process such as peers and outside experts (for example a visual art project or an website could be assessed not only by the teacher, but by other students as peers),

assessing more complex learning products and using more complex assessment methods, such as game-based assessments and online collaborative problem solving. Online learning and teaching could be supported by **additional tools**, enhancing the educational process such as educational games, blogging, networking and community tools, video channels, etc.

1.3. E-learning Course Creation

E-learning course planning, design and creation is a process, which contains several important steps. The first stage comprises learners' group identification and respectively identifying the course content based on the target group needs. The next step includes learning objectives definition and the appropriate course model selection, followed by the e-tools selection and curriculum development itself. The final step consists in piloting and evaluation of the created course, as well as the users' feedback consideration and course improvement.

1.3.1. Defining the Learning Objectives and Course Model Selection

The first step in e-learning course creation aims at learning and teaching objectives definition. For these purposes a students' needs analysis has to be conducted to define the basic level needed to start the course, the learning needs of the trainees, to evaluate the school's organizational and technical capacity, equipment and resources. Related to this analysis is also surveying the students' expectations from the course, their computer skills and technical expertise, the network bandwidth, etc.

According to all above mentioned characteristics, the set of learning objectives should be defined. They should be defined sequentially, in the order in which they should be achieved with the purpose to achieve the general, high-level course objective. According to Bloom's taxonomy of learning domains [2], learning objectives can be formulated through six different types of actions, ranged in ascending order:

- ❖ *Remember* - the student is able to memorize or recognize information.

- ❖ *Understand* - the student is able to explain a concept on their own.
- ❖ *Apply* - the student is able to use the information in a practical case or exercise.
- ❖ *Analyse* - the student is able to define a structure: to determine the elements and define relationships among them.
- ❖ *Evaluate* - the student is able to make a decision or to find a solution according to a criterion or standard.
- ❖ *Create* - the student is able to produce a new solution or approach.

Clearly defined learning objectives allow the development of consistent learning activities which are really focused on learners' needs and provide the basis for course evaluation tests. These objectives should be used as a basis for instructional, media, evaluation and delivery strategies selection.

As a result of this stage, a blueprint should be defined, which will be used as a reference to develop the course. It should contain the following major elements:

- the curriculum structure, i.e. the curriculum organization in modules, units, lessons, activities;
- the learning objectives, associated with each unit;
- the delivery methods and formats (e.g. reading materials, interactive self-paced activities, synchronous and/or asynchronous collaborative activities, etc.) to deliver each unit.

1.3.2. Curriculum Development and Selection of E-tools

During this stage the course learning materials are actually created. Content planning and analysis is probably the most critical step in the instructional design process. The detailed course content should be carefully planned in order to achieve the goal of the course.

The course could include the following types of learning content:

- *Facts* - they could be historical events, data of any kind, etc.

- *Procedures* - a sequence of instructions, for example entering a function in Microsoft Excel.
- *Concepts or principles* - a group of objects, entities or ideas that are defined by a term, sharing common characteristics and laws or rules, related to them. For example, the course could contain the concept of computers and the principles they work with.
- *Personal attitude or interpersonal skills* - communication, collaboration or presentation skills, understanding of the importance of nature or cultural heritage preservation, etc.

The learning content can vary significantly, depending on the available resources. E-learning content may consist of only simple text-based materials (Word, PDF or text documents), containing primarily text, images and URLs. These static materials could be combined with other materials (e.g. audio or video files), assignments, interactive games and tests.

The development of multimedia interactive content includes as a first step content development (writing or collecting all the required knowledge and information), followed by storyboard development, i.e. integrating instructional methods (all the pedagogical elements needed to support the learning process) and media elements. This is conducted by developing the storyboard, a document that describes all the elements of the final interactive products, including images, text, interactions, assessment tests. The final step is courseware development, i.e. developing media and interactive components themselves, producing the digital content in different formats, uploading and integrating the content elements into a learning platform and incorporating the materials into a single course that students can access.

In a practice-oriented course (for example a Web-design or multimedia design course), the content could be organized according to the order of the activities in the real job environment (practice-context principle). In the case of a scientific or an informative course, concepts can be organized according to their inter-logical connections, for example describing the concept and listing examples, providing examples first, then definitions or starting from familiar or simple information and then proceeding with more abstract or complex concepts. It is a good idea to start the course with a revision of the

previous knowledge, if possible, then focus on course specific topics, and finally lead the students to the general conclusion (**zoom principle**). The other approach could apply the idea that the learning curriculum can revisit and update the previously known ideas, and repeatedly build upon them until the learner understands them fully (**spiral principle**). As a result, the final course sequence corresponds to the selected logical interconnections, where each element corresponds to a specific learning objective and contributes to the achievement of the overall course goal.

The curriculum design methods could be broadly divided into the following categories [3]:

- **Expositive methods** - suitable for presenting new information and new knowledge to students. It could include text-based materials, presentations, case studies, examples, etc. The purpose is to present the knowledge to the students. These methods could be delivered by the following formats:
 - *Text documents or PPT presentations* - these materials could be quickly developed, but contain no interactivity for students.
 - *Interactive e-lessons* - they are flexible and could be adjusted according to linear or non-linear learning scenarios depending on the specific needs. In addition, they reduce the risk of mechanical memorisation of the information, since the learner is forced to read and understand the material in order to be able to proceed. It is a good idea for an interactive lesson to contain a screen with learning objectives, introduction screens with previous materials revision (1-3 screens), major content (5-25 screens depending on the size and complexity) and final summary screen.
 - *Video/audio lessons and podcasts* - they can easily be developed and delivered to students. Their

drawback is the lack of interactivity, since they provide only passive learning.

- *Video/audio conferences, chats, virtual classrooms* - they allow interaction between teacher and students and support interactive learning. They could be easily combined with some other tools, for example desktop sharing. The students' Internet connection and resources have to be taken into account before using the tools, requiring real time video.
- **Application methods**, i.e. learning by doing - the purpose is to make the student do some practical exercise, solve a problem, create a project, etc. They could include demonstrations (video tutorials), case-based or scenario-based exercises, role plays, simulations and serious games, research, work on projects or course work, etc. The purpose is to motivate students to apply the new facts and knowledge in a real-time situation. These methods could be delivered by the following formats:
 - *Simulation or animation tools* - the students can practise in interactive mode. These tools are useful in practical trainings, for example in software, engineering, medical training, etc.
 - *Virtual classrooms* - in addition to the previous tools, they could provide additional opportunities, like shared applications and online practically oriented discussions.
 - *Interactive e-learning lessons* - they could be applied in order to check the level of understanding the students have achieved in an interactive way. The lessons could be adjusted to give additional resources or exercises in case of a wrong answer. The major drawback of this approach is its relative complexity and time needed to develop it.

- *Online group or tutored activities* - they are highly interactive and support social interactions between students. They could be used for collaborative creation of documents, collecting materials on a specific topic, creation of a project or wiki, etc. They require time and the presence of a teacher or a facilitator in order to provide online support.
- **Collaborative methods** - they aim at cooperative and collaborative work. These methods could be realized using discussion forums, chat rooms, various collaborative work tools (workshops), peer tutoring and assessment, etc. The purpose is to force students to apply the obtained knowledge in team-work environment. These methods could be delivered by the formats, already discussed above: simulation or animation tools, interactive e-learning lessons, online group or tutored activities, as well as forums, chats, discussion groups, blogs, shared documents, etc.

Assessment tools are useful for tracking students' progress and allow the students to check their level of understanding in an interactive way. Online quizzes are popular tools for trainees assessment and self assessment. They could contain some of the following widespread question types:

- *True/False question* - the student has to decide whether a statement is true or not.
- *Multiple choice* - the student has to select one or more true answers to a question.
- *Matching* - the student has to join each element of a set with its correspondent from another set, for example some terms with their correspondent definitions.
- *Fill-in-blanks* - the student has to fill in some missing words in a text.
- *Ordering* - the student has to order several elements in a sequence, following their logical structure.
- *Short answer/essay* - the student has to answer a question formulating the answer on their own.

In addition, the course could include auxiliary resources such as a glossary with key terms and related explanations, lists with URLs, providing additional information on specific topics without interrupting the flow of the lesson for students, who want to learn more on the topic, text-only or printable versions of some lessons, “getting started” tutorials, providing an overview of navigation features for new learners, etc.

1.3.3. Course Evaluation and Feedback

Once developed and uploaded into a web-based learning management system, the course has to be piloted with students, evaluated using their feedback and the obtained results has to be used for future exploitation. After its creation, the e-course has to be promoted among students and they have to be acquainted with the platform and course technical details (URL address, hardware and software requirements and constraints). They have to be aware what the purpose of the e-course is and how they will benefit from it.

As a pre-course learning activity and a course demonstration, the teacher could deliver the first interactive lesson together with the students. This will also act as a test stage of the platform, the technical skills and the IT knowledge level of students. During this initial activity, it is very important for the e-course to make a good impression on participants, so the teacher has to encourage them and to explain in case any obstacles or uncertainties arise.

The work with the course itself could be scheduled on a weekly or daily basis and typically should last during the traditional class-based learning. E-learning activities may include self-study as well as various individual and collaborative activities:

- *reading, watching and self-study* - the students should be encouraged to read and watch different types of content, such as simple learning resources (documents and presentations), video and audio content and interactive e-lessons;
- *individual assignments, quizzes and collaborative project work* - the teacher gives the students assignments, either in a group or individually. Students may also be allowed to assess or comment on

each other's assignments, for example in website, presentation or multimedia creation. An assignment should be clearly defined and followed by a discussion on the strategies used to complete it;

- *sharing ideas and knowledge* - learners can comment and exchange ideas about course activities or share their knowledge about a specific domain. In addition, students can ask the teacher specific questions;
- *discussions* - they could be initiated or regularly shared by the teacher. On the contrary, discussions can be initiated by students when they need some help or clarification from peers or from the teacher. It is important for the teacher to track the discussions and evaluate students' involvement in the course.

In cases when the e-course contains a final exam (online quiz, coursework or project), it should be conducted through the course and results should also be discussed and evaluated. At the end of the course the students should complete an evaluation survey that will provide the teacher with feedback about users' experience, course advantages and drawbacks. This is a very useful step as it allows the teacher to improve the course before using it again. In fact, the content improvement takes place during the whole life cycle of the course. It also gives students the feeling that the teacher is interested in their opinion and it is important to make the course more effective.

1.4. MOOC's Development

The latest trends in the evolution of open educational resources include MOOCs. A massive open online course (MOOC) is an educational model for delivering learning content online to any person who wants to take a course completely online, with no requirements or limit on attendance. Although it was first considered in 2008 by Dave Cormier of the University of Prince Edward Island as a part of distance learning, the model became very popular among business and academic institutions, since it offers the stakeholders new business opportunities to reach, what we call today, "the extensive classroom". It was claimed that 2012 was the year of MOOCs [2], because of the world-wide popularity of big MOOC providers like Coursera [25], Udacity [35], eDx [29], etc. The model was developed by the Higher Education Online: MOOCs the European way (HOME) [28] partners in March 2014.

In terms of instructional design, models MOOCs were broadly divided by Stephen Downed in 2014 into two major types: **xMOOCs** (Extended MOOCs) and **cMOOCs** (Connectivist MOOCs). The basic difference between the two MOOC kinds is related to the place where the learning and training process is conducted. As could be guessed by the name, xMOOCs are run and maintain training on a specific MOOC platform, where many concurrent users can access the materials simultaneously. The vast majority of contemporary MOOCs offered fall into this category. The other type, cMOOCs rely on the connectivist idea, that the learning process could be conducted at various places - websites, social networks, etc., looking for information from various sources according to the connectivist pedagogy model.

Chapter 2. Moodle - An E-learning Platform

2.1. Moodle – An Overview

Moodle was originally developed by Martin Dougiamas to help educators create online courses with a focus on interaction and collaborative construction of content, and it is in continual evolution. The first version of Moodle was released on 20 August 2002. Nowadays the Moodle Project is led and coordinated by Moodle HQ, an Australian company of 30 developers which is financially supported by a network of eighty-four Moodle Partner service companies worldwide. Moodle's development has also been assisted by the work of open-source programmers.

Moodle (Modular Object-Oriented Dynamic Learning Environment) [32] is a free software e-learning platform with an open source, which is licensed under the GNU Public License [27]. This means that the system is protected by copyright, but users are granted additional rights to copy, modify and use.

Moodle is based on the theory of *social constructivism*, according to which not only educators, but students can contribute to improve learning. Education is not regarded as a one-way process of transmitting knowledge, but as a two-way process in which both sides communicate actively and it is based on the idea that a person actively constructs knowledge through the contact with the environment, but he/she is not a passive recipient. The training in this method focuses on individual assignments, development, research, cooperative and collaborative work of students to create and share content, rather than passive reproduction of knowledge.

We will note, however, that we cannot expect that students themselves will be motivated to attend an e-course, no matter how attractive the materials that we have developed in it are. The activity of students and usability of a course are directly dependent on the efforts of the teacher and his/her leadership. When implementing e-learning, the teacher is not the owner and sole source of knowledge but a mediator in forming a culture of self-seeking knowledge and its application in practice, a moderator of discussions and activities, thus making the teacher-student relationship more direct.

In the above mentioned taxonomy of Bloom, as well as in its subsequent modifications (e.g. Kratuol [13] and Marzano [14]) the basic levels of the

cognitive sphere are described, in order from simple to complex as a method for assessing the effectiveness of training. Moodle can effectively assist the teacher on all cognitive levels through its various possibilities for adding resources and learning activities.

The Moodle e-learning system is designed as a mediator between the parties, which is why there are specific modules that support the constructivist approach to learning and other standard modules that are designed to remove restrictions that the creator of the program Martin Dougiamas sees in the main commercial products. It can be used for e-learning by managing available online educational content and by supporting and complementing the learning process of traditional face-to-face training. Moodle allows the publication of e-learning content to be similar as an idea and parameters to the real learning process, whereas the assessment of the learning and the exams take place in the traditional way.

Traditionally, Moodle is distributed with a base configuration that includes a set of modules. However, a number of additional modules are developed to supplement and add useful features to the system when installed. Moodle requires no knowledge in Web design or HTML, as it has an easy to use HTML editor with an intuitive interface. Moreover, a variety of free and commercial plugins to Moodle are developed in order to make the environment more flexible and adaptable to a variety of training purposes. It can also be used to train tens of thousands of users, e.g., Open University in the UK [33] and around the world employing over 80,000 copies.

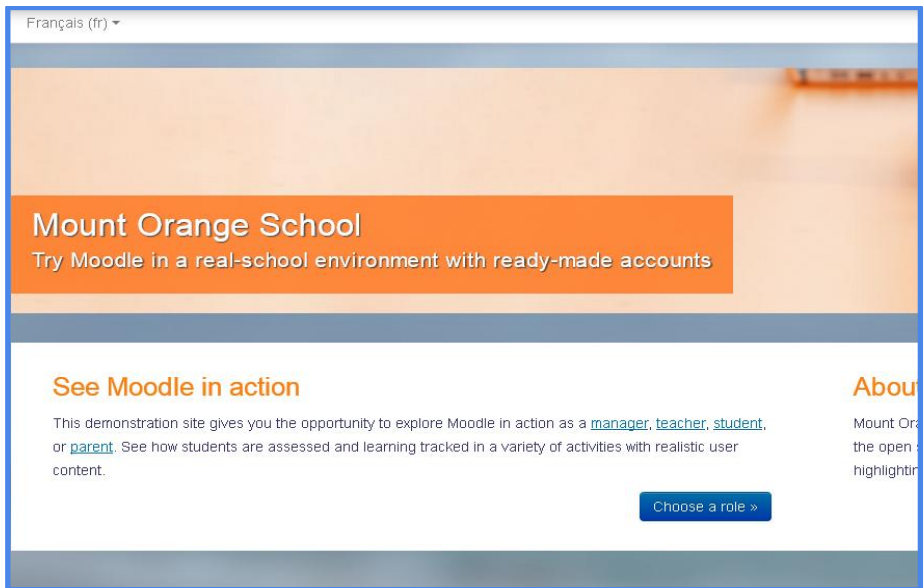
Moodle is a multilingual system (translated into 85 languages and dialects), and different parts of the system can be set to work in different languages. When used in a multilingual environment, the default language interface could be set in English. It should be noted that when changing the language, the system only changes the interface, but does not translate automatically the user content (study materials, files, etc.).

2.2. The Moodle Front Page

There are different ways to begin your Moodle experience and discover your first Moodle site. Here are some cases:

- Your educational establishment has a Moodle platform and you can access some courses on it.
- You attended an ICT workshop and they gave you an address to log on an online course or just to consult some teaching materials.
- You have read about this platform and you made a research on the Internet and you find Moodle courses.

Regardless of the way through which you fell on a Moodle site, you will arrive on the Moodle front page. We will give an example with the official test course of the Moodle community at <http://school.demo.moodle.net/>



This is not yet the typical Moodle front page. It is a demonstration learning site and you can choose a role to discover in Moodle. We suggest to begin with the role of the student for your first discovery.

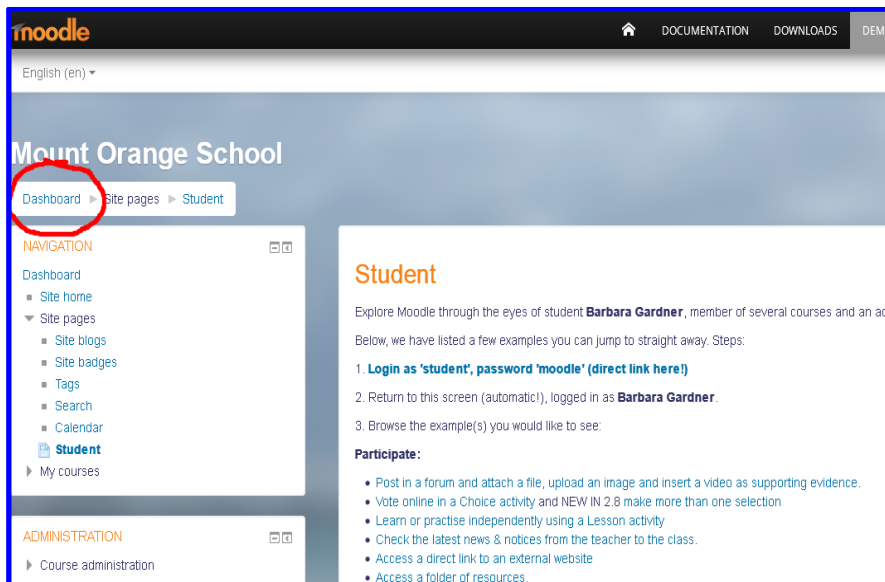
Here is the address to log on as a student –
<http://school.demo.moodle.net/login/index.php>

You need a login and a password:

login - student

password - moodle

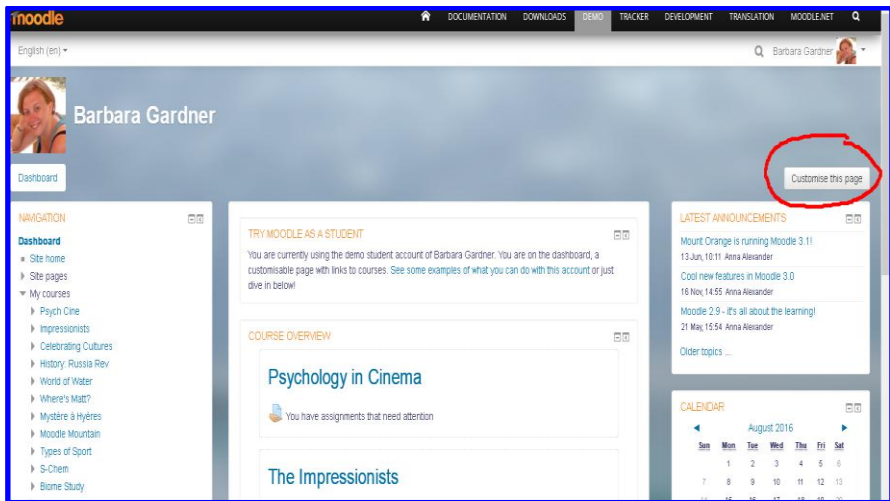
After login on the platform you will see a page with all the learning activities that a student can practise on a Moodle platform.



2.2.1. The Dashboard

Every user in Moodle has their own personal or customisable page called “*Dashboard*”. The login and the password used to enter the platform belong to **Barbara Gardner** and you will explore Moodle through the eyes of this student. Now, you are a member of several courses and you can see them by clicking on the “*Dashboard*” (in the top left corner).

This is a typical Moodle front page when a student is logged on.

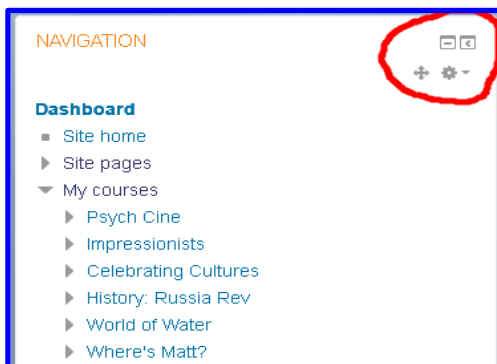


The courses you (Barbara G.) have subscribed to are in the middle of the screen. On the right and on the left there are some blocks - “Navigation”, “Latest announcements”, “Calendar” - blocks that you are able to change; the student can customise his/her dashboard and choose what to see on his/her Moodle front page.

To begin customising you have to click on the button “Customise this page”.

2.2.2. The Blocks on the Dashboard

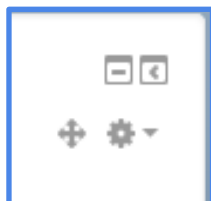
The default blocks to have on your dashboard are the “Navigation” block, the “Course overview” block, the “Upcoming events” block, the “Private files” block and the block with “The Latest Badges”.



The “Navigation” block displays where you are in this site and where you can go. In this demonstration the student can see the links to his/her subscribed courses and it allows him/her to move to a topic that is

much further down on the page without scrolling.

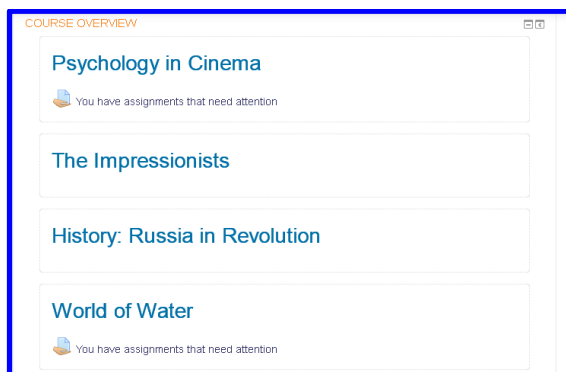
The little buttons in the top right corner are very important and you can find them on every block. Some of them are always visible and some others are only visible when you are in customized mode.



The two small buttons at the top are always visible and they are used to hide or to display the block or to put the block on the “*Dock*”¹ and also to restore it back on the front page. You are free to put or not to put the chosen block on the “*Dock*”; you can also put on the “*Dock*” some blocks and let other blocks on the page.

The two buttons below are used to move the block and to set it up. By moving the blocks you can personalise the design of your dashboard; you can put the block to the left, to the right or in the central position and also choose a place at the top, at the bottom or in between. Every block could have a special setting - to be shown on a specified page and appear on a specified place on this page.

The “*Course Overview*” block is usually in the middle of the page.



The “*Course Overview*” displays the courses that you have subscribed to the platform and some useful information in connection with various learning tasks and their deadlines. If the teacher has provided a course summary, it

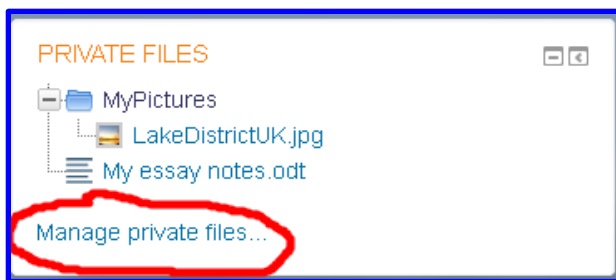
¹ The “docked” blocks appear as vertical tabs along the left margin attached to the page.

will be shown, too in this overview and also the name(s) of the teacher(s) in this Moodle course.



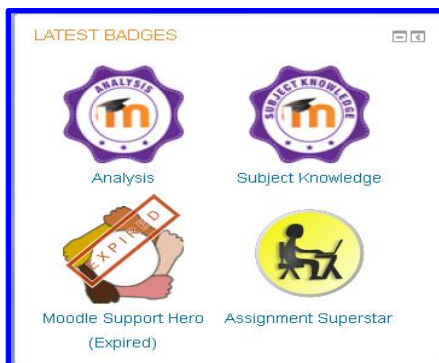
The “*Upcoming Events*” block contains the latest announcements on the platform from your courses. The information in this block comes from the “*Calendar*” block

with announcements from your teachers. You can read the entire informative text by clicking on the corresponding links.



The “*Private files*” block allows you to put some files on the platform that you can use in the different courses which you are a member of. The access to this block is enabled by the site admin, who limits the

size of the files that you can put on. You can manage your private files by clicking on the respective button, creating folders and uploading and downloading files.



The “*Latest Badges*” block displays the badges that you have earned by doing different activities at the due time in the Moodle course. There are two categories of badges:

- *Site badges* - available to users sitewide and related to the site wide activities, like finishing a set of

courses.

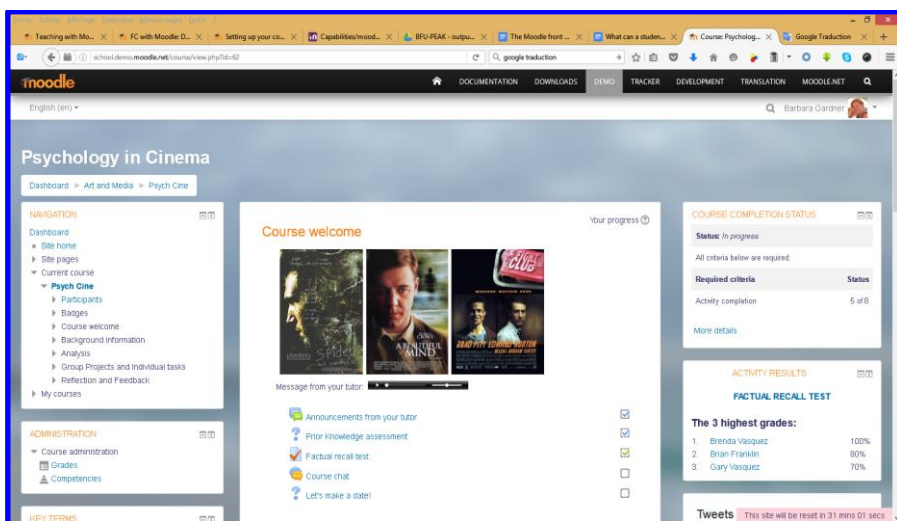
- *Course badges* - available to users enrolled in the course and related to the activities that happen inside the course.

Badges are a good way of celebrating achievement and showing progress.

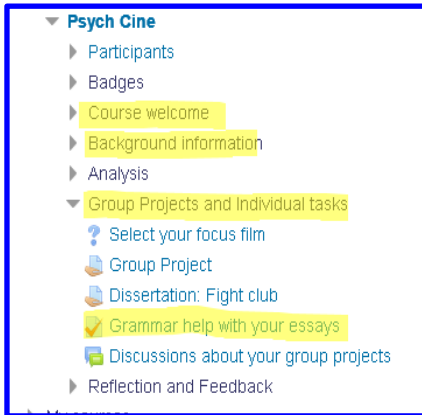
2.3. What Can a Student Do in a Moodle Course?

2.3.1. The Most Common Elements in a Course

The Moodle course looks like a web page and could have different designs. The most typical design is a page with 3 columns, the middle one being the widest. The left and right columns contain the blocks enabled by the editing teacher and the central one contains sections with texts and/or pictures - they are called “*Labels*”, and links to learning resources and activities. Here is a typical example:



When you are a student in a Moodle course you are not allowed to choose the blocks and to place them on the right/left and top/bottom of the course homepage. It is up to the editing teacher to do almost everything connected to the design of the course. For sure, there will be at least 2 blocks - the “*Navigation*” and the “*Administration*” blocks.



The “*Navigation*” block, as its name suggests, allows quick access to the different sections of the course. In the example on the right, you are in the course “*Psychology in Cinema*” and you can go, without scrolling, to sections “*Course welcome*” and “*Background information*”, for example. You can also have a look at the learning resources and activities in a section, “*Group Projects and individual task*”, for example and directly do the quiz “*Grammar help with your essays*”.

There are 5 other blocks that appear by default on the homepage of a Moodle course that you will see, provided that the teacher has not decided to disable some or all of them. Moodle is a social platform and is very useful to learn with a group and have many interactions on the base of the learning tasks in every course. So, these 5 blocks are designed to facilitate the communication between the members of the course. “*Comments*” is a place where every user can make a comment, receive an answer and be informed of the opinion of the group; it is a kind of asynchronous chat, which every



course member can use at the right time. “*Search Forums*” is very useful in a course with multiple forums with many posts; it helps to find a forum by using appropriate keywords. The 2 blocks, “*Latest announcements*” and “*Upcoming events*”, display useful information about the group and the individual tasks to do in the Moodle course - recent posts made in the

“*Announcements forum*” and future events in a summarized list. “*Recent*

activity” is a very useful block to keep you informed of the latest activities on the platform - the new forum posts, a new task to do, a new assignment uploaded by a colleague, a new learning activity added by your teacher.

To finish with the blocks, we remind that the student in the Moodle course cannot choose the blocks to see in the course and their places on the homepage. However, you are able to hide a block if you do not need it, or to place it on the “*Dock*” (an area on the right of the homepage). In the example on the previous page, “*Navigation*” and “*Administration*” are on the “*Dock*” and the block “*Key Terms*” is hidden and you can see only the name of the block.

2.3.2. Learning Resources and Activities in a Moodle Course

If we use the terminology adopted in Moodle, a student can have access to learning resources and learning activities. The resources in Moodle are connected to the different kinds of learning information prepared by the teacher and the activities are connected to the learning tasks, individual or group, that the student has to do in the course.

2.3.2.1. Learning Resources

The learning resources are displayed like links in the different sections of a

Learning resources

 [See the summit of Mont Blanc](#)
a very short youtube video showing you the summit of Mont Blanc


Interview with Steve, experienced alpinist, talking about the risks and considerations when climbing Mont Blanc

 [Information online about Mont Blanc](#)
This is the wikipedia entry about Mont Blanc

 [List of necessary equipment](#)
list in pdf format of mountaineering equipment (courtesy of [ontopmountaineering](#))
A folder of Word documents and Powerpoints to supplement your studies.

▼  Course resources

▼  Course resources

Moodle course. In the most common cases, the resource is a sort of a title preceded by an icon² and you have to click on it and read this resource if it is a kind of text, watch a video or listen to a recording. The resource could be a web page, created by the teacher, a file or a folder with files uploaded by the teachers, an external link to a web site. In general, on the basis of the resources in the course, the student has to do different learning tasks - the activities in the Moodle course.

2.3.2.2. Learning Activities

The learning activities in Moodle are the most important part of an online course. There are individual and group activities; some activities are



Can you make a revolution?

Think you could mastermind a revolution? Take a look at this resource and discover how you would manage.

individual or group according to the teacher's pedagogical intentions.

There are activities which are mainly focused on **learning**, for example the activity called “Lesson”. It is an individual

task where you have to consult a document, a simple text, a presentation or multimedia and answer questions about it; from the answer you give, you go

to another part of the document, answer another question, and so on.



Class discussions

Add your response to each forum post by clicking "Reply" at first thing that comes into your head: think a little first!

The activities “Forum” and “Wiki” are mainly focused on the **collaboration** and are, in

general, group activities. The “Forum” allows the teacher to organize a

discussion and the “Wiki” could be good support for collaborative writing. The

“Forum” is used to exchange ideas but the students could share documents by attaching

them on a post in the “Forum”.

² Icons may appear differently depending on the theme of the platform chosen by the administrator.



Write a Water Poem

Write a poem on any aspect of our World of Water. It must rhyme and must include alliteration. Help us out.



Quiz: Test your knowledge on Alpinism

This quiz contains a variety of questions to test your knowledge on Alpinism. At the end of the quiz you will be given your score.

The two other basic activities in Moodle are “*Assignment*” and “*Quiz*” and they are focused on the **evaluation**. The “*Assignment*” is an activity where the students have to prepare a kind of homework and send it to the teacher on the platform; it could be an online text, a doc file or any type of file.

The evaluation is made by the teacher and the student receives the grade and the teacher's feedback in the same place where he/she posted the assignment. Unlike the “*Assignment*” activity, the “*Quiz*” activity is evaluated in an automatic way by the platform and you receive the note and the feedback directly. In a “*Quiz*” you have to give or choose answers to different types of questions or make matches; the latest Moodle allows answers to be provided with drag and drop.

2.4. Courses in Moodle

2.4.1. A General Course Introduction

A course is a basic teaching unit in Moodle and corresponds to a curriculum subject in universities. Courses are grouped in categories and subcategories with the purpose of maintenance and easy access on behalf of students and lecturers.

Upon logging onto the system, with a username and a password, the user can see on the left side of the main Moodle page a block titled “*My courses*”, which contains a list of the courses in which he/she is a lecturer or a student. During the first logon of the student, in a particular course, if it is accessible for students, the system asks a question whether the student wishes to enrol in the course and puts him/her on a list of students, when the answer to the question is positive. If the lecturer wishes, and when the system has been set appropriately, they can further limit the access to the course by using a **code for access**, e.g., a password, which the system requires from the user for the first logon only. If this opportunity is not available, then the students

can be enrolled manually by the administrator of the system or the lecturer of the course.

The changes in the course done after the last logon of the user are shown on the main page of the course, in accordance with the settings. All the marks in the forums, tests and course assignments can be shown on one page (saved in a separate file).

Moodle uses the following main types of courses:

- **Thematic** – with this type of course, the teaching content is organized around a certain number of topics, which usually correspond to the topics of the course syllabus, but can also be completely different, for example, “*Lectures*”, “*Seminars*” and “*Recommended bibliography*”. This format is especially suitable for distance or part-time education, as it allows for a clear organization of the teaching content.
- **Weekly** – with this type of course, the course content is organized into a certain number of weeks, which corresponds to the number of weeks during the semester. This format is suitable for subjects in full-time education, where there is a relatively even distribution of sessions during the semester, and it gives the students the opportunity to easily follow the material taught and the tasks assigned.
- **Social** (interactive) – the course content is in the form of a discussion, and is arranged in additional blocks. This format is suitable as an online communication medium, for joint development of projects and assignments and the improving of students skills for cooperative and collaborative work.

With distance learning, it is advisable that the materials of the whole course should not be available to the students at the beginning (all the topics or weeks), as they can perform the various tasks and work with the resources without getting into depth. It is a good idea that most of the materials are hidden, and they are made available to the students step by step, making them acquire the material gradually, within the particular deadline.

Another approach is to use the so called **conditional activities**, which require the student to complete a particular activity before proceeding with

the following one, after being allowed access by the system. In this way, various pedagogical scenarios can be implemented.

2.4.2. Course Settings

The course settings in Moodle are defined by the administrator of the system when the course is created, and can be changed when necessary, by the course administrator. The settings that are coloured in red and are marked by an asterisk (*) are obligatory.

Edit course settings Expand all

▼ General

Course full name* Moodle E-motion - Workshop Burgas 2017

Course short name* Burgas 2017

Course category Miscellaneous

Visible Show

Course start date 19 November 2016

Course ID number

Description

▼ Course format

Format Topics format

Number of sections 10

Hidden sections Hidden sections are shown in collapsed form

Course layout Show all sections on one page

Appearance

Files and uploads

Completion tracking

Save and display Cancel

A **full** and a **short version** of the course name is included in the picture above, which is shown as a link in the upper part of the course, for marking the navigation from the main page of the system to the particular resource. The course **identifier (ID)** is an additional signature of the course, which is often present in the university lists of courses.

The course description is not compulsory and can help the students to get oriented in the course content. Then follow the settings for choosing **the course format**, the **number of weeks or topics**, depending on the type of format, and a **starting date** of the course, which is significant for the week format, as it sets the basic date for all the sections of the course. What follows are options for setting the number of **news** for the main page of the course, access to the **grades**, a **record of the visits** to the course, as well as a limitation to the **size** of the files uploaded.

Depending on the type of format chosen, what follows are additional course settings, for example, if the **hidden sections** should be accessible to the students or not; whether all the sections should be on one page or on a separate one (in a very long course), etc.

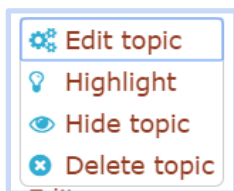
Then follow settings concerning the course **accessibility** to all students and/or guests (users that are not registered); **assigning groups**, for example, with seminars or laboratory sessions. The field “*Registration key*” sets a password which the system requires initially when registering for the course.

Next are the settings for the language of the course interface if it is different from the one used by default by the system, and also a possible change of the names of the roles used, for example, a teacher and a pupil instead of a university lecturer or a student, etc.

2.4.3. Main Blocks in a Moodle Course

Every course has a main page which is accessible after clicking on the name of the course. It contains links to the whole information available in the course. Overall, the courses in Moodle are organized on the basis of the following comprising elements:

1. **A course content** (resources and teaching activities), arranged in weeks or topics. These elements are usually positioned in the middle column of the course. Every week or topic is visualized in the course as a section marked with a number. All the topics in the course are visible, by default. By using the icon marked with the symbol of a lamp, the lecturer can note a particular topic as

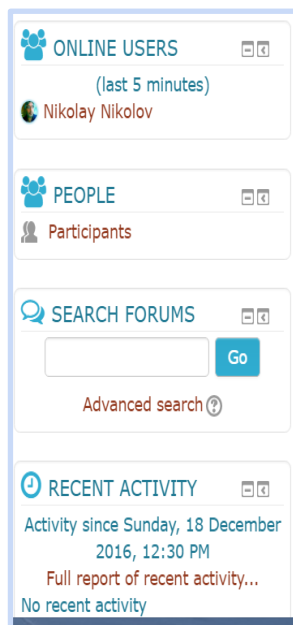


current, thus attracting the attention of the students to it. By using the icon marked with the symbol of an eye, the lecturer can show or hide a particular topic from the students (the open eye shows that the topic is visible, whereas the closed eye shows that the topic is hidden for the students). The lecturer can rearrange the topics by dragging and dropping, using the icon with arrows, positioned on the left of the topic title.

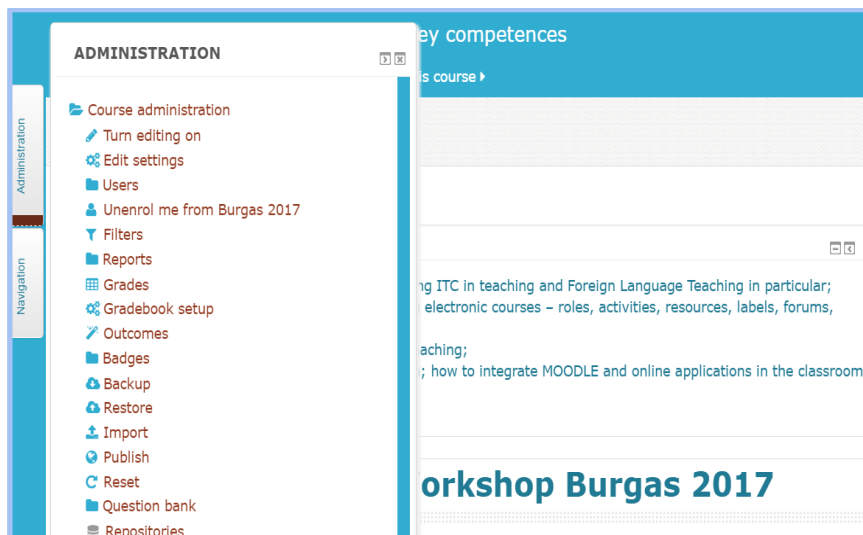
2. A number of **blocks** positioned, by default, in two columns (left and right) on both sides of the main column with the course content. The content of the course in the two side columns is organized in elements called blocks, which are visually presented usually in blocks, depending on the chosen course topic. The course administrator can add, hide, arrange and edit the blocks in the “*Editing*” mode of the course. There are several icons available for each block, positioned under the name of the block, by which the editing can be carried out.

Through the “*Permissions*” icon, the administrator can authorize other users to administer a particular block. Depending on the topics in the course, the icon presented with the symbol of an eye can be used for showing and hiding the block in the course. The icon presented by the symbol of a cross is used for deleting the block from the course.

The repositioning of the blocks can be done by dragging and dropping the block, the option being available by marking the block on its title part. Some of the blocks (“*Navigation*”, “*Settings*”) are compulsory for the courses and can be neither deleted, nor temporarily hidden. New blocks are added through the block titled “*Add a block*” by choosing the respective type of block from the scrolldown menu. The new block always appears at the bottom-right column of the course above the scrolldown menu for adding blocks and can be moved to the necessary place using the way described above.

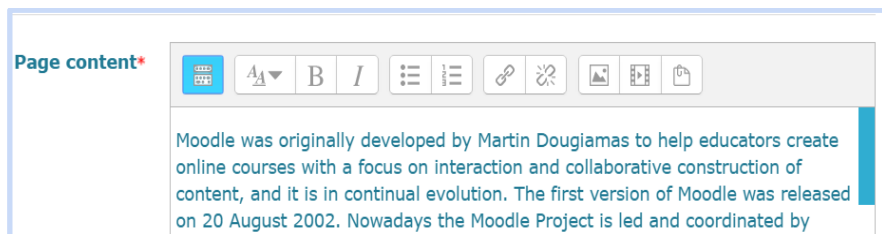


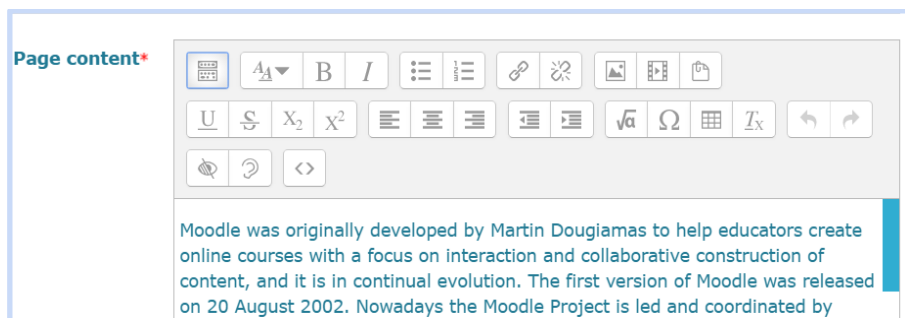
For the courses in Moodle 3, there is a special section called “*Dock*”, in which the blocks in the course can be moved. The “*Dock*” is the vertical band in the top-left part of the course, which is permanently positioned in the upper part of the screen (despite the scrolling), and can be selected by the user at any time. In this way, space on the course interface is saved, without hiding the respective block completely:



2.5. HTML Editor

Almost everywhere in Moodle where a text is required to be inserted, an embedded editor of the WYSIWYG is used (What You See Is What You Get). Through its easy and user-friendly interface, the teachers can generate HTML content without knowing the HTML language. The editor has two versions: short and expanded:





An alternative switch between the two modes is done by using the button on the top-left corner of the editor. Most of the options on the editor (font, size, alignment, bolding, numbering, etc.) are similar to the respective buttons on the toolbar in Microsoft Word. We are going to look at the more important options which differ from the usual functions in Microsoft Word.

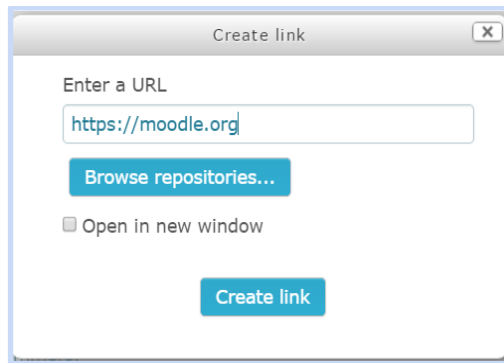


Formatting the font colors. This is done by using the button for the colour of the letters and selecting the required colour in the additional window with the colours available for the user to choose from. Similarly to Microsoft Word, this function relates to a text which has been selected beforehand.

Creating/editing of hyperlink. For creating a hyperlink, it is necessary to insert the text which we want to mark as hyperlink in the Moodle editor (for example “the official site of Moodle”), after which the text is selected and the button to add the hyperlink is chosen.



It opens a window from the following type:

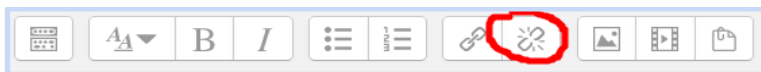


In the field “*URL*” the web address which we want to open is entered, and is accessible by clicking on the hyperlink, for example, “<http://www.moodle.org>”. If this is a site different from the Moodle system, it starts with “*http://*”, which comes up in the field by default. Through the “*Browse repositories*” button a link to a file in the current course can be easily created. More information on working with Moodle files will be provided in Chapter 4.

It is advisable to choose the “*Open in new window*” option. In this case, the link that we are creating will open in a new window on the browser, whereas the resource which the user is reading in Moodle will remain in the current window. Otherwise, the user can easily get confused in the navigation and can forget to go back to the course page in Moodle. If the user closes the Moodle window by mistake, it will be necessary to open the whole site anew and to start again from the beginning.

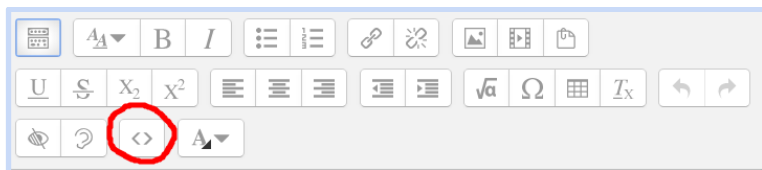
Editing of hyperlinks is done again by selecting the link and the same button. The options of the link are edited and, finally, the “OK” button is selected.

Deleting of a hyperlink is done by selecting the link and the button:



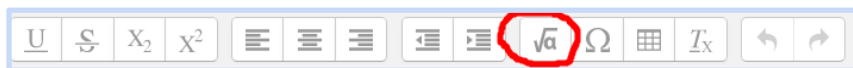
It should be noted that this action leads to deleting of the link only but not of the text which has been selected as a hyperlink.

Editing of an HTML code. Although it is not obligatory for the Moodle users to know HTML, such an option is included in the editor for advanced users, who can write and edit codes. It is started by the button which leads to the visualization of the HTML code of the text inserted in the window.



A double click on the same button causes visualization of the text in the way in which it is seen by the users in the browser.

Editing of mathematical formulae. Mathematical formulae cannot be entered in Moodle, by default. One of the ways for transferring of formulae inserted with Microsoft Equation or MathType is to convert them into images (for example, gif or png) and transfer them into Moodle, one by one. However, the formulae thus inserted are treated as images by the system and cannot be edited in the Moodle platform. Moodle 3.0 uses the **Atto HTML editor** by default and there is an equation editor function started by the button:



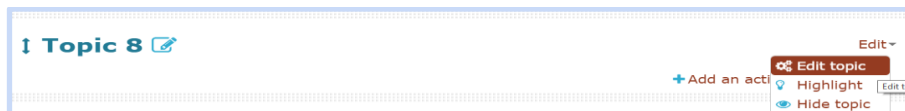
The insertion of formulae with this button is done in an additional window, which is similar to the window for the insertion of formulae in Microsoft Equation Editor.

Chapter 3. Resources in Moodle 3

The resources are static elements of the courses (texts, images, files, Web pages, etc.) designed for reading by the learners. They do not require any follow-up activities and are identical for all the users of the course, i.e. they are not adaptive to the actions of the learners.

3.1. Summary

The summaries are the simplest type of resources which are used for adding titles of the topics/weeks in the course. They are positioned in the top part of the respective topic/week and are usually used for introducing a short text to prepare students for the activities within the topic or week. The text is shown on the course page under the section name. The Summary is added using the link “*Edit topic*” in the top part of the respective topic:



When clicking on this link, a window opens, in which the user can insert the text of the summary using the embedded HTML editor. After recording the changes, the inserted text appears in the top part of the selected topic.

3.2. Label

The label is a simple resource which contains text, images, tables or hyperlinks. In general, the label is a short resource because all its content is visualized in the topic/week of the course. In this aspect, it very much resembles the summary, but as opposed to it, which is unique for each topic and plays the role of its title, the number and place of the labels in each topic are not limited. The label can be used for structuring the resources and the teaching activities in the topic, for example, creating subtitles, as shown in the following example, in which the labels are used for introducing the course:



A label is added by selecting the respective point on the list “Add an activity or resource” in the “Edit” mode of the course. For that purpose the embedded HTML editor in Moodle is used. After saving the content of the label, it appears on the respective place in the topic of the course.

3.3. Page

The page module enables a teacher to create a web page resource using the text editor. A page can display text, images, sound, video, web links and embedded code, such as Google Maps. The advantages of using the page module rather than the file module include the resource being more accessible (for example to users of mobile devices) and easier to update.

For large amounts of content, it is recommended that a book is used rather than a page.

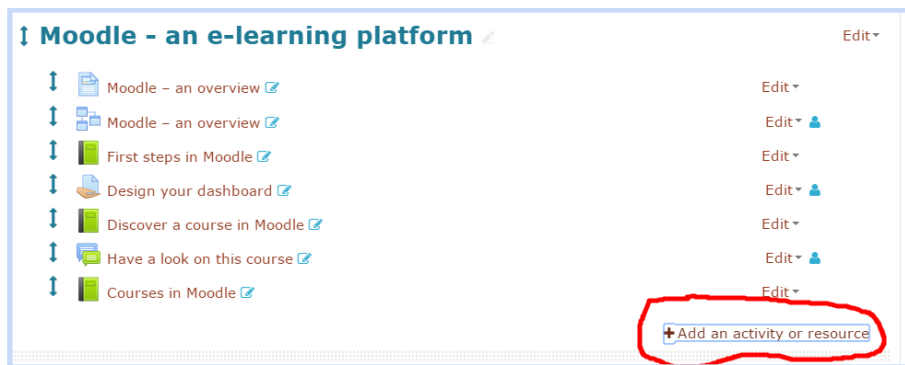
A page may be used:

- To present the terms and conditions of a course or a summary of the course syllabus.
- To embed several videos or sound files together with some explanatory text.

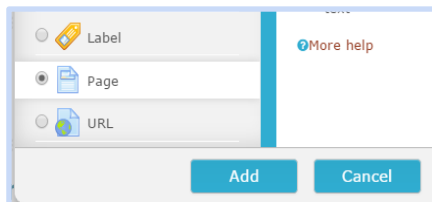
3.3.1. How to Create and Edit Text in Moodle Webpages

Creating a text which is a part of a web page is done by following several basic steps:

1. First, you enter the course in which a webpage has to be created, and in order to start the uploading of the text, it is necessary to click the “Edit” button (the top part of the course).
2. Then you choose a space where the text of the newly created webpage has to be inserted – this could also be the place where all the common course resources of a particular course topic are:

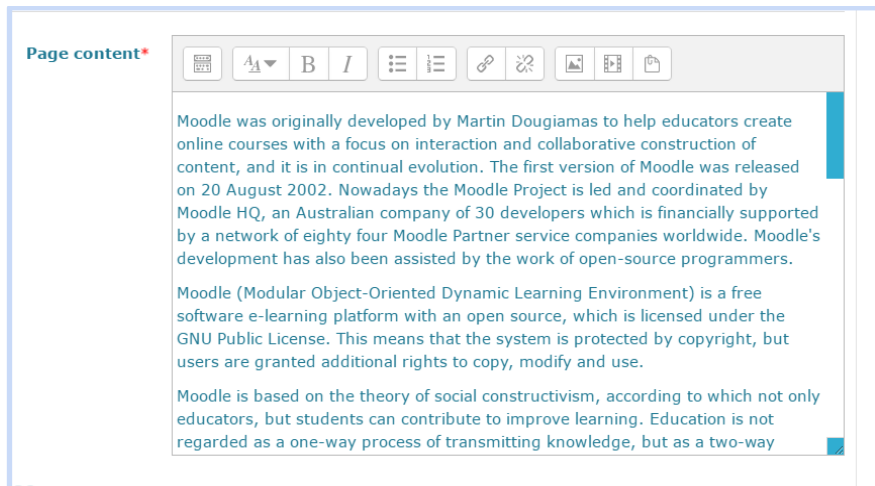


3. In the selected topic you click on “Add an activity or resource”, and from the dropdown menu it is necessary to select “Page”. The form for uploading text in the course will appear on the screen.



4. Then a name of the link is inserted, which will be used by the students to open the text (e.g., “Aims of the course”, “Lecture 1”, “Paper 1”, etc.), and the space below “Edit” may be left empty or may include a review of the webpage which is under construction.
5. The big box under the text “Page content” is the space for uploading the text of the webpage. The most convenient way for doing this is by copying the text from MSWord. Shorter texts are better to be typed directly in the box, on the keyboard, and then the text should be formatted. In this case, it should be considered that there is always a risk that the Internet connection fails, or you stay away from the computer for a long time or the computer

blocks and the typed text can get lost. Therefore, it is strongly recommended that the text inserted in Moodle is regularly saved.

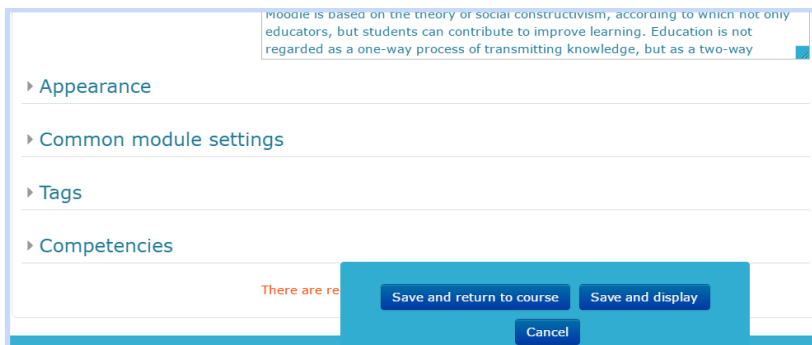


6. If the text is already in a file (for example, .doc or .docx), the following steps should be carried out. Without closing down the course in Moodle, the MSWord file should be opened and from it the text should be copied. If the text contains pictures, photographs or diagrams, only the text should be copied. It is possible that some specific formatting is lost, such as the colour of the fonts or the background, automatic numbering, etc. For an additional formatting, the icons of the HTML editor above the box should be used.

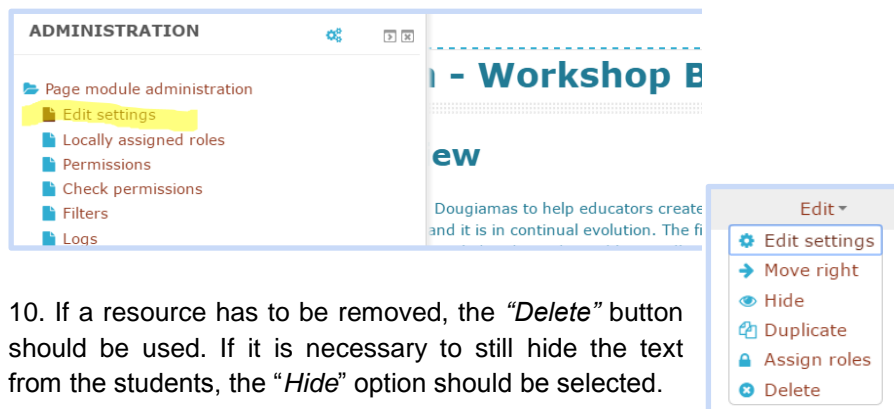
7. A Copy/Paste of the whole text is carried out, or of that part which is necessary for the editing of the webpage. It is not advisable that the text which will be copied in Moodle is longer than 5 pages in MSWord. For example, if it is necessary to upload a lecture of 15 pages, it is better that this is done in three uploadings. (It is difficult to upload texts on the screen that are too long; therefore, Moodle does not allow for long texts).

8. The text is already in the form for uploading texts in Moodle. The next groups of settings, "*Appearance*", "*Common module settings*", etc., can be skipped. In order to save the changes, it is necessary to use one of the two buttons at the bottom of the form – "*Save and display*" or "*Save and return to course*". Both buttons complete the same function: when clicking on them, the text is saved in Moodle and the form is closed down. The difference between the two options is in the page which is visualized after the

recording: in the first option it is the page that has been created, whereas in the second – the course which it is being worked in.



9. If it is necessary to complete additional correction on the text which has been just uploaded in the course (in order to edit or change some of the options), the “*Edit settings*” button is used. After the changes in the form have been carried out, one of the two buttons should be selected: “*Save and display*” or “*Save and return to course*”.



10. If a resource has to be removed, the “*Delete*” button should be used. If it is necessary to still hide the text from the students, the “*Hide*” option should be selected.

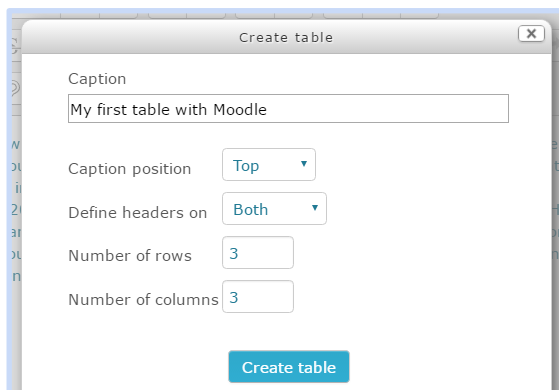
3.3.2. Adding a Table to a Webpage

In general, tables from MS Word and MS Excel can be copied in Moodle, so it is recommended that they are done in advance in the respective programme and then copied, after the text has already been copied (or to do it simultaneously).

It is possible to insert a new table in the text on the webpage, with the instruments of Moodle. For that purpose, you should log on the editing form again (by clicking on “*Edit settings*”), and there, in the field of the text, to instruct, with the click of the mouse, where exactly the table should be inserted.

For a better layout, first a new line can be inserted (by clicking on the “*Enter*” button on the keyboard), so that the table should split the text (if one such has already been inserted), but it can also be inserted anywhere else, even between two words in the text, after which the following steps are carried out:

1. From the toolbar above the box, the icon “*Table*” should be selected. A window opens, in which the parameters for the table should be selected. The table can be created with only equal in size rows and columns. Once it is created, the size of the single rows and columns cannot be changed with the mouse so that they are different from the rest. This can be done only when text is inserted, which is longer than the width of the respective column.



Create table

Caption
My first table with Moodle

Caption position Top

Define headers on Both

Number of rows 3

Number of columns 3

Create table

2. After all the parameters of the table have been specified, the “*Create table*” button is selected in the same window. With the help of the mouse, each cell can be entered and information from the keyboard can be inserted in it. The whole table can be deleted by clicking on it with the mouse and pressing the “*Delete*” button on the keyboard.

on 20 August 2002. Nowadays the Moodle Project is led and coordinated by Moodle HQ, an Australian company of 30 developers which is financially supported by a network of eighty four Moodle Partner service companies worldwide. Moodle's development has also been assisted by the work of open-source programmers.

My first table with Moodle

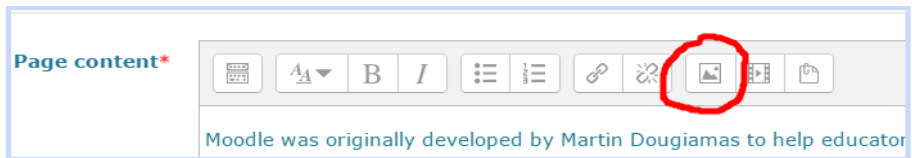
aaaaaaaaaaaaa	bbbbbbbbbbb	cccccccccccccccccc

3. In order to save the changes, you should click on any of the two buttons at the bottom of the blank - “*Save and display*” or “*Save and return to course*”.

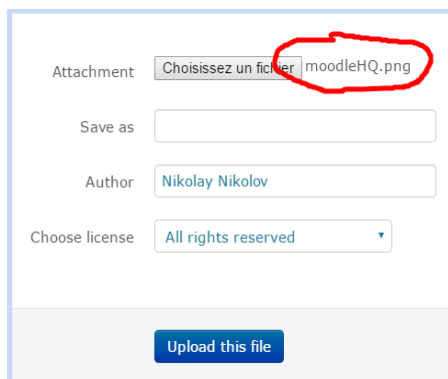
3.3.3. Inserting an Image into a Webpage

It is possible to add an image to the text (picture, photograph, etc.), but first you have to put this image in a separate file with an extension, for example, .jpg, .gif or .png, and to also consider its size, in order to fit well on the webpage and not to exceed the maximum for the course.

1. In the editing form (the same which is used for uploading a text and a table), a place is selected with the mouse, where the image will be inserted. From the toolbar, the “*Image*” icon is selected.

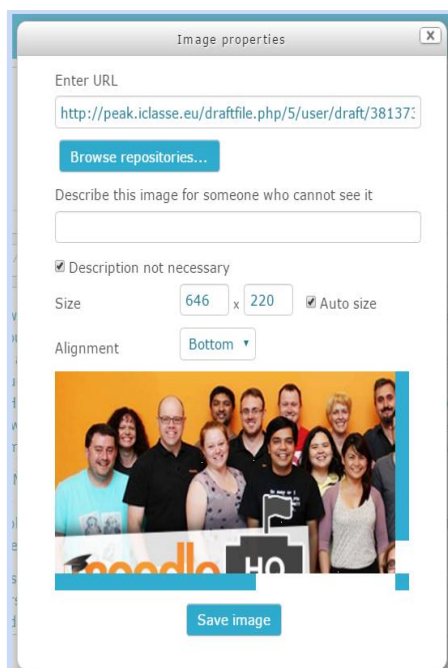


Then select the “*Browse repositories*” button in the window that opens. By using the new window, the file with the picture in the computer is accessed and is selected by a double click with the mouse.



A screenshot of a Moodle file upload form. The 'Attachment' field contains a button labeled 'Choisissez un fichier' and a text input field with 'moodleHQ.png' entered. A red circle highlights the text input field. Below this are fields for 'Save as' (empty), 'Author' (filled with 'Nikolay Nikolov'), and 'Choose license' (filled with 'All rights reserved'). At the bottom is a blue button labeled 'Upload this file'.

2. After clicking on “*Upload this file*” button, a window with image properties appears:




A screenshot of the 'Image properties' dialog box. It has a title bar 'Image properties' with a close button. The 'Enter URL' section shows a text input field with the URL 'http://peak.iclasse.eu/draftfile.php/5/user/draft/38137:'. Below it is a blue button 'Browse repositories...'. The 'Describe this image for someone who cannot see it' section has a text input field. Below that is a checkbox 'Description not necessary' which is checked. The 'Size' section shows '646' x '220' and a checked 'Auto size' checkbox. The 'Alignment' section shows a dropdown menu set to 'Bottom'. At the bottom is a preview of the image (a group of people) and a blue button 'Save image'.

The URL of the uploaded image is visible on this screen and the opportunity to give a name of the image or to mark that description is not necessary.

Note that this description is used when the image could not appear in the browser, for some reasons. The size and the alignment are important for the look of the edited page.

3. After finalising the settings of the picture by clicking on the “*Save image*” button, and after closing down the window, the way the picture looks on the page can be seen. The image can be deleted only with a click with the mouse on it and then pressing the “*Delete*” button. In order to save the changes that have been carried out, any of the two buttons at the bottom of the form can be used - “*Save and display*” or “*Save and return to course*”.

Moodle – an overview

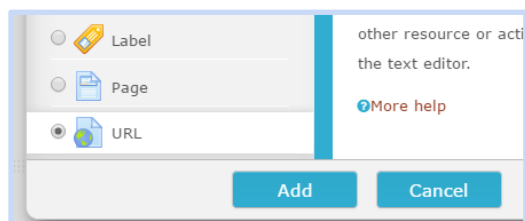
[Return to: Moodle](#)


Moodle was originally developed by Martin Dougiamas to help create online courses that focus on interactive, collaborative content, and it is in constant evolution. The first version of Moodle was released in August 2002. Now the Moodle Project is coordinated by Moodle HQ, an Australian company of 30 developers which is financially supported by a network of four Moodle Partner service companies worldwide. Moodle's development has also been assisted by the work of many programmers.

3.4. URL

3.4.1. External URL

Hyperlinks are one of the main elements of all text and multimedia ones on the Web, because they offer opportunities to present additional and useful materials on the topic, parallel to the teaching material.

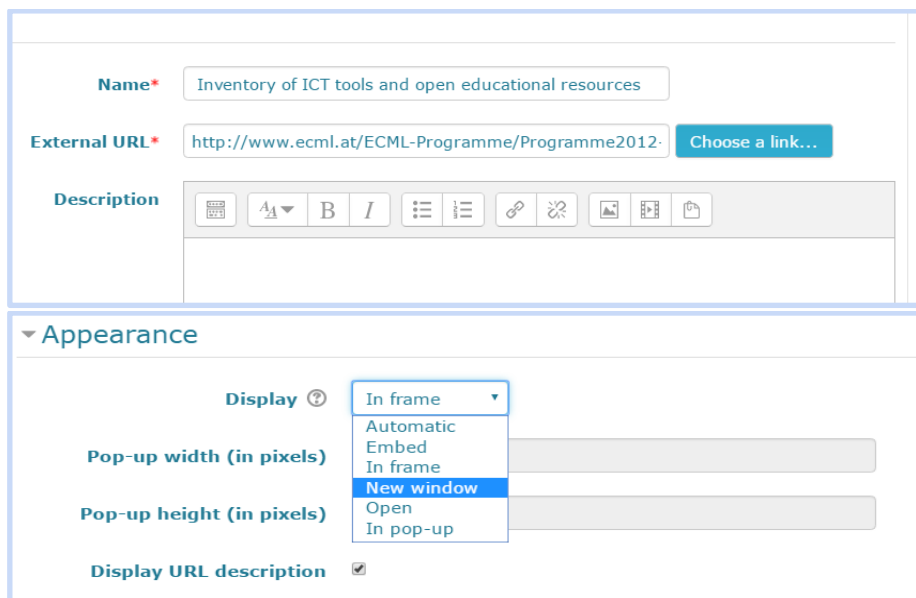


Hyperlinks in Moodle are added by selecting the option “*URL*” from the list “*Add an activity or resource*” in the “*Edit*” mode of the course.

In the field “*Name*” the text we want to mark as a hyperlink is put (i.e., if clicked with the mouse, to upload

the resource). The field “*Description*” contains additional, non-compulsory information, which can be read when browsing the list with the course resources.

The most important is the field “*External URL*”, in which the address of the site that contains the searched resources is provided. The button “*Choose a link*” allows the user to select a specific file on the platform. In the “*Appearance*” field, it is shown whether the site should be opened in the same or a new window of the browser. It is recommended that if the site is not in Moodle, the option “*New window*” should be chosen. Otherwise, (in the option “*The same window*”) the resource will open as a part of the course in Moodle, which can lead to some confusion for the students and then they can close the window of the browser by mistake when they close the windows with the resource. Then they will have to start the browser again and to enter the system anew.



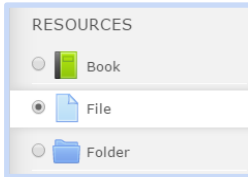
The screenshot displays the Moodle resource creation interface. The top section contains three main fields: 'Name' with the value 'Inventory of ICT tools and open educational resources', 'External URL' with the value 'http://www.ecml.at/ECML-Programme/Programme2012-' and a 'Choose a link...' button, and 'Description' which includes a rich text editor toolbar. Below these is the 'Appearance' section, which is expanded. It features a 'Display' dropdown menu currently set to 'In frame', with a list of options including 'Automatic', 'Embed', 'In frame', 'New window' (highlighted), 'Open', and 'In pop-up'. To the right of the dropdown are input fields for 'Pop-up width (in pixels)' and 'Pop-up height (in pixels)'. At the bottom of the 'Appearance' section is a 'Display URL description' checkbox, which is checked.

Through the link “*Common module settings*” with the “*Visible*” field you can set whether the resource should be visible or hidden for the students in the course. The “*ID number*” field contains a non-compulsory identifier of the

course created. For saving the resource that has been created, any of the “*Save and display*” or “*Save and return to course*” buttons can be used.

3.4.2. Creating New Hyperlinks to Files

Creating hyperlinks to files can be similar to creating hyperlinks to sites, because all the files to which we create hyperlinks have to be uploaded on the server of Moodle beforehand. This is carried out in two main stages:

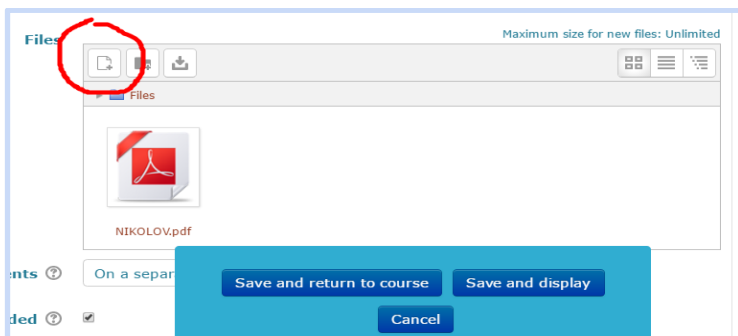


1. Uploading a file on the server.
2. Creating a link to the file

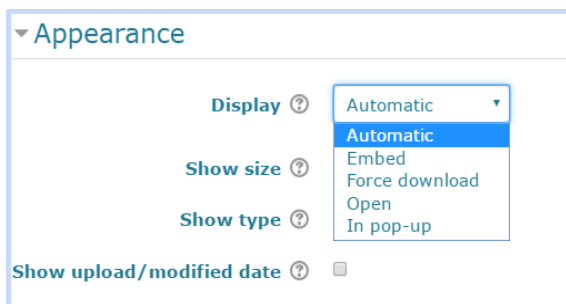
Hyperlinks to files are added by choosing the option “*File*” from the list “*Add resources*” in mode “*Edit*” of the course. In the field “*Name*”, the text which we want to mark as a hyperlink is inserted. The field “*Description*” contains compulsory additional information which can be read when browsing the list of resources of the course.

The uploading of a file on the server is started by clicking the “*Add*” button which visualizes a window that shows the files that have been already uploaded on the server, for the particular course, the files that have been last used, or allows for uploading a new file.

The file is selected from the local computer, from the menu “*File upload*” and after that using the “*Browse*” button, similarly to the selection of a file when sending an e-mail. After that the selected file is uploaded on the server using the button “*Upload this file*” and it appears in the list of files on the server. Moodle 3 also has an option for uploading by “*dragging*” with the mouse.



Before finally creating a link to the uploaded file, we can choose the way the added file is displayed. The option “*Force download*” allows for the file to be automatically downloaded on the computer of the user. This option is useful when opening files in which incompatibility can occur when working with different browsers, for example, when there are missing plugins or which are from a lower version.



When choosing the option “*Open*”, it is instructed whether the file should be uploaded in the same or a new window of the browser. It is advisable, when opening the file, to choose the option “*In pop-up*” in this field. Otherwise, the file will load in the same window in which the course is, in which case, unintentionally, the students, on closing down the window can close down the whole system. Then, they will have to start the browser anew and to log on the platform again. The fields “*Visibility*” and “*Identification number*” are analogical to the same fields when creating a link to a website. These actions have to be finalised through one of the buttons “*Save and display*” or “*Save and return to course*”. The difference between them is that the latter button opens the uploaded file after creating a link to it, whereas the former takes the user to the home page of the course.

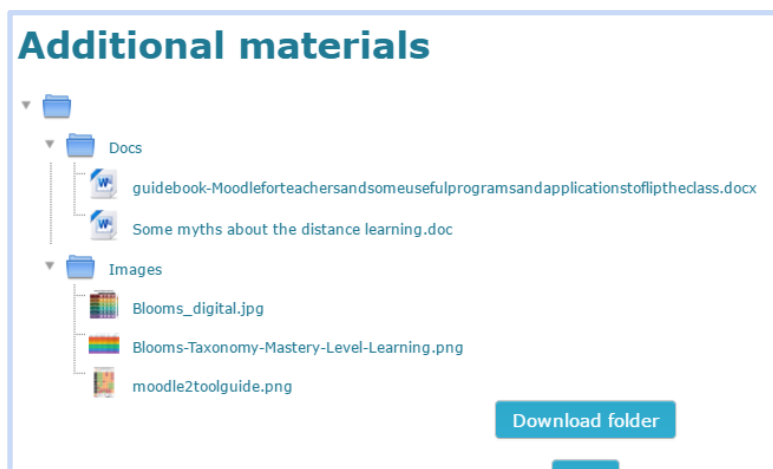
3.5. Folder

The folder module enables a teacher to display a number of related files inside a single folder, reducing scrolling on the course page. A zipped folder may be uploaded and unzipped for display, or an empty folder created and files uploaded into it. A folder may be used:

- for a series of files on one topic, for example a set of past examination papers in pdf format or a collection of image files for use in student projects;

- to provide a shared uploading space for teachers on the course page (keeping the folder hidden so that only teachers can see it).

In the “*Name*” field, the name of the folder is inserted, as well as a short description of it. The “*Description*” field contains a compulsory summary of the course created. We can upload a series of files of different types, using the already familiar button for file upload. We can then see the files arranged in alphabetical order in the created folder, by clicking the button for saving and returning to the course. When arranging the files into the folder, we have the opportunity for a precise and structured arrangement by creating folders and subfolders. The final resource can appear in the following way:

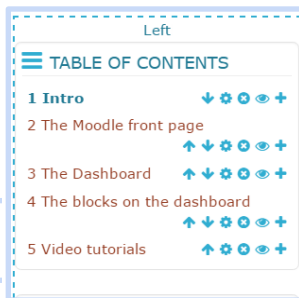


3.6. Book

The book module enables a teacher to create a multi-page resource in a book-like format, with chapters and subchapters. Books can contain media files as well as text and are useful for displaying lengthy passages of information which can be broken down into sections. A book may be used:

- to display reading material for individual modules of study;
- as a staff departmental handbook;
- as a showcase portfolio of student work.

The creation and insertion of a book appears as a new type of resource in Moodle 2. The separate pages are created in a similar way that a resource page is created. When creating them, it has to be stated whether they are Chapters (the “*Subchapter*” box remains empty) or Subchapters (in this case, the “*Subchapter*” box is selected). On the image below, the title of the created book is shown, and on the image on the right is the menu with the separate chapters.

A screenshot of a Moodle Table of Contents menu. The menu is titled "TABLE OF CONTENTS" and is located on the left side of the page. It lists five chapters, each with a set of icons for navigation and editing. The chapters are: 1 Intro, 2 The Moodle front page, 3 The Dashboard, 4 The blocks on the dashboard, and 5 Video tutorials. The icons for each chapter include a down arrow, a gear, a magnifying glass, and a plus sign. The chapter titles are in a reddish-brown font, and the icons are in a light blue color.

Left	
TABLE OF CONTENTS	
1 Intro	↓ ⚙ 🔍 +
2 The Moodle front page	↑ ↓ ⚙ 🔍 +
3 The Dashboard	↑ ↓ ⚙ 🔍 +
4 The blocks on the dashboard	↑ ↓ ⚙ 🔍 +
5 Video tutorials	↑ ⚙ 🔍 +

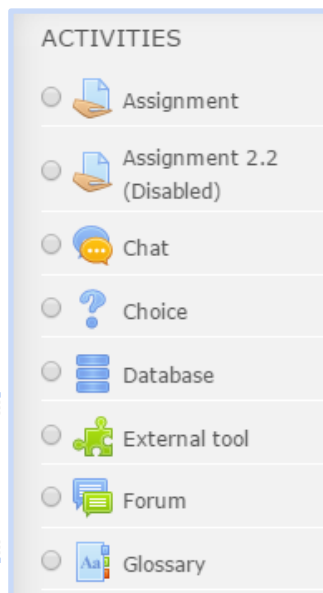
Chapter 4. Activities in Moodle 3

Using the learning activities of Moodle platform the teacher could set specific tasks to the learners and evaluate them after their completion. The obtained grades are included in the learners' personal gradebook for tracking their progress.

The various activities are presented in the figure on the right (depending on the platform's specific settings the types and number of the activities could vary):

Adding an Activity

The activities could be added into each course topic. The figure below shows how to add an activity into topic 8 of some course:

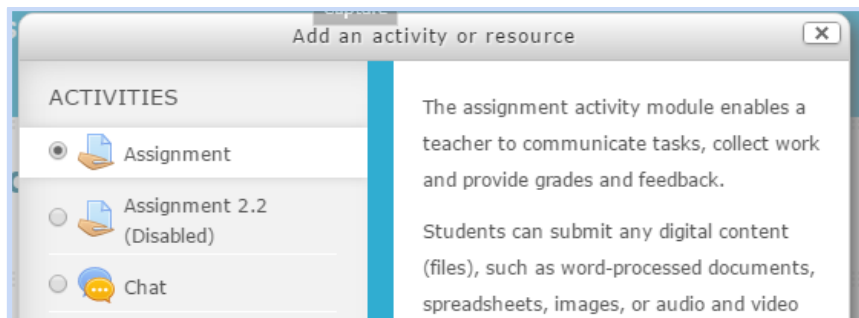


4.1. Assignment

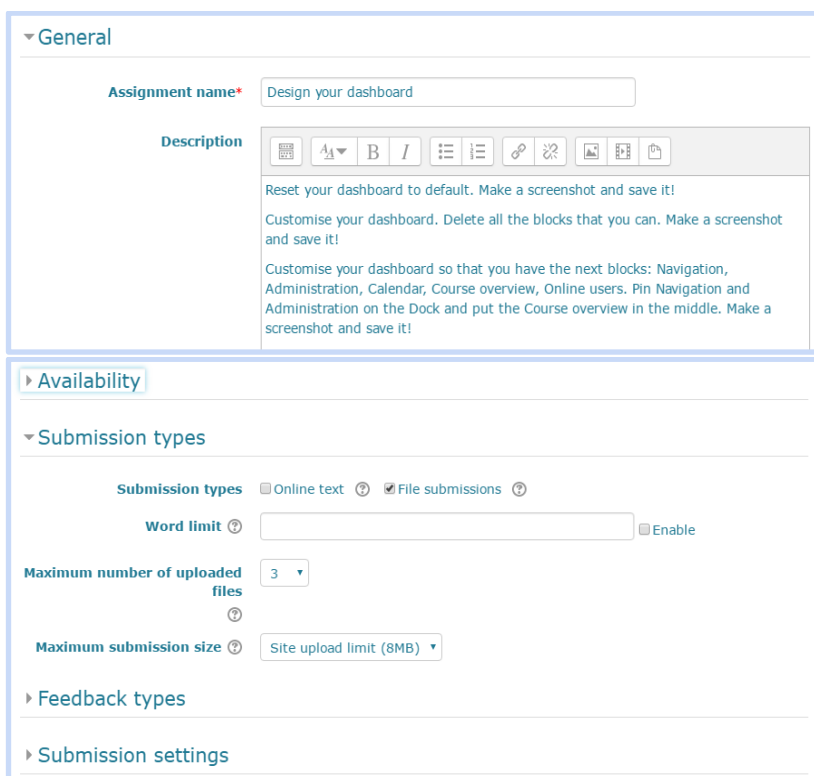
4.1.1. What Is an Assignment?

The assignments are activities, intended for the teacher to set homework, classwork or projects to the students. Essentially, the assignment puts a problem or a case to the learner, who is required to create digital content and to upload it into the system, probably until some fixed deadline. When the assignment is ready, the teacher should evaluate it using a grades scale and/or text comment. The digital material could contain text, electronic spreadsheets, presentations, images, audio, video, etc. and could be in any file format. The assignments could be a useful tool for independent or collaborative work practice, combined with course group mode, and tracking the learners' progress.

An assignment activity could be added into a course by clicking the corresponding link and selecting the “Assignment” option .



Detailed information about the assignment could be entered using the following screen:



The screenshot shows the "Assignment" configuration screen. It has two main sections: "General" and "Availability".

General

Assignment name* Design your dashboard

Description

Reset your dashboard to default. Make a screenshot and save it!

Customise your dashboard. Delete all the blocks that you can. Make a screenshot and save it!

Customise your dashboard so that you have the next blocks: Navigation, Administration, Calendar, Course overview, Online users. Pin Navigation and Administration on the Dock and put the Course overview in the middle. Make a screenshot and save it!

Availability

Submission types

Submission types ☐ Online text ☒ File submissions

Word limit ☐ Enable

Maximum number of uploaded files 3

Maximum submission size Site upload limit (8MB)

Feedback types

Submission settings

Adding the assignment requires the following most important fields to be filled in:

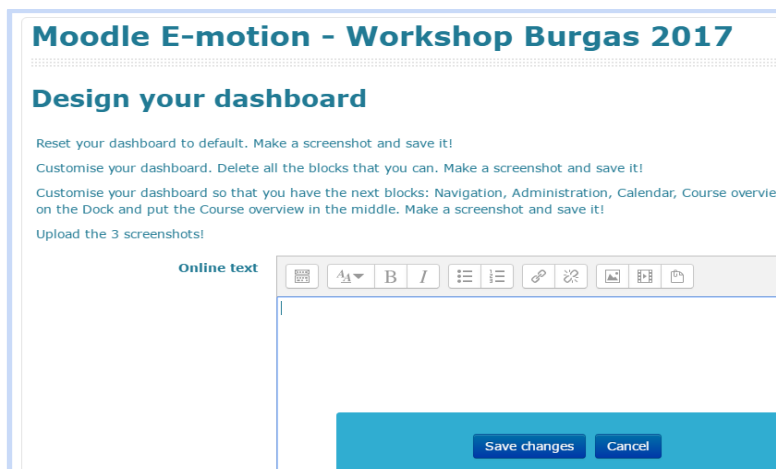
- **Assignment name** – this name will be listed in the course.
- **Assignment description** – it contains the problem/case description to be solved or created.
- **Additional files** – this option could be used in order to provide some template, example or preliminary data to the learners.
- **Availability** – defines starting and/or final dates and hours for the assignment deadline, as well as a cut-off date. All the dates could be fixed together or separately.
- **Submission type** – defines the types of the assignment:
 - **Online text** – typed directly in the course with the embedded editor, eventually with some pictures, hyperlinks and other objects available in the editor. This text could be limited with the option “*Word limit*” when it is enabled.
 - **File submissions** – this is the most common option, which requires the learners to prepare and upload some files for the assignment. Note that their type is not previously defined and not limited (documents, spreadsheets, presentations, pictures, video, program code, etc.).
- **Maximum number of uploaded files** – the number of the files could be limited due to security or other reasons (between 1 and 20). Note that the number filled in is the maximum number of files and the system will not require from the learner to reach it in order to complete the assignment. In case the assignment requires more than 20 files to be uploaded or the files should be placed in different folders (for example a website), the learner could create an archive (rar, zip, etc.) and upload it instead.
- **Maximum submission size** – the uploaded file could be limited to some reasonable number in order to avoid unnecessary traffic and storage usage. This limit should not exceed the maximum submission size, specified in the course settings.

The rest of the settings concern the submissions options, evaluation methods, group mode, using of comments, etc.

Apart from storing the learners' coursework during the training, the assignment activities could be used for the achieved grades storage or for course chronology creation.

4.1.2. Online Text

It is a simple assignment, which asks the student a question, sets a problem or a case to be solved and requires an answer (i.e. short essay) to be entered directly into the platform, using the embedded HTML editor. This assignment could be triggered by choosing the corresponding option during the assignment addition into the course. File upload could be selected together or separately from the online text. It could be added in a window similar to the one in the following screen:

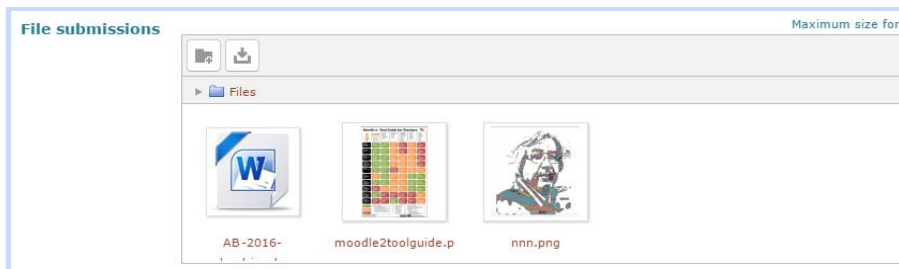


4.1.3. File Upload

The trainer determines the problem and the maximum number of the files, which contain the solution. This option allows the student to upload up to 20 files to the platform. The assignment solution requires a number of files to be developed (with no limit regarding their type) with size lower than the maximum allowed. If the number of the files is not defined preliminarily or is too big, the files could be compressed into zip or rar format and the archive could be uploaded into the platform as a single file. The learners could add some comments to the files, for example their description, in the case this

option is provided by the trainer. When the learners are ready with uploading, they have to confirm that the assignment is ready for submission, in case this option is selected and after that the assignment could not be edited.

The file upload looks as follows:



The system allows the students to edit their work by adding new files and/or editing and deleting the existing files. If a student attempts to upload more files than the maximum number of uploaded files, the system sends a warning message for error.

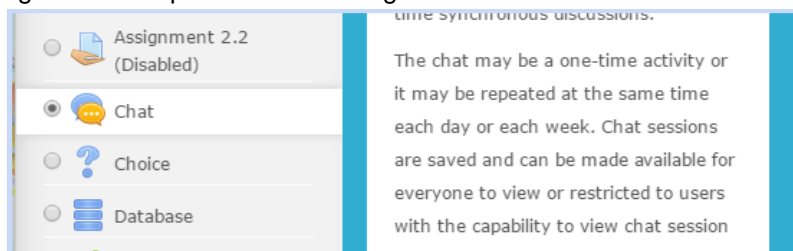
4.2. Chat

4.2.1. What Is a Chat?

The chat activity provides the course participants with an environment to share text messages in real-time communication. Usually their purpose is to discuss the learning content or a problem during a synchronized session, which has to be previously scheduled. The chat could be one-time or regular (weekly or monthly) with the purpose to periodically discuss the misunderstandings or obstacles the learners may encounter. The chat sessions could be saved and seen later if necessary by learners, who did not have the opportunity to join the real-time discussion. In addition, the saved sessions could be accessible to everyone or with restricted access. Chats are especially helpful in distance learning, where the learners have not got the opportunity of live contact during the course lifetime. They could be used as a group learning tool or for real-time discussion about collaborative work on a project or a case.

4.2.2. Adding a Chat

Adding a chat is represented in the figure below :



After adding the chat, the following major parameters should be determined:

A screenshot of the chat configuration form, divided into two sections: 'General' and 'Chat sessions'. The 'General' section includes a 'Name of this chat room*' text input field and a 'Description' text area with a rich text editor toolbar. The 'Chat sessions' section includes a 'Next chat time' field with dropdowns for day (28), month (December), year (2016), and time (19:15), a 'Repeat/publish session times' dropdown set to 'Don't publish any chat times', a 'Save past sessions' dropdown set to 'Never delete messages', and an 'Everyone can view past sessions' dropdown set to 'No'. A 'Common module settings' link is at the bottom.

- **Name** - the name with which the chat will be listed in the course.
- **Description** – it contains the chat details – purpose, problem or topic to be discussed, rules the participants have to follow, etc.

- **Next chat time** – using this option the teacher can schedule the date and time of the chat session.
- **Repeat/publish session times** – contains additional schedule settings.
- **Save past sessions** – this option determines whether and how long the saved sessions will be kept into the platform.
- **Everyone can view past sessions** – determines the access to the saved sessions.

4.3. Choice

What Is a Choice?

This activity is a simple survey, which includes a question the trainer asks the trainees and a number of answers they could select. The obtained results could be published on the course page after the activity closure or after a specific date. They could be published with the students' names or anonymously. This activity is reasonable to use in the following cases:

- To stimulate the thinking process in the considered area.
- To check how the trainees accept the learning material.
- To make trainees vote for a topic.

Adding a choice is represented in the figure below:

? Adding a new Choice ?

► Expand all

▼ General

Choice name*

Description

Rich text editor toolbar: Table, Text color, Background color, Bold, Italic, Underline, Bulleted list, Numbered list, Link, Unlink, Image, Video, Document.

Display mode for the options: Display horizontally ▼

Options

Allow choice to be updated: No ▼

Allow more than one choice to be selected: No ▼

Limit the number of responses allowed: No ▼

Option 1* ?

After adding the choice, the following major parameters should be determined:

- **Name** - the name with which the choice will be listed in the course.
- **Description** – the question the trainees should answer. It could contain text, images, URLs, video, etc.
- **Display mode for the options** – determines the mode the answer choices should be represented: horizontally or vertically.
- **Option 1, Option 2**, etc. – They will appear as possible choices the trainees can select. If no **limit** is fixed (set to 0), any number of trainees could select the corresponding option.
- **Results** – this part of the features determines whether and how the results will be displayed.

Other options could be used in order to determine whether the trainees could select more than one option, whether they could update their choice, to restrict answering within a specific time period, etc.

4.4. Database

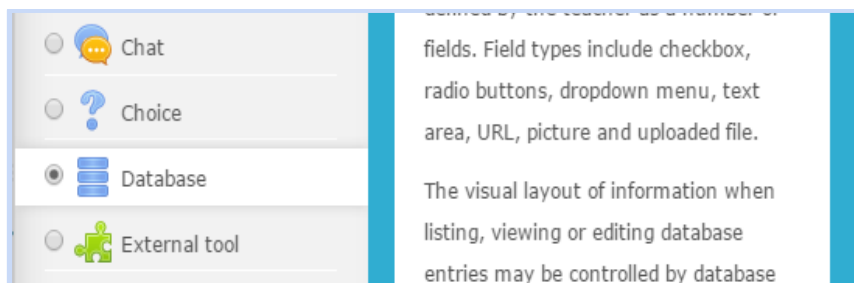
4.4.1. What Is a Database?

This activity allows the trainer together with the trainees to compose a dataset on any specific topic, related to the training. The format and structure of database records could be of various kinds: text, images, video, files of any type, URLs to other resources, etc. By default, trainees can upload and share their own content of resources, as well as edit them. Some useful database applications include:

- Facilitating collaborative work on data collection, for example Web links, articles or books on a specific topic.
- Collecting and visualizing students' developments (pictures, projects, websites, posters, etc.).
- Collecting comments, evaluations and feedback about lists of potential logos, slogans, projects, etc.
- Uploading and sharing files.

4.4.2. Adding a Database and Major Parameters

Adding a database is represented in the figure below:



The screen for entering detailed information for the “*Database*” activity is shown below:

▼ General

Name*

Description

Install your platform by registrate on <https://moodlecloud.com/en/> and share on this database the adress and a brief description of the courses that you will put on it and the users that will learn in your platform.

▼ Entries

Approval required ⓘ No ▾

Allow editing of approved entries ⓘ Yes ▾

Allow comments on entries ⓘ No ▾

Entries required for completion ⓘ None ▾

Major parameters

After adding the database, the major parameters that should be determined are its “Name” and “Description”. These fields are similar to those with other activities. For the created database a limited availability period could be fixed, respectively for its availability for adding and listing of its records; a number of mandatory fields to be filled in before the trainee could view the rest of the database; maximum records number; presence or absence of comments; whether records will appear directly into the course, or the trainer should approve them manually, etc.

4.4.3. Entering data into the database

After the database creation, it is empty and contains no fields. Before the database can be filled in with records, the fields list should be defined. It represents the number and types of data the database will contain. This could be executed by selecting the field type from the dropdown box “Choose” under the text “Create a new field”:

The fields could vary according to their type: number, text, picture, URL, data, file, etc. In addition, the database could be sorted according to some field criteria; the default sort field is the time the record has been added. After the new field selection, some field parameters should be filled in, including name and description (optional); whether the field is required or not, etc.

After the fields definition, the database is ready for the data to be inserted by selecting the link “Add entry”. A screen, where the user can enter the data for

each field, appears. The user can add a single entry and view the result or go to another entry insertion.

The database entries could be viewed either listed (10 entries per page by default) or single (one entry per page). The entries could be edited or deleted by selecting the corresponding icon next to the entry, if the user has the corresponding permission.

Searching into the database is available by selecting the link “*Search*”. Some search criteria could be fixed as well – specific data value, author’s name or family name, etc.

4.5. Forum

What Is a Forum?

This activity provides users with media for asynchronous discussions, i.e. communication during a relatively long period of time.

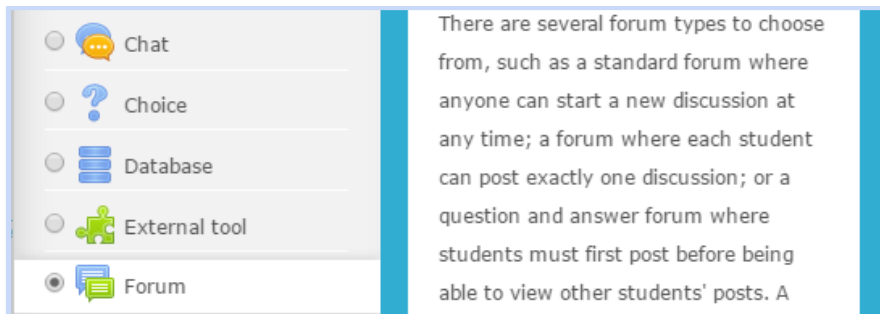
Moodle maintains various types of forums: a standard forum, where each course participant can start a new discussion topic at any time; a forum, where each participant can start only one discussion topic, or a question–answer forum. The teacher could allow or forbid file attachment to postings. The topics and postings can contain images.

The course participants could subscribe to a forum and receive notification emails for the new postings. The teacher could also set the subscription mode: optional (trainees could subscribe or not); forced (all trainees are subscribed and cannot stop the subscription); auto (all trainees are subscribed, but can unsubscribe); disabled (the subscriptions are not allowed).

If necessary, some participants could be blocked temporarily to publish more than a certain number of discussion topics for some period of time, with the purpose to prevent certain users to dominate the discussions.

Forum postings can also be rated using a preliminarily defined scale by certain roles (for example students and teachers). In this case all ratings are stored in the students’ personal gradebooks.

1. 11. 1991



Forum name*

Have a look on this course

Description

A ▼

B

I

Have a look on the course where you are working now and give your answer to the question: What are the activities that you can see in the course? Please, try to define which of them are focused on:

- learning
- collaboration
- evaluation

You will also find the answer of the other participants in the course.

Display description on course page

?

Forum type

A single simple discussion

A single simple discussion

Each person posts one discussion

Q and A forum

Standard forum displayed in a blog-like format

Standard forum for general use


Attachments and word

0 0 0

Have a look on this course

Return to: Moodle - an e-...

Display replies in nested form



Have a look on this course
by **Nikolay Nikolov** - Tuesday, 29 November 2016, 11:16 AM

Have a look on the course where you are working now and give your answer to the question: What are the activities that you can see in the course? Please, try to define which of them are focused on:

- learning
- collaboration
- evaluation

You will also find the answer of the other participants in the course.

Permalink | Edit | Reply

The major parameters for this activity(although some of them have already been discussed) are as follows :

- **Name** – the name with which the activity will be listed in the course.
- **Description** – contains the purpose and the intended forum content.
- **Forum type** – the available forum types have already been discussed above.
- **Maximum attachment size** – this size in bytes cannot exceed the maximum file size limit for the course.
- **Maximum number of attachments** – is created to be used by the course participants. A new reply could be added using the corresponding button, as shown in the following figure:

You will also find the answer of the other participants in the course.

Permalink | Edit | Reply

▼ Your reply

Subject* Re: Have a look on this course

Message*

A ▼

B

I

In my opinion.....|

4.6. Glossary

What Is a Glossary?

The glossary activity module allows participants to create and maintain a list of definitions, similar to a dictionary, thus collecting, organizing and structuring information. The “*Glossary*” activity allows the participants in a course to create, update and maintain a list of definitions for terms in the course subject area. These terms can be browsed in different aspects – by the first letter, all together, in print format, by date of editing, by author and browsing by a certain term can also be carried out. Besides, terms can be grouped in categories to make browsing easier.

In this respect the glossary can also be used as a resource, i.e. students can be allowed only to browse through terms without modifying them. Apart from that, a glossary can be used as a medium for collaborative work, where links between terms are created.

Moodle distinguishes between two types of glossaries:

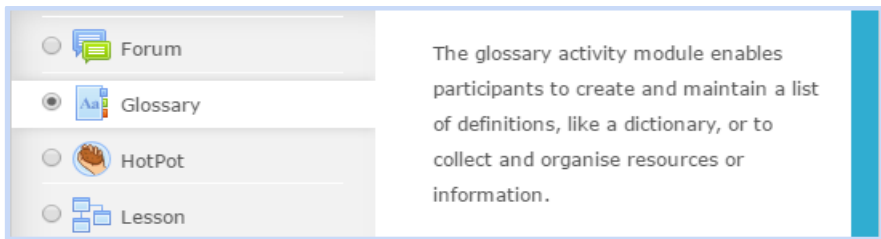
- **global** - available for the whole system.
- **local** - accessible only within a certain course.

The teacher can include the option to attach different files to the glossary entries, including images. Glossary definitions can be searched or browsed by alphabet, by category, by date or by author. They can be approved by default or they may need approval by the teacher, before they are displayed to all course participants.

The information submitted to the glossary can be assessed by a teacher or a student (peer assessment). Ratings can be aggregated in order to form the final grade, which is saved into the Gradebook.

Adding a Glossary

You can add a “*Glossary*” using the method already discussed.



The screen for adding detailed information for a “Glossary” activity is shown below:

The form is titled "Name*" and contains the text "Favourite ICT tools in teaching". Below this is a "Description" section with a rich text editor containing the text: "Add your favourite ICT tools used in your classes. One tool per participant please!". At the bottom of the form, there are checkboxes for "Display description on course page" and "Is this glossary global?", both of which are unchecked. Below these is a "Glossary type" dropdown menu set to "Secondary glossary".

The screen for adding a new definition to the glossary of terms is illustrated in the figure below:

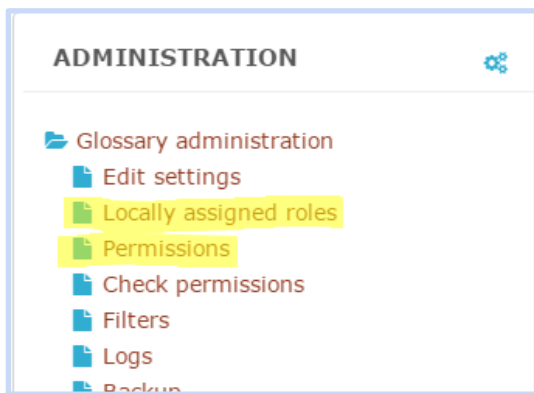
The page title is "Favourite ICT tools in teaching". It includes a "Return to: General" link and a "Printer-friendly version" link. The main text reads: "Add your favourite ICT tools used in your classes. One tool per participant please!". Below this is a search bar with a "Search" button and a checkbox for "Search full text". A red circle highlights the "Add a new entry" button. At the bottom, there is a link to "Browse the glossary using this index" and a list of letters: "Special | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | ALL".

The “*Name*” and “*Description*” fields are similar to those in the other resources and activities. The field “*Entries shown per page*” sets the number of entries to be displayed on one page by default. Then you have to determine the glossary type (main glossary or secondary glossary), whether to allow duplicate entries and comments on entries, print view, the display format of the glossary, whether the teacher has to approve the entries expressly or they are approved by default and other glossary settings (special links, alphabet links, all links, etc.). There are more settings for the grading (in case the entries are rated), the roles with permissions to rate, the time interval for rating, etc.

We shall pay particular attention to the option “*Automatically link glossary entries*”. This option means that if you come across a glossary term in a resource, a forum post, the glossary itself or somewhere else in the course, this term will be marked as a hyperlink. When a student selects this hyperlink, they can read its definition from the glossary in a separate browser window.

Sometimes this option could be undesirable, for example in tests or lessons, in which the teacher wishes to assess the students’ knowledge, that is why it has to be disabled .This can be performed by marking the term in editing mode and selecting the option (“*Prevent automatic linking*”) from the HTML editor.

Assigning permissions for access to the glossary.



Once the glossary has been created, only the teachers and course administrators have permissions for access to it. If necessary, permissions can be assigned to students to add or edit. This can be done in two ways:

- by selecting the option “*Locally assigned roles*” in the browsing mode of the

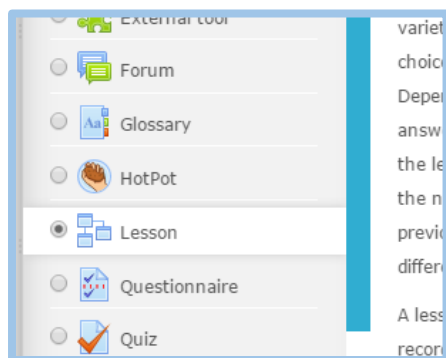
glossary, permissions are assigned to certain students;

-by selecting the option “*Permissions*” in the same mode, you can assign permissions for certain functions of the glossary for roles chosen by the user, for instance all students from the course.

4.7. Lesson

4.7.1. What Is a Moodle Lesson?

A Moodle lesson is a series of pages, which the student has to read through and usually at the end of each page the student is asked to make a choice or answer a question, as a result of which the system chooses the next page to be shown. The present guidebook will use the term “lesson” since the option



in the Moodle platform is called “*Lesson*”, despite the fact that the term is not used in the system of higher education, where it has been replaced by the words “lecture”, “seminar”, etc.³

A Moodle lesson, in substance, can be used to present lectures to students, thereby the learning material is broken into separate parts, which are not necessarily linearly connected. This module is designed to be adaptive in order to suit the knowledge and learning needs of the students, thus allowing them to set the speed at which they advance and learn. It enables the teacher to present the learning material in a flexible way, which requires no activity on their behalf after the lesson is created.

Adding a “*Lesson*” activity

Lessons in Moodle contain two basic types of pages:

- question pages.
- branch table pages.

There are also some more complex types of pages, which can be used to create a more complex logical structure of the lesson.

³ This terminology is used in Bulgarian universities.

The figure shows how to add a “*Lesson*”:

Different parameters can be set to the *Lesson*, which aim to retain the learner’s attention to the highest degree: password protection, maximum number of reviews and attempts, a maximum time limit for reviews, the lesson can be dependent on previous activities, etc.

The basic settings of the *Lesson* include:

- ***name*** – lesson name.
- ***time limit*** - a time limit can be set to review and take the lesson.
- ***available from/deadline*** - sets a start and end date before/after which the lesson is not available.
- ***maximum number of answers*** - one or more true answer boxes can be set for each question, the maximum number is set by this option.
- ***grade*** - a numerical value which sets the points (percent) for the result achieved by the student.
- ***grade settings*** - they allow additional settings to the lesson, for example the number of retakes allowed and how they should be graded, how to handle retakes - whether points should be accumulated or not, whether the learner can be allowed to see the achieved score, etc.
- ***flow control*** - settings which define whether the student can review the whole lesson before answering the questions, whether they can try to answer the question again and how many attempts are allowed, whether the progress bar can be displayed (e.g. page 5 from 10 pages), whether the student is allowed to see a page list, etc.
- ***dependent on*** - the lesson can be made available for the students only if they have completed successfully another lesson in the course.

4.7.2. Question Pages

An Overview and Specific Features

In order to create and edit the question pages the teacher uses the standard Moodle HTML editor, making full use of the different fonts, colours, pictures and links to present the learning material. All the pages from a given lesson can be reviewed and/or edited by the teacher using the “*Edit*” link.

Two different modes - *collapsed* and *expanded* - are provided to review and edit the content, which can be shifted alternatively via the corresponding links. The collapsed mode displays only the page title, its appearance and jumping to other pages, if there are any, whereas the expanded mode displays the full text in the pages. These pages can be edited, rearranged or deleted at any time using the corresponding buttons, which are the same as those used in editing resources or activities.

Once the lesson pages are created, the teacher can review them in the order and sequence in which they are viewed by the students, using the “*Review*” link.

The default settings of the question pages provide multiple choice questions. Using this option the teacher can include a question on the learning material presented and a number of possible answers. In the simpler version of these pages, the teacher sets an option that allows the student to advance further in the lesson, i.e. they can jump to the next page if a correct answer is given. If the student selects a wrong answer, they remain on the same page. In addition, if a wrong answer is selected, the teacher can refer the student to a page with additional explanations on the learning material, afterwards the student is given the chance to choose a new answer and continue with the lesson. Unlike paper tests, in this case the system automatically shuffles the answers to the questions every time the page is loaded by the student. Besides, the teacher can also set the several correct answers to the question.

Main Fields and Questions

We recommend that you choose the question type first: from the links grouped in the list “*question type*”. If it is a “*multichoice*” question, you can choose the option “*multiple-answer*” if necessary.

- **Page Title** – it contains the title of the page.
- **Page contents** – it contains text; you could also include pictures, a video, links to other pages, etc. The question for the student is also included in the page contents (in case there is such a question).
- **Answer 1, etc.** – these fields contain the answers to the question. Their number will depend on both the question type (for example 2 in a True/False question) as well as on the corresponding settings for the lesson, giving the maximum number of answers for one question.

The fields “*Response*”, etc. below the answers to the questions contain a possible response of the system for the students if they choose the correct answer, for example: “Well done! Your answer is correct”, “Sorry, wrong answer!”, etc. These fields are not required and they can be left blank;

- **Jump** – in these fields you choose to which page the system should navigate the student if he selects the correct answer;
- **Score** –these fields set the grade that the student will receive for the selected answer (positive numerical value, negative numerical value or 0). That value must not exceed the maximum value defined in the general settings of the lesson.

The following question types can be included in a question page:

1. Multichoice – the student is given a question and the default settings allow them to select only one answer. In the “*lesson*” activity the system automatically shuffles the possible answers every time the page is viewed by the student. The questions can contain images, links, etc., since the HTML editor is used to create them. The answers can also contain multimedia elements and/or links if the setting “*HTML format*” is chosen for the corresponding answer and the page is reloaded by saving and shown again. Every answer can be graded separately using the “*Score*” field and the grade can be positive as well as negative numerical value (points are deducted if an incorrect answer is given).

Using this type of questions more than one possible correct answer can be given if you tick the checkbox “*Multiple-answer*” at the top of the page. In this case, the student has to choose all the correct answers in order to continue further with the lesson. For that purpose, all the correct answers should have equal scores (e.g.1) and should jump to the same next page. Likewise, all the incorrect answers should grade the student equally and should jump to the same page, for example the page which contains the question. In case the student does not choose all the correct answers or chooses an incorrect answer among the correct ones, the overall response is considered as incorrect.

2. True/false – this question type is a variant of the previous type – you have to choose between two possible answers: “*True*” or “*False*”.

3. Short answer – the student has to enter a single word or a short phrase answer. The system analyses a student’s answer using two different methods:

- *the simple system* – used by default; the system finds a correct match between the answer entered by the student and the correct answer introduced by the teacher
- *regular expressions analysis* – this method uses **regular expressions** for analyzing responses. Using it, the teacher introduces some parameters which the answer (entered by the student) has to match in order to be considered as correct.

4. Numerical – this question type requires a number as an answer. The most simple version requires just a number, but a number within a range can also be accepted as correct.

5. Matching (matching questions) – this question type sets two drop-down lists of elements and the student has to look for a match between the elements. The correct answer in this case also requires a match of all answers and they should all jump to the same next page. All the other possible answers are considered by the system as wrong answers and in this case the student jumps to the same page.

6. Essay – in this case the student is required to write a short essay as an answer to a given question. The essays are graded manually by the teacher, afterwards the students can read their evaluations.

4.7.3. Content Pages

If the lesson contains a lot of material or if we do not want linear structure, we can use the *Content page*. In it we arrange a number of buttons, representing links, which jump to different pages from the lesson or other resources in the course. These buttons can be arranged horizontally or vertically, which is set by ticking the checkbox option “Arrange content buttons horizontally?”

The buttons are arranged immediately after the page contents box, which usually contains an introduction to the learning material in the pages that follow. In this respect, the branch tables are similar to the page containing a “*multiple choice question*” since both types include a title, contents, a choice option for the student, jumps to other pages. Unlike the “*Short answer*” page where the system analyses the student’s response by default, the main difference here is the lack of grade for the student.

These tables are added to the lesson by choosing from the list “*Add a new page*” – “*Add a content page*”. The next pages from the branch appear as buttons to the student at the end of the page. The end is marked by choosing “*Add an end of branch*”.

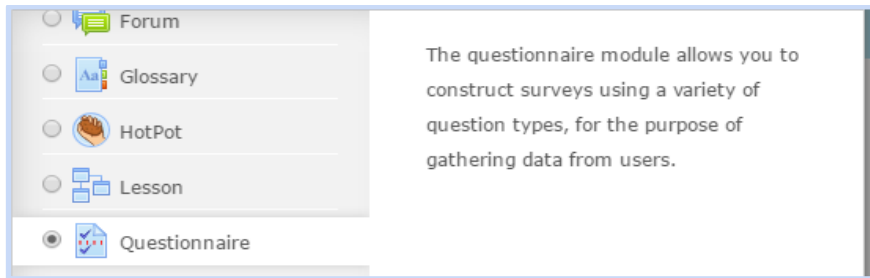
4.8. Questionnaire

4.8.1. What Is a Questionnaire?

This module is not included in the basic configuration of Moodle, it has been created additionally, since it allows teachers to obtain useful feedback from users. This type of questions require neither correct nor wrong answers, the aim is to obtain results containing the users’ opinions regarding learning. Nevertheless, students can be graded, i.e. the questionnaire can also be used as an ordinary test for evaluating knowledge.

Adding a Questionnaire

The figure below shows how to add a “*Questionnaire*”:



The screen below shows how to enter detailed information for the “*Questionnaire*” activity:

▼ General

Name*

Description

▼ Timing

Use Open Date ☐ 29 December 2016 09 45

Use Close Date ☐ 29 December 2016 09 45

▼ Response options

Type

Respondent Type

Students can view ALL responses

The major parameters for the questionnaire are listed as follows:

- **Name**
- **Description** (summary) - contains general information about the questionnaire
- **Timing** – sets whether the questionnaire will be accessible within a given time period or all the time

- **Response options** – define additional settings: how many times every user will be allowed to respond, whether the responses will be anonymous or the full names will be displayed, whether students can view all responses, whether the users can save their answers and leave the questionnaire, then resume from the save point on, etc.

4.8.2. Questions

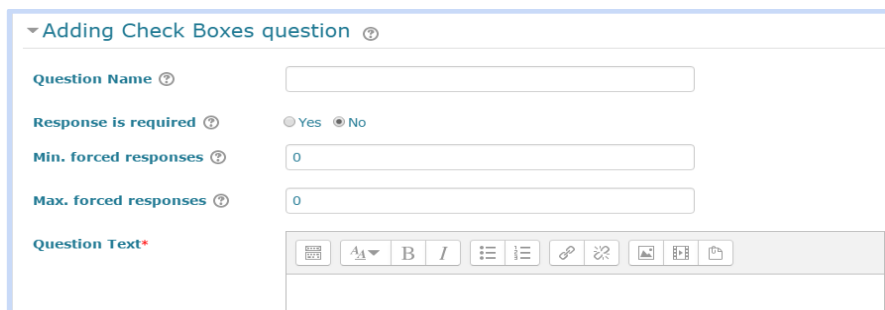
Questions can be added to the questionnaire and edited using the “Questions” tab when you click on the questionnaire. You can specify whether all these questions must be answered by the students by choosing “Response required”.

Types of Questions:

A. Check Boxes

Using this type of question you can add several stand-alone options, among which the student can choose 0, 1 or more responses, depending on the settings.

The settings menu/screen looks as follows:



The screenshot shows a settings interface for adding a check box question. It includes fields for 'Question Name', 'Response is required' (with radio buttons for Yes and No), 'Min. forced responses', and 'Max. forced responses'. At the bottom, there is a 'Question Text' field with a rich text editor toolbar containing icons for text formatting and insertion.

Basic settings:

- **Question name**
- **Response required** - defines whether a response from the student will be required
- **Min / Max forced responses** - the minimum/maximum number of responses that will be required from the student

- **Question Text**
- **Possible answers** - the possible options are given one per line

B. Rate (scale 1..5)

This type of question requires from the students to choose 1 among several possible ranks for a certain question, i.e. to rate importance, whether they agree or disagree with a statement, etc.

The number of items to be used in the rate scale is defined by using the “*Nb of scale items*” setting.

C. Date

This question type requires a response which is a correctly formatted date in accordance with the system.

D. Dropdown Box

These questions are similar to **Check Boxes** but students can choose only one option from the dropdown list.

E. Essay Box

This question type requires a response to be written by the student in a plain text box with plenty of lines. The number of columns and rows can be defined using the “*Text area columns*” and “*Text area rows*” settings, respectively. This question type is not common in questionnaires and can be used for writing additional comments, recommendations, etc.

F. Label

This is text (containing pictures, links, etc.) which is added to a questionnaire for possible additional explanations, to describe or illustrate sections in questions, etc.

G. Numeric

This question type requires a response which is a correctly formatted number. A minimum and/or maximum number of digits can be set for this question type.

H. Radio Buttons

This question type is similar to **Check Boxes** but students can select only one option from the choices provided in the list. The buttons can be aligned horizontally or vertically.

I. Text box

This question type is similar to the **Essay Box** questions but the text box here contains a single line and you can define the maximum length of the response to be entered by the student (Max. text length).

J. Yes/No

This question type requires a simple 'yes' or 'no' answer.

4.8.3. View of Responses

After the questionnaire is created, students can complete it on a screen similar to the following:

Survey [Print Blank](#)

Questions about the workshop's organisation.

1 * Did the duration of the workshop seem to you:

☐ too short ☐ too long ☐ sufficient

2 * Did the alternation between theoretical / practical sessions seem to be balanced?

☐ Yes ☐ No

3 If not why ?

In case at least one response to the questionnaire is submitted, responses can be viewed as per different categories – for each/all students, a graphical display or the accumulated number of responses based on the type of questions included.

4.9. Quiz

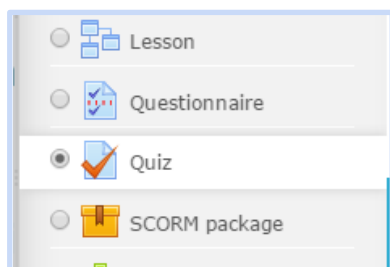
What Is a Quiz?

This activity allows the teacher to design quizzes for teaching or exam purposes, comprising questions of various types including multiple choice, matching, short-answer and numerical. The teacher can allow a quiz to be attempted only once or multiple times and the questions selected from the question bank are shuffled randomly. A time limit for completing the quiz can

also be set. Each attempt is graded individually and is recorded in the Gradebook.

Quizzes may be used:

- for self assessment
- to provide immediate feedback about performance
- as mini-tests at the end of a topic
- as practice tests
- as final exams



4.9.1. How to Add a Quiz

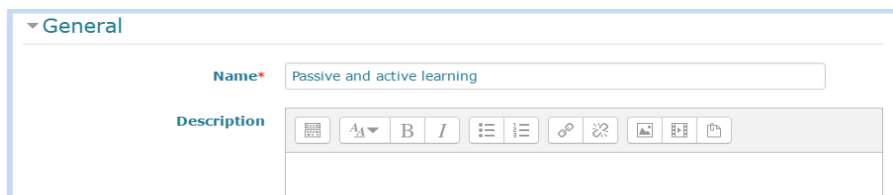
Building a Moodle quiz is one of the most widely used activities in e-courses. It comprises three main steps:

1. Creating a “blank” quiz with defined parameters.
2. Creating a question bank with questions to be included in the quiz.
3. Selection of questions and their arrangement in the quiz.

By building a “blank” quiz the teacher defines the main parameters of the quiz and this is closely related to the goal the teacher sets. In order to create the proper parameters, it is essential to answer the question “Why am I building this quiz?”. The parameters of the quiz depend on the answer to this question: whether it is a test created for evaluating students or a quiz intended to make students read thoroughly and understand the information presented.

The “*Question Bank*” is the basic and most important part of a quiz. Organising questions into categories as well as the properly arranged, well-thought-out questions will make an effective quiz. The selection of questions to be added to the quiz is made from the database already created; questions from the same database can be used many times in different quizzes, which puts more emphasis on the database and its arrangement.

The settings menu looks as follows:



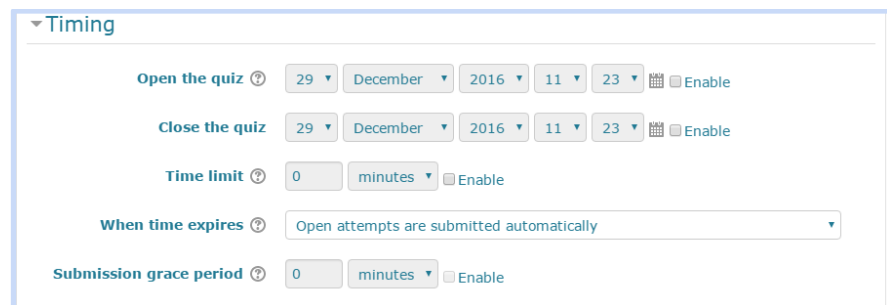
The screenshot shows the 'General' settings tab for a quiz. It features a 'Name' field with the text 'Passive and active learning' and a 'Description' field with a rich text editor toolbar containing icons for text formatting (bold, italic, underline, list, link, unlink, image, video, document) and a table icon.

General settings

The name of the quiz is given in the “*Name*” field (for instance “Quiz 1”, “Final Test”, etc.). The “*Description*” field contains instructions for the students who will complete the quiz. For example: “Dear students, this is the Final Test on History of Byzantine Art. The quiz comprises 60 questions, the time limit is restricted to 180 minutes, the maximum score is 60 points. Incorrect answers do not deduct points.”

Basically these are the settings for the quiz; after completing them you can scroll down to the bottom of the page and select the tab “*Save and display*”.

Timing



The screenshot shows the 'Timing' settings tab for a quiz. It includes several configuration options, each with a dropdown menu for date and time, and an 'Enable' checkbox. The settings are: 'Open the quiz' (29, December, 2016, 11, 23), 'Close the quiz' (29, December, 2016, 11, 23), 'Time limit' (0, minutes), 'When time expires' (Open attempts are submitted automatically), and 'Submission grace period' (0, minutes).

These settings define the time allowed for quiz completion. This option is inactive by default. In order to activate it, first you have to tick the check boxes “*Enable*”, then from the dropdown list you have to choose the date, year, hour and minutes to open and close the quiz.

If a time limit for the test is required you tick the “*Time limit*” checkbox and next, in the “time” box, you have to write the desired time instead of “0” (for instance 180).

Grade

Grade category ? Uncategorised ▾

Grade to pass ?

Attempts allowed Unlimited ▾

Grading method ? Highest grade ▾

Grade

This option sets the grade category and method for evaluation of the quiz and the number of attempts the student is allowed to have at the quiz.

Layout

The “*Layout*” settings determine how students view and navigate through the quiz, the order of questions, the number of questions per page to be viewed by the student and whether students are allowed to browse through the quiz without completing it.

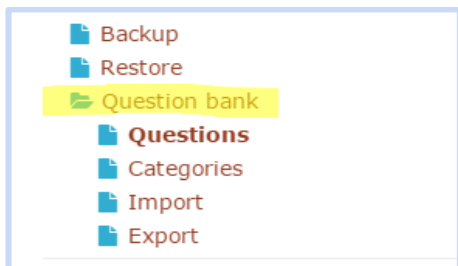
Question behaviour

With this option you can set whether the questions will be shuffled randomly or not. If you select “Yes”, two students, working on two separate computers, will view different variations of the quiz (i.e. different sequence of questions and different order of the responses within questions). This decreases significantly the attempts for copying. Nevertheless, this option is inappropriate if the questions are ordered by meaning, difficulty or any other principle.

Moreover, you can set whether the student can see the result immediately after the attempt to answer each question or not, whether each attempt builds on the previous one, etc.

The performance percentage and the corresponding grade can be evaluated using the settings for the whole behaviour. You can leave these fields blank, as they are by default.

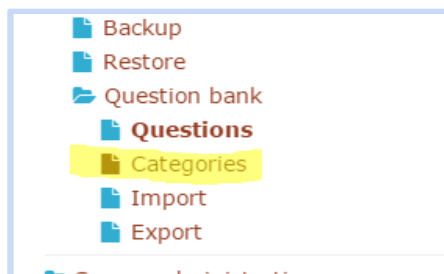
In order to complete the settings you have to click either “*Save and return to course*” or “*Save and Display*”. Either tab will save the configured settings, will generate the basic characteristics of the quiz and will open the course page or the generated text.



4.9.2. Creating a Question Bank

To start creating a question bank, first you have to click on the title of the quiz, where the questions will be added and then, from the “Administration block” select “Question bank”.

In the interest of clarity it is desirable to create a “category” first, where to add the questions. It is strongly recommended that you create more than one “category”, if necessary. The creation of categories is essential when a number of courses with plenty of quizzes are designed on one platform.

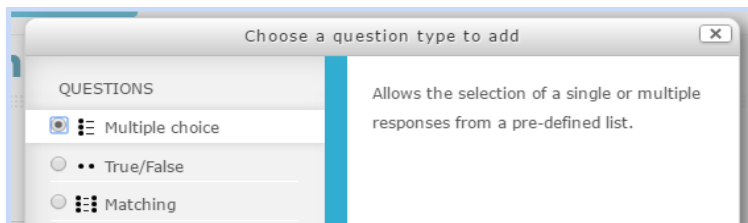


If you choose the “Select a category” link, the existing categories will appear and below you can see the box “Add a category”. In the first row you choose where the new category will be located, for example in “Default for Burgas 2017”, and in the next row you write the name – we recommend that the name is related

to the online course. The “Category info” field is optional and in order to create a category you have to click on the tab below - “Add category”.

A screenshot of a web form titled 'Question categories for System'. Below the title is a bullet point: 'Default for System (0) The default category for questions shared in context 'System''. There is a tab labeled 'Add category'. The form has three main sections: 'Parent category' with a dropdown menu showing 'Default for Burgas 2017 (2)'; 'Name' with a text input field; and 'Category info' with a rich text editor containing icons for bold, italic, list, link, unlink, and image. The 'Category info' section is currently empty.

To start creating the question bank you have to select the relevant category, where the questions will be created. If questions are created in a ‘wrong’ category or if you need to reshuffle them into new categories, it is possible to move them afterwards.



Use the “*Create a new question*” tab in order to choose the type of question, for example “*Multiple choice*”, which creates a question with multiple responses from a pre-defined list.

In the new window that appears you can see that the category, to which the question will be added, is selected. It can be changed if necessary.

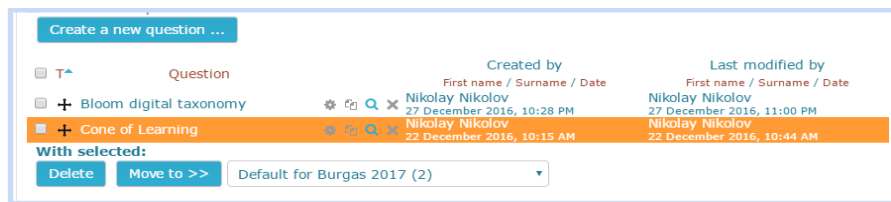
This “*name*” serves the teacher only for the arrangement of the quiz, the student will not see it when completing the quiz.

In the large field “*Question text*” you write the question that you would like to add to the quiz. You can leave the default settings as they are. Then you scroll down to “*Choice 1*” – in this field you have to write the first choice. If this is not the correct answer, you leave “*None*” in the “*Grade*” tab and if the answer is correct, you have to choose 100%. In case there are more than one correct answers, the total grade should be 100%. Another possibility is to deduce percentage for incorrect answers by setting a certain value.

The next step is the feedback, which will appear after an incorrect or correct response. This feedback is essential, especially if it is a practice knowledge quiz, not an examination. The feedback can contain references to additional explanations and clarifications.

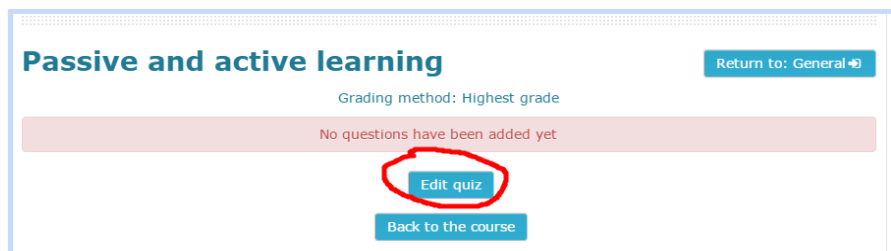
You have to select “*Save changes*” to complete a question.

Similarly, you can create other questions – of the same type or different/calculated multichoice, true/false, short answer, numerical, essay, etc./.

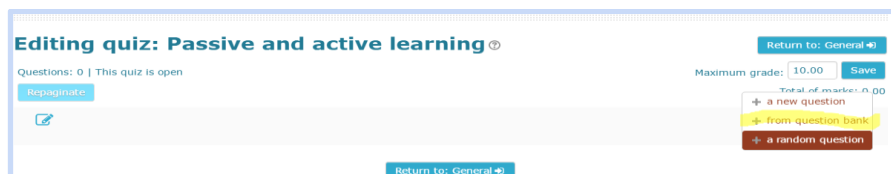


4.9.3. Building a Moodle Quiz from a Question Bank

Click to open the blank test that you have created, on the screenshot the example is with the test “Passive and active learning” and then “*Edit quiz*” button.



You can add questions from the question bank, a random question or create a new one. In the example below, the questions will be added from the question bank.



By selecting the questions and clicking on the button to add them, we are ready with the test.

Add from the question bank at the

Select a category:

Default for Burgas 2017 (2) ▼

The default category for questions shared in context 'Burgas 2017'.

Search options ▼

☒ Also show questions from subcategories

☐ Also show old questions

☐ T ▲

Question

Bloom digital taxonomy Put the tool on the right place. /from the teacher's point of vu/

Cone of Learning Complete the cone of learning - source Edgare Dale

Add selected questions to the quiz

The new screen looks as follows:

Editing quiz: Passive and active learning ⓘ

Questions: 2 | This quiz is open

Repaginate

Maximum grade: 10.00 Save

Total of marks: 12.00

Shuffle ⓘ

Page 1

1 Bloom digital taxonomy Put the tool on the right place. /from the teacher's point of vu/ 6.00 Add -

Page 2

2 Cone of Learning Complete the cone of learning - source Edgare Dale 6.00 Add -

The order of the questions can be changed (using the arrows next to each question), questions can be removed from the quiz (but not from the quiz bank). In the “*Maximum grade*” tab you have to select the maximum score, that a student can achieve in an attempt (for the 10.00 system with grades from 0 to 10.00).

4.10. Wiki

What Is a Wiki?

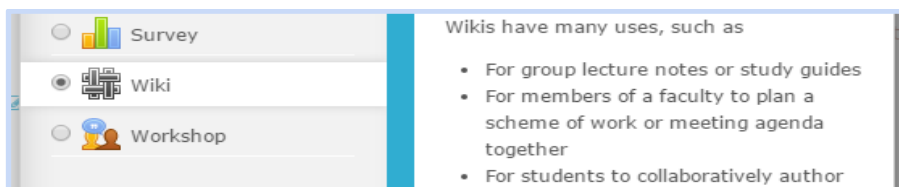
The term “*Wiki*” represents a collection of linked webpages, which are created collaboratively by a group of authors, in most cases, on a voluntary basis. The term “*Wiki*” gets its name from the Hawaiian word “*wiki-wiki*” meaning “very fast”. A “*Wiki*” allows fast and easy adding, editing and

maintenance of a collection of pages on a certain topic by a group of authors without needing to know HTML. It can be used easily as an instrument to create a list of links, as well as to create whole encyclopedias. Wikipedia⁴ is the most widely known such database, created using MediaWiki software⁵.

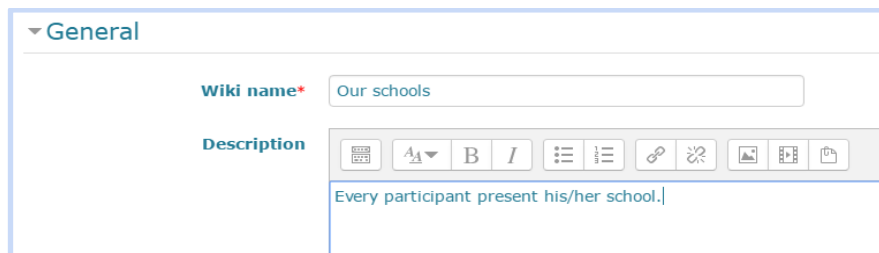
The “Wiki” activity in Moodle is a collection of interlinked Web documents, which can be read, added and edited by each participant in the online course, in accordance with the rights of permission. Every “Wiki” has its homepage, where you can start browsing through. Authors can upload their own pages by adding a link to a page that does not exist yet. A “Wiki” can be used to collaboratively author an article on a certain topic, to run the management of group work under a project, as virtual space for sharing ideas (brainstorming), etc.

Adding a Wiki Activity

The figure below shows how to add a “Wiki” activity:



The screen for adding detailed information about a “Wiki” is shown below:

A screenshot of the Moodle Wiki activity configuration screen. The 'General' tab is selected. The 'Wiki name*' field contains the text 'Our schools'. The 'Description' field contains the text 'Every participant present his/her school.' and is equipped with a rich text editor toolbar showing icons for text formatting (bold, italic, underline, link, unlink, list, table, image, etc.).

⁴ <http://www.wikipedia.org/>

⁵ <http://www.mediawiki.org/>

The screenshot shows a configuration window for a Wiki. At the top, there is a 'Wiki mode' dropdown menu currently set to 'Collaborative wiki'. Below this is a text input field for 'First page name' which contains the text 'Our schools'. Further down, there is a section titled 'Format' with a 'Default format' dropdown menu set to 'HTML'. A link labeled 'Format' with a downward arrow is also visible.

The required fields “*Wiki name*” and “*Description*” are similar to the fields in other activities. In addition, the name of the first “*Wiki*” page is also required.

Once the general settings of a “*Wiki*” have been determined and the “*Wiki*” itself has been created on the platform, you can proceed with creating the separate pages for it. The system provides the user with a screen, where they can start writing the title page of the new “*Wiki*” by using the HTML editor available. To create the front page you have to mark the key words and phrases, for which separate pages will be created afterwards. This is done by enclosing these words and phrases in the text in double square brackets, for example `[[]]`:

Generally, `[[distance learning]]` can be described as a type of `[[learning]]`, where the learners are at a location different from the teacher’s location and they communicate via a `[[computer]]` or other means of communication.

The settings for the text above are such that separate pages will be created for the key words and phrases “distance learning”, “learning”, and “computer”. When the front page is saved, these words and phrases are marked with a different colour and they appear as hyperlinks. If a user selects such a link, they can start writing a page, that describes the relevant key word or phrase.

Students always start viewing a “*Wiki*” from the front page. There are a number of additional options for the teacher. One of the main problems with editing and maintaining a “*Wiki*” is to track down and edit all the links between pages. The front page can be seen in the “*View*” mode and can be edited using the “*Edit*” mode. The “*Links*” tab is very useful - it allows users to track down the pages linked to the viewed page. The “*History*” tab allows users to see all the versions of a page with the author, date and hour of modification, as well as to compare the different versions (the “*Diff*” tab).

The other pages can be viewed and edited using the options in the dropdown menu “*Links*”. These options give users access to different areas of information on a wiki – a site map, a list of pages, the most recent pages, the most visited pages, updated pages, etc. The option “*Search wikis*” allows users to search for certain words and phrases in the *Wiki* pages.

The dropdown “*Administration*” menu allows teachers to remove pages, cancel corrections and delete old page versions.

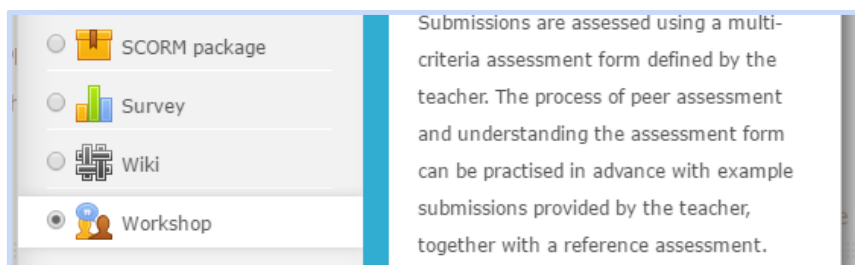
4.11. Workshop

What Is a Workshop ?

This activity assigns course participants the roles of both students and teachers. The teacher sets an assignment, students submit their work and afterwards the submissions are assessed by the teacher and the students themselves. Using the “*Workshop*” settings you can define the students’ access to the assignments of their peers. With this activity students can obtain two grades – for their own assignment, as well as for the assessment of their peers’ submissions.

Adding a Workshop Activity

The figure below shows how to add a “*Workshop*” activity:



The screen for adding detailed information about a “*Workshop*” is shown below:

Adding a new Workshop to Topic 7 ⓘ

▾ General ▸ Expand all

Workshop name*

Description

▸ Grading settings

▸ Submission settings

▸ Assessment settings

▸ Feedback

The required fields “*Workshop name*” and “*Description*” are similar to those in other activities. The introductory “*Description*” field contains a description of the assignment that the course participants have to complete. The options from the “*Grading settings*” determine how grades are formed. Using the “*Instructions for submission*” in the “*Submission settings*” the teacher determines the additional instructions for the submission of the assignment, the number of submission attachments, the maximum submission attachment size, etc. The “*Instructions for assessment*” enable us to determine additional instructions and criteria for assessment of the students’ submissions by their peers, whether students can assess their own work, etc. The other settings of the “*Workshop*” define the feedback mode, whether to provide an example submission or not, when the course is open for submissions and/or the submissions deadline, when the assignment is open for assessment and/or the deadline for assessment, etc. After the settings of the workshop are saved, a screen is displayed, similar to the one below, in accordance with the determined settings and instructions:

My first workshop ?

Return to: Topic 7 ↩

Setup phase

Setup phase	Submission phase ?	Assessment phase ?	Grading evaluation phase ?	Closed ?
<div><div>✓ Set the workshop description</div><div>✗ Provide instructions for submission</div><div>✓ Edit assessment form</div></div>	<div><div>✓ Provide instructions for assessment</div><div>✓ Submit your work</div><div>✓ Allocate submissions</div><div>expected: 3</div><div>submitted: 0</div><div>to allocate: 0</div></div>		<div><div>✓ Calculate submission grades</div><div>expected: 3</div><div>calculated: 0</div><div>✓ Calculate assessment grades</div><div>expected: 3</div><div>calculated: 0</div><div>✓ Provide a conclusion of the activity</div></div>	

Description ▼
My first workshop

The available options enable us to review and assess the submitted assignments, to grade the peers’ assessments, to form the final total grades and conclude the “*Workshop*”.

Chapter 5. Moodle 3 Course Administration

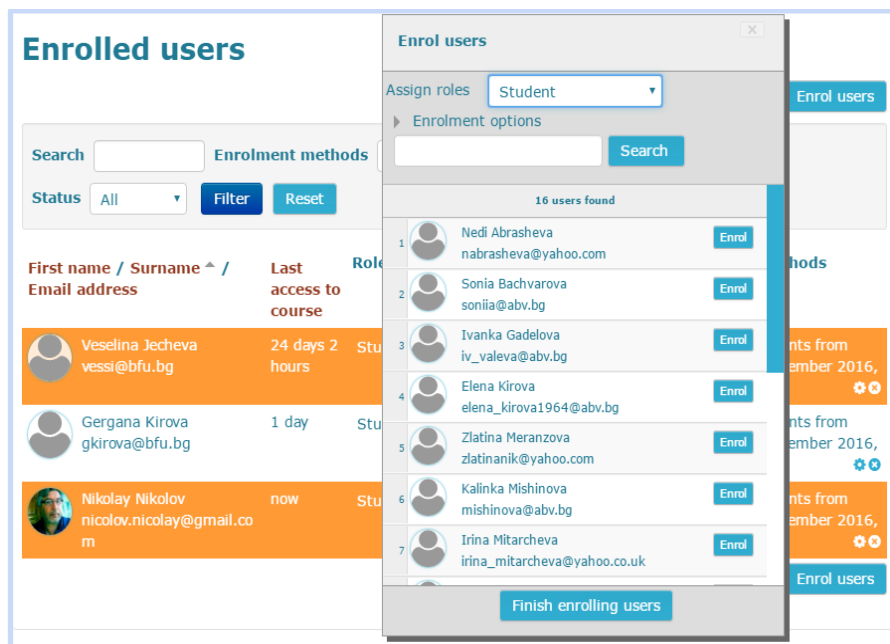
5.1. Moodle Basic Administration

Most of the links to the course “*Administration block*” are accessible only to teachers and course administrators. Students can only have access to the “*Grades*” link, through which they can review the grades they have received in this course, presuming that the “*Show grades*” settings are turned on. The rest of the settings are accessible only to teachers and course administrators and they refer to the general course settings, the way students are enrolled and the groups of students, how to archive and restore some or all parts of the course.

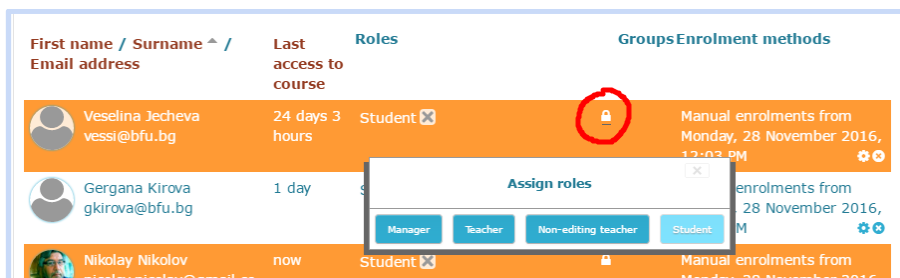
Resource or activity/Activity chooser on/off – it changes alternatively the mode of adding an activity or a resource to the course. With the first option the activities and resources can be selected from the same window, which opens when you select the option “*Add an activity or resource*” in the “*Turn editing on*” mode. With the second option the resources and activities are selected from separate dropdown lists.

Settings – it contains the general course settings: course name, summary, format, number of topics/weeks, course start and end dates, layout, enrolment method, groups, enrolment key, language settings, etc.

Users – this option enables you to assign the roles of administrators and teachers to certain users, as well as to enrol students in the course. This can be done by clicking the option “*Enrolled users*”. A window opens, where you can select the desired role and then you select users from the list of all participants. In order to facilitate the selection, you can use a filter based on the first name and surname, then you click the “*Search*” button.

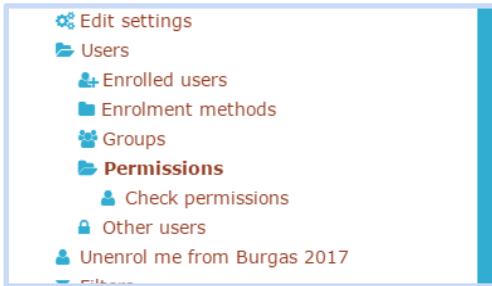


The selected users are added to the list of participants for the given course. Some or all users can be unenrolled by clicking the “x” icon on the right side of the row their name is in. You can assign additional roles by clicking the “lock” button next to the current role of the participant:



The option “*Enrolment methods*” from the menu enables you to edit the available methods of enrolment in the course and depends on the settings determined for the whole system. By default, the roles assigned in a course are the same as those for a course category or the whole course. If necessary, the course administrator can change the permissions given to

users by clicking the link “*Permissions*”. The option “*Inherit*” is the default setting for all permissions but it can be changed if you wish to allow or prohibit certain actions. For some of the options it is stated that this will lead to security risks, therefore these actions should be performed only by users who are fully aware of the possible consequences.



The option “*Groups*” from the menu enables the teacher to divide the students into groups, which can be the same as the administrative groups or the students can be allocated into groups for a certain project, etc. You can create a group by using the “*Create a group*” button and you can delete groups by using

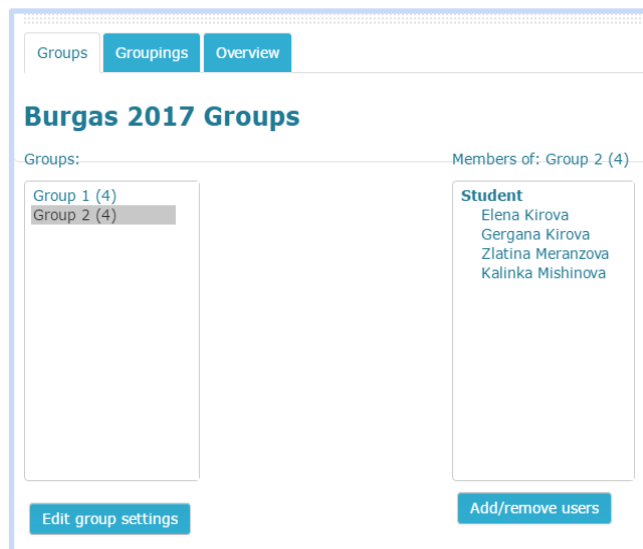
the “*Remove a group*” button. Additional settings can be determined for each group using the “*Edit group settings*” button – you can edit the name of the group, add a description, enter an enrolment key and/or an image referring to the group purposes.

The new version of Moodle allows teachers to make use of all the alternatives for organising learning into groups. The creators of distance learning courses are not limited by the fact that every participant in a group on a certain course can be a member of only one group.

The 2.0 and higher versions of Moodle give not only the possibility to create groups, but also to create groupings. This possibility makes the platform highly adaptive to different types of groupings within the same course. By adding this function Moodle proves and defends the philosophy guiding its creation, based on group collaborative learning.

Creating Groups and Groupings - An Example

You can create groups using the same method as in the older version of Moodle. A group is created and users, enrolled on the course, are added to it. Only participants already enrolled on the course can be added to the



groups. The course administrator, i.e. the teacher in most cases, can add or remove members form a group at any time before, during or after the process of training on certain modules or course activity.

Users can be added to or removed from a group by using the “Add/remove users” button. A list is displayed with all

the course participants along with their roles (guest, student, teacher, etc.) and next to the user’s name, the number of groups he participates in is displayed. When you select a name, a list appears next to it with the names of the groups that the user participates in. If the users’ list is too long, you can use the first name and surname filter. The selected users are added to the list with the “Add” button and removed from the list with the “Remove” button.

What is the purpose of groupings? It is quite natural to ask that question. The same course participant can be a member of different groups that the teacher has created for the purposes of training. What made it necessary to add the groupings function to the new version of the platform?

In the older version of Moodle if the administrator/teacher has created groups with every member participating in more than one group and selects the parameters “group work”, the user will “participate” at the same time in all the groups they have been enrolled and they will have to work simultaneously in all the groups with different colleagues, which would lead

to confusion. That is why in Moodle 1 one student participates in only one group throughout the whole course.

The groupings function is essential. In this way, an unlimited number of groupings can be created and every grouping is saved under a name given by the teacher: “team grouping”, “grouping in pairs”, etc., so every grouping can be used for a certain activity. This achieves the purpose of enrolling students in different groups, so every student can be enrolled in more than one group and they can participate in the particular activity with only one of the groups that they have been enrolled in.

Creating groupings is similar to creating groups with the exception that the participants in the grouping are groups of students, not individual students. First, you have to create a blank grouping, give it a name and save it. Then you have to add the groups which have been created beforehand.

Moodle E-motion - Workshop Burgas 2017

Groups Groupings Overview

Groupings

Grouping	Groups	Activities	Edit
Grouping 1	Group 1, Group 2	0	
Grouping 2	None	0	

Create grouping

The image above displays an example of a grouping with groups added to it and an example of a blank grouping. You have to click on the symbols on the right and select the symbol for groups in order to add the desired groups.

Moodle E-motion - Workshop Burgas 2017

Add/remove groups: Grouping 2

Existing members: 3

- Group 2
- Group 3
- Group 4

Potential members: 1

- Group 1

Add Remove

Three groups have already been added to the blank grouping (Grouping 2). When assigning an activity which includes group work, the teacher can choose (in this case “Grouping 2”), i.e. only the selected groups participate in the particular activity.

Filters – this option enables the teacher to activate some settings referring to multimedia plugins, emoticons, mathematical symbols, etc. and is connected to the settings defined for the whole system.

Grades – using this option, the teacher can monitor and/or edit the results of the students enrolled on the course for particular elements(assignments, quizzes, lessons, etc.), as well as to form indicators valid for the whole course: average results for a particular activity, a comparison of results using different indicators, etc. Grades can be exported to an external file and they can be additionally processed, if necessary. Different grading scales can also be added as well as various settings for the course grades can be edited.

Backup – this option enables the teacher to save the whole course or parts of it in order to store data, transfer learning materials to another system or to import the data into another course. After the teacher selects the “*Backup*” function, they can choose whether to save only activities and resources and/or users’ activity as well (completed quizzes, lessons, completed assignments, grades, files uploaded, etc.) for all or particular roles on the course. Then the teacher has to confirm or change the backup name (format mbz), which by default includes the course short name, the date and hour of backup in order to generate a unique name. Once the backup has been completed successfully, an appropriate announcement appears. The backup is stored in the so-called “*Course backup area*”. For data security reasons, we strongly recommend that you copy the backup on a different medium, for instance the teacher’s local disk or a CD.

Restore - this is an action reverse to backup and it consists of the extraction of the already stored data for a particular course. In order to perform this action, first you have to select a backup file created beforehand, which you have to upload to the course files. After the teacher chooses this option, they have to select the “*Restore*” link next to the name of the selected backup. The system requires from the teacher to choose whether the data will be

added to a new course or it will be extracted to the existing or another course, as well as whether the existing data will be deleted or replaced by the new data or only the new data will be uploaded to the course. At all stages the system displays in detail the data contents and the actions that have to be undertaken. Since this option leads to complete changes in the courses, we strongly recommend that it is performed by users who are fully aware of the consequences arising.

Import – this option is a short version of “*Backup*” and “*Restore*” and it allows you to copy certain resources and activities from one course to another within the same system. When the teacher selects this option, they can choose from a list of existing courses (from the current category or another category) and they can use the option to search for a course. Once a course is selected by using the option “*Use this course*”, the teacher can choose which particular resources, activities and/or groups have to be imported to the existing course.

Reset – This option allows to delete automatically some elements from the course: unenrol users and delete their results, grades, posts in forums and chats, participation in surveys, events from the calendar, set a new course start date, reset the course log files, etc. Similarly, all the groups can be deleted together with their participants, elements from glossaries, etc. can also be deleted. This option is useful, for example, at the end of a semester or upon completion of the course by a group of students and it is advisable to back up the course data before you apply the reset option.

Legacy course files – this option duplicates the option that allows you to upload, edit and delete quiz questions when adding a Moodle quiz.

5.2. Users in Moodle

Moodle provides different methods for user authentication, which are maintained by additional modules, thus enabling their integration in the established system installations. Users’ accounts in Moodle can be registered into the system using various ways, referred to as authentication plugins. The most important are as follows:

- **Manual accounts** - the administrator could create accounts manually

- **Email-based self-registration** - users can create their own profiles and email addresses are authenticated via a confirmation message by an admin
- Authentication, based on existing servers in organization:
 - **LDAP (Lightweight Directory Access Protocol)** for organizations, using Microsoft technologies
 - **CAS server (SSO)** - using external single-sign-on server
 - **FirstClass server** - using external FirstClass server
 - **RADIUS server** - using external authentication server
 - **IMAP, POP3, NNTP** - users' registrations are authenticated by a mail or news server
 - **Moodle Network authentication** - using user database from other Moodle sites in the case of connected institutions
 - **External database** – every database which contains at least two fields can be used as an external source for identification. For instance, the database of an application for human resources management, which operates with data for users, students and teachers database in schools, etc. can be used.

5.2.1. Types of Users and Their Permissions

The types of users in Moodle, i.e. the set of permissions that can be given to users in some context are called **roles**. The combination of role and context determines the permissions for a certain user in certain context, i.e. part of the system. The most common examples of roles are those of the teacher and student on a certain course. The following roles are set by default in every system:

- **Manager** - can be a site administrator or a manager (an administrator with limited permissions)
- **Course creator** - can create and edit courses
- **Teacher** - can create activities and resources
- **Non-editing teacher** - can grade students' work but may not create activities or resources;

- **Student**
- **Guest**

These roles can be modified - deleted, edited (both their names and their context) and new roles can also be added. For instance, the teacher's permissions can be extended (i.e. new functions can be added) or limited (he/she can be restricted from certain actions which are allowed by default). Extending the students' permissions is not advisable, since it will change the permissions for a large number of users and it will lead to increased security risk.

Generally, **the administrator** (manager) has full permissions for the system. They can create, edit and delete files, set or modify the permissions for other users, back up and/or restore activities and resources. The number of administrators is not limited by default, but in accordance with the principle of least privilege, the reasonable number of administrators should not be large. Besides, instead of the role of "site administrator", which gives full permissions for the whole system, the role of the "manager" can be used, which has more limited, but yet enough permissions. Consideration should be given to the essential characteristic that, apart from **global administrators**, who have full permissions for the whole system, there are also **local administrators**, who can administer parts of the system, for example a category or a sub-category of courses or a separate course. Therefore, it is fully admissible in Moodle for a certain user to be assigned the role of an administrator for parts of the system and limited permissions (the role of a student) for the rest of the system. By default (unless otherwise expressly set) every user has the role of a student for the whole system.

The teacher has permissions to create, edit and delete resources in a course or a group of courses. They can add, edit and delete activities (for example assignments for the students), as well as to assess the completed assignments. The teacher can monitor the activity of the students enrolled on the course, he can enrol or unenrol students. By default, the teacher cannot introduce global modifications to the course, for instance delete it, change its name or type (for example from topics to weekly format), backup or restore course data. As it was already mentioned, the role of "*non-editing teacher*" has "intermediate" permissions in a course - they can grade students' work, but may not alter resources and activities.

The students are the learners in the system and being such they are assigned limited permissions. Generally, their actions are limited to viewing resources, i.e. learning materials and completing activities, i.e. different types of assignments. Apart from that, they can communicate with their peers or teachers in the course forum (the news forum or other forums available) or via messages in Moodle.

The guest is an unregistered visitor to the system. They are assigned the lowest priority role with almost no permissions, since by default Moodle courses do not allow guest log-ins, but only registered users, who are assigned one of the aforementioned roles.

5.2.2. Setting up and Editing User Profiles

Moodle users can either self-register into the system, possibly with confirmation by an administrator or they can be registered administratively. Every registered user can view his/her **profile** after logging into the system by clicking his/her name.

Based on their assigned permissions for the system, i.e. their roles, users can edit all or some of the settings in their user profiles by clicking the *“Edit profile”* link.

Besides, users can add settings to their profiles, for example a photo or a description. If necessary, the email address of the student will not be fully displayed to other students or other users of the system. Every user can set their own time zone and day. Moodle will correct the dates and times for this time zone for uploading assignments, completing quizzes, etc.

5.2.3. Main Activities/roles of Users. Interaction with Other Users.

The learners in Moodle (students) are the registered users in the system lowest in rank. In accordance with the settings determined for the system, students can either enrol in the system themselves (internal enrolment) or they can be enrolled by the teacher. An enrolment code may be required, just once - a password, known as *“enrolment key”*. After that the selected course is included in the list *“My courses”* for easy access.

Main activities/roles of learners:

- View resources
- Complete quizzes
- Complete assignments (homework)
- Take surveys
- Participate in forums and chats

All users of the platform can communicate using different communication tools:

- **messages** - this type of communication is intended for the recipient only, no one else has access to the messages. Messages can be sent by clicking the name of a course participant and selecting the link “*Send a message*” in their profile. In this way, an additional window appears where the two course participants can exchange messages while they are logged into the platform. If a participant logs out of the platform, Moodle sends them the message by email.

Every user can read the pending messages when he/she logs in the platform and goes to “*Messages*” or when he/she clicks the “*Messages*” button in his/her own profile. Messages are displayed according to the senders’ list and the number of messages by every user. Using the “*Messages*” link the course participant can make a list of the users that he/she most often communicates with, so that every time he/she logs in the platform, he/she can easily check who is online. The selection of users for this list can be made using the “*Search*” option – search by first name/surname, as well as using key words. After the user is found, they can be added to the list of contacts that you most often communicate with or they can be added to the list of blocked contacts, whose messages are unsolicited.

- **forums** – the forum is a common tool of asynchronous communication, via which every user can post a note on a virtual “noticeboard” as well as take part in discussions with other users, by responding to their notes. The notes can contain files, they can be displayed flat or in threaded form, they can be displayed with the oldest notes first or vice versa. Users can subscribe to different forums in order to receive their notes by email in case they cannot log into the platform.

- **chats** - the chat is a tool of synchronous communication between the users of the platform. A lot of users can communicate in real time and chat messages are displayed to all participants. In order to ensure the rational performance of this function, the chat session should be announced in advance, so that the users can attend it. Messages can be saved after the session expires, so that they can be viewed by users, who were not able to participate in the chat. The chat can complement successfully distance learning or work under different projects when there is no physical contact between participants. In the case of e-learning, complementing traditional learning, the forum proves to be more suitable for exchanging questions and answers.

5.3. Installing a New Personal Moodle Platform for Free - Basic Actions of a Moodle Manager

The Moodle platform is well known by teachers and trainers, at least by name and in theory, but the big problem is to experiment and test this platform. To install this platform, you need a good server and the competences of an IT specialist. You also need to take care of the security of this server and make the new updates regularly. To have a useful and functional platform, you need to find, install and activate different additional plugins.

Since the middle of 2015, there has been a new service called Moodlecloud, a service provided by the people that make Moodle. It is a free hosting with some limits – 200 MB to upload teaching resources and maximum 50 users could subscribe in the courses on your free Moodle platform. Obviously, there is a paid service with less limits, Moodle for schools, where for some money, you can have more space for uploading and have more users on your Moodlecloud platform.

This service is very useful to create a free platform, a Moodle site, in order to test the administration of a platform, create your first Moodle course and invite your students to subscribe in order to consult the pedagogical resources and do the different activities. No need to be an ICT genius to have an up-to-date functional Moodle platform with a bonus, a free web

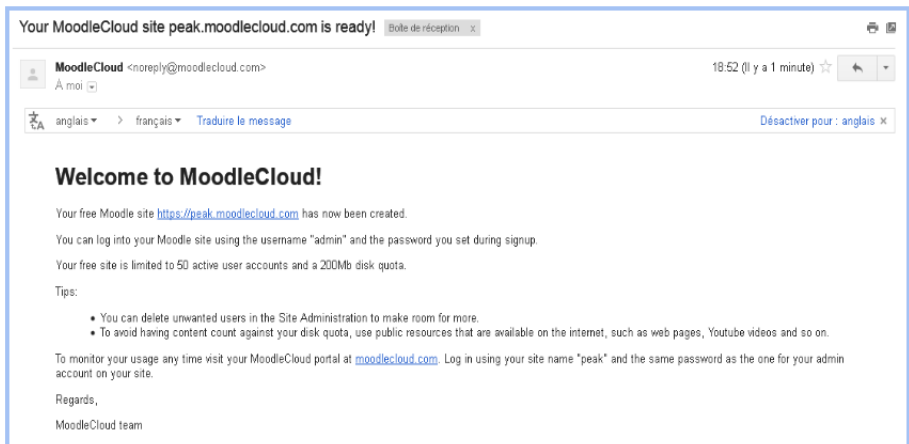
conference, thanks to plugin BigBlueButton⁶. The web address of the registered platform will be <http://yourname.moodlecloud.com>

5.3.1. Installing a New Personal Moodle Platform for Free - Basic Actions of a Moodle Manager

Here is the address of the service - <https://moodlecloud.com/en/> On this page you just have to choose your hosting plan, for example MOODLE FOR FREE, and to sign up and create a new account.

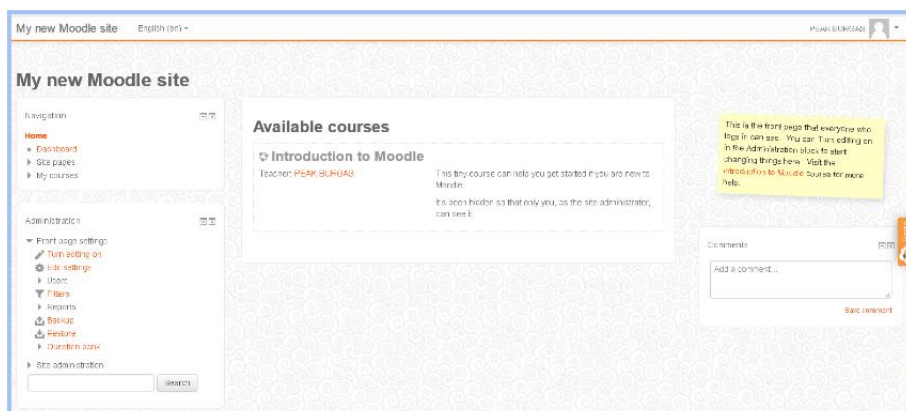
You have to follow 5 steps:

- Enter your details. Do not hesitate to put your mobile number, you will receive just a confirmation code!
- Give your MoodleCloud site a name. Write a name, you will know immediately if the name is not yet taken.
- Verify your identity. Just write the code from your phone.
- Choose a password.
- Success! You will receive a mail:



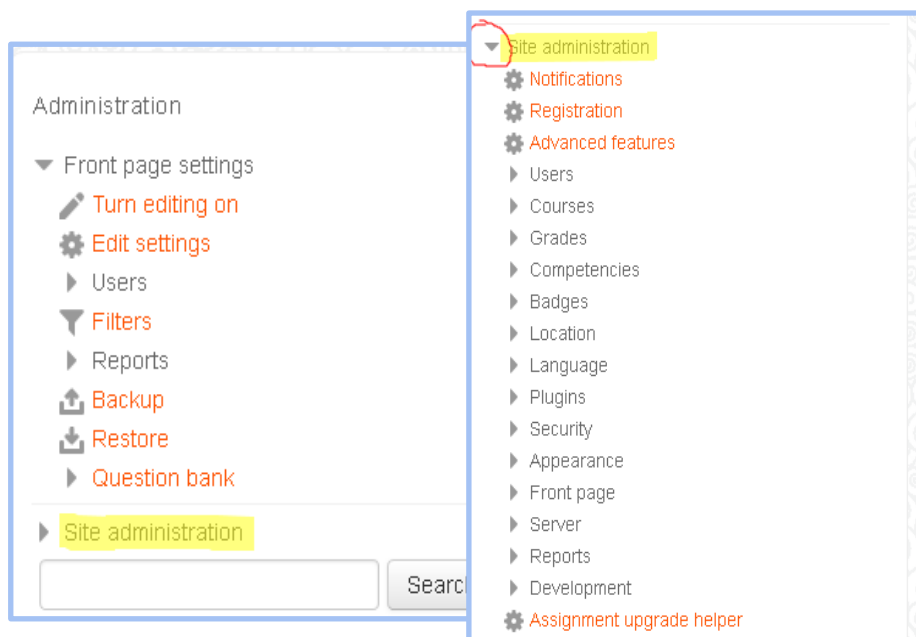
You can go to your new Moodle site.

⁶ <http://bigbluebutton.org/>



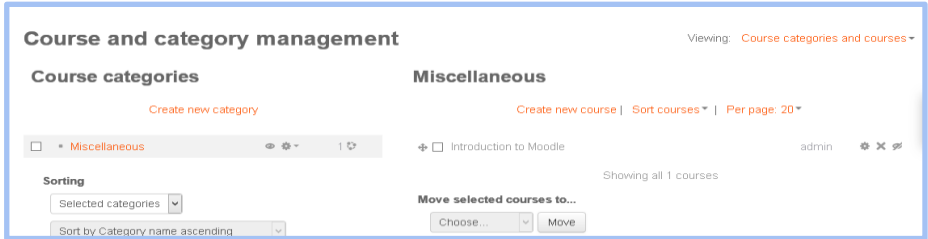
5.3.2. How to Create a New Blank Course

When you are logged on your new Moodle site, you are logged as an administrator of this platform. So, you have all the rights on this LMS! To



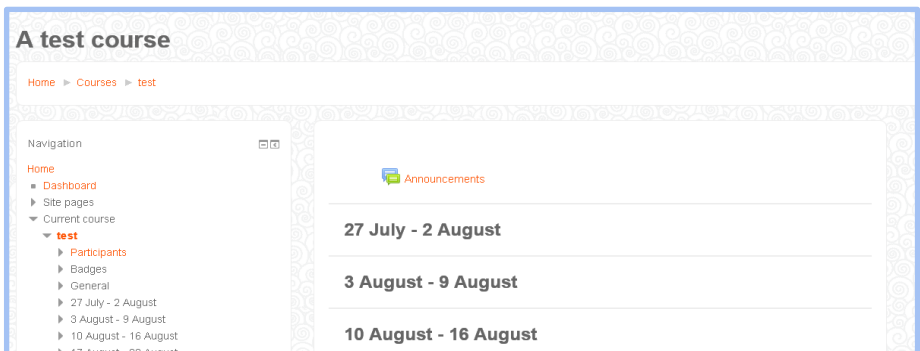
begin to enjoy all those rights, you may use the blocks on the left – “Administration” and “Site administration”.

To create a new empty course you have to use “Courses/Manage courses and categories”. On the left you can add or delete the categories and on the right, the courses.



On this screenshot you can see the course “Introduction to Moodle” in the category “Miscellaneous”. By clicking “Create new course” you can add a new course giving it a name and a short name (the short name is used in the navigation bar), putting it in a category, etc. The other items are optional, in the beginning you can leave them by default; it is possible to come back later and change the defaults options.

To finish and create, you have to go to the end of the page and use the button “Save and display”. You cannot enrol users now because users have not registered yet; for now there is only one user – You. So, skip the enrollment of users and click on “Proceed to course content”. Here is your new empty course:

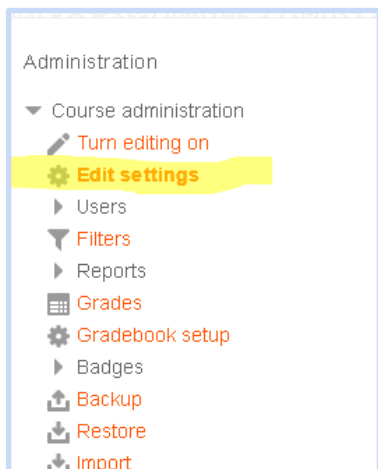


In almost the same way, you can create categories and then arrange your courses in the suitable category.

5.3.3. Setting up the New Course

The new course can be set up by the administrator (the manager) and by the teacher with editing rights. There are 2 important course formats - weekly or

topic format and social format. Weekly and topic formats are almost the same, there is only one difference - the sections appear like weeks or like topics. The social format is very different: in the main part of the course there is a forum and the sections with the teaching resources and activities are in a block on the left.



To begin to set up the course, the teacher or the manager has a special block - “Administration”. Do not confuse with the block “Site administration” (accessible by the manager).

By clicking on the “Edit Settings”, you come back to the page when the course was created and you can change the settings of the course - you can change the names and the category and you can change the other settings left by default.

You can add a description of the course, choose the suitable format and appearance, set up the group mode, etc. Do not forget the symbol “?” that provides help and describes the function of the different buttons or links.

- *To add a description.*

The screenshot shows two sections of a Moodle course creation form. The top section, titled 'Description', contains a text area labeled 'Course summary' with a rich text editor toolbar above it. The bottom section, titled 'Course format', contains four settings: 'Format' set to 'Topics format', 'Number of sections' set to '10', 'Hidden sections' set to 'Hidden sections are shown in collapsed form', and 'Course layout' set to 'Show all sections on one page'.

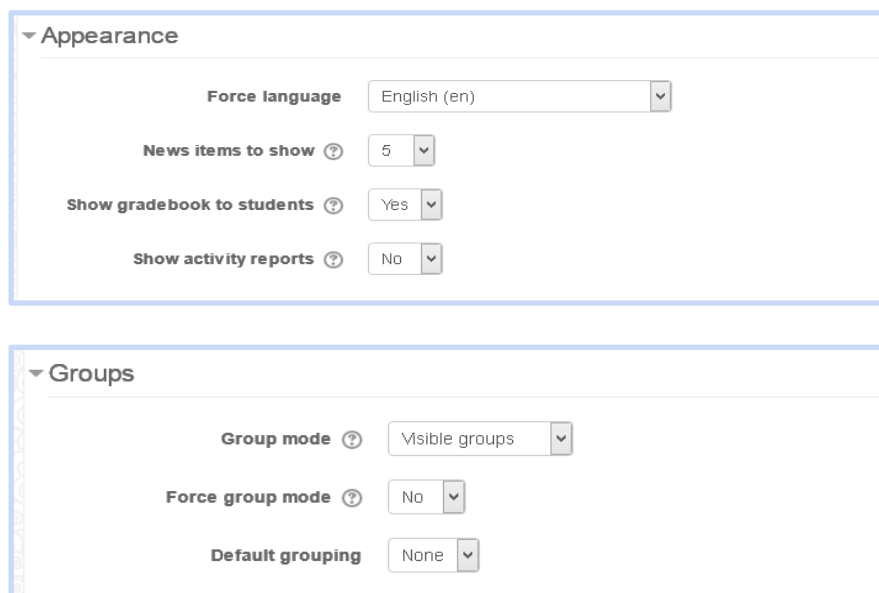
This action is optional and the course summary could be empty. The text that you will put here and the image, if you choose to add an image, will appear in the home page, on the right of the name of the course. Do not put too much text or big images because when you have many courses on your Moodle platform, it will take a big part of your home page!

- *To choose the format of the course.*

The most common format is the “*Topics format*”. If you choose this format, you will be able to give a name to every topic and every topic is a section in your course. Obviously, it is possible to set the number of the sections in every course, to add or remove sections later if you need a change. If you have more sections and the home page of the course becomes too big, you can choose another “*Course layout*” - show a section per page.

- *To set up the appearance of the course.*

In “*Force language*” you can choose “*Do not force*” and give the choice to the user to set the language of the course (the language of the blocks but not the language of the teaching resources added by the teacher). When you use this course to teach languages or teach subjects to be taught in a foreign language, it will be better, of course, to choose the target language. The 3 other options you can leave by default.



▼ Appearance

Force language English (en) ▼

News items to show ? 5 ▼

Show gradebook to students ? Yes ▼

Show activity reports ? No ▼

▼ Groups

Group mode ? Visible groups ▼

Force group mode ? No ▼

Default grouping None ▼

- To set up groups.

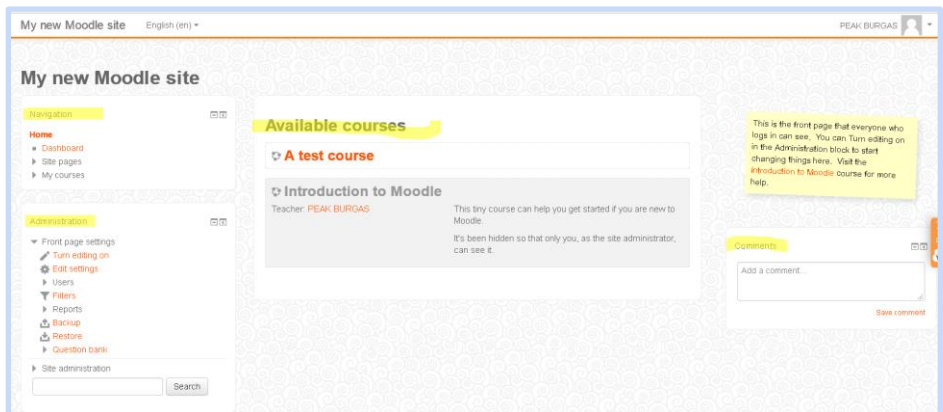
In “*Group mode*” the choice is between “*No groups*”, “*Visible groups*” and “*Invisible groups*”.

- **No groups** - There are no sub groups, everyone is part of one big community.
- **Separate groups** - Each group member can only see their own group, others are invisible.
- **Visible groups** - Each group member works in their own group, but can also see other groups without taking part in the group's activities; one is allowed to participate only in the activities in their own group.

The group mode defined at course level is the default mode for all activities within the course. Each activity that supports groups can also define its own group mode. If the group mode is forced at course level (you have chosen “Yes”), the group mode setting for each activity is ignored.

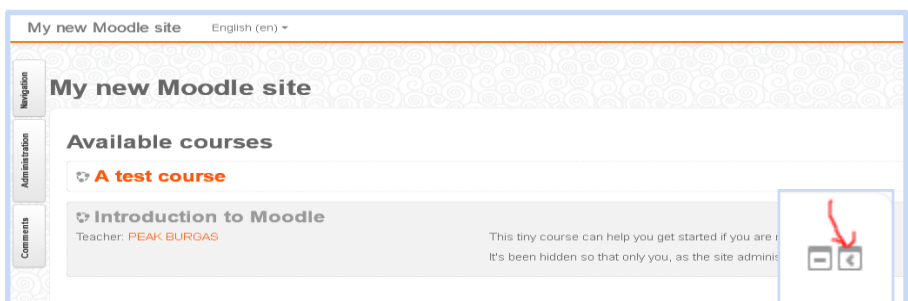
Using different types of groups, visible or invisible is very useful to organise group work and provide opportunities to organise collaborative work and multiple exchanges between the members of one group and the members of the other groups.

5.3.4. How to Set up the Homepage of Your Moodle Platform



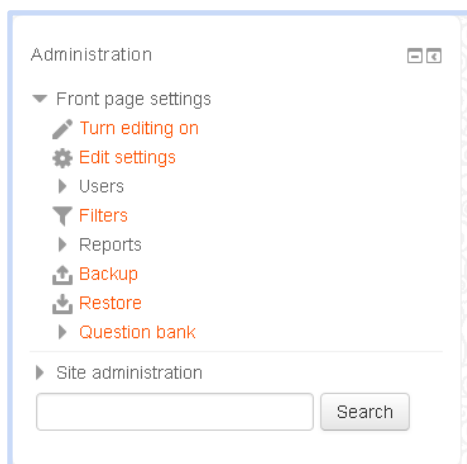
Only the administrator/manager of the platform has the rights to set up the blocks that appear on the home page.

By default there are 5 blocks in a MoodleCloud platform - “Navigation”,



“Administration”, “Available courses”, “Comments” and a “Html Block” (the block on the right with the notice). The manager can choose to leave the blocks on the home page or to minimise them if he/she wants to have more space on the page. He/she can do it by clicking on the little button in the right corner of each block (except the block “Available courses”).

In this example, the blocks “Navigation”, “Administration” and “Comments” are minimised on the left. They become active by putting on the mouse (do not click); to restore the block on the home page, click on the button in the right corner.



The most important block for the manager of the Moodle platform is the “Administration block”.

Note: this block is not the same when you are on the homepage of the platform (like the example) and when you are on a course. Only on the home page the manager is allowed to make changes on the platform’s settings buy using the buttons below “Front page settings”.

When you are the manager of the platform, you can change the name of the platform, you can change the name “My new Moodle site” with another name. Also you can do some other important changes on the appearance of the home page:

- Add a front page summary. The summary could be a simple text, a text with images and/or video. The summary will be visible if you add a course/site summary block.
- Choose, if on the homepage, a list of courses or/and a list of categories appear; you can also choose a combo list. When there are not many courses on the platform, a list of courses or a combo list will be a good choice but when there are many courses in different categories, the best choice will be a list of categories.

- Choose different or the same appearances of your homepage for logged and non-logged users.

Here is an example with a new name of the Moodle platform, with a summary in a new course/summary block with text and video put on the right and a list of courses for logged and non-logged users.



5.3.5. How to Manage the Authentication of the Users on the Platform

By default, the MoodleCloud platform does not allow students to create an account by themselves. Only the manager or the teacher has the rights to create students' profiles on the platform or in a course. Sometimes it could be very useful to allow your students to log and enrol on a course by themselves.

- **To manage the authentication mode.**

It is not very easy to find the right place to do it! In “Site administration” / “Plugins” / “Authentication” / “Manage authentication” you can find the Available authentication plugins below the “Common settings”:

In “Self registration” you have to activate the “Email-based self-registration”

Common settings

Self registration
registerauth

Email-based self-registration

Default: Disable

If an authentication plugin, such as email-based self-registration, is enabled, users can create accounts. This results in the possibility of spam for spam. To avoid this risk, self-registration should be disabled.

and go to the end of this page to save this option by clicking the button “Save changes”.

Then, it is an optional step, you can define the registration fields. In “Available authentication plugins”, at the top of the page, you can define the fields by clicking on “Settings” in the line of the “Email-based self-registration”.

Manage authentication

Available authentication plugins

Name	Users	Enable	Up/Down	Settings
Manual accounts	1			Settings
No login	0			Settings
MoodleCloud	1		↓	Settings
Email-based self-registration	0		↑	Settings

There you can see the fields for the registration and lock the fields that the student will not use because you do not need this information.

Note: when you decide to allow this kind of registration, there is a risk for multiple registrations by robots! So, you will need to use a CAPTCHA. At the end of the page with “Available authentication plugins” and “Common settings” you have to provide a public and a private reCAPTCHA key (you get them by registering on [Google reCAPTCHA](#)).

domains are enforced only when creating new users.

ReCAPTCHA site key
recaptchaapikey

Default: Empty

String of characters (public key) used to display the reCAPTCHA element in the signup form from [Google reCAPTCHA](#).

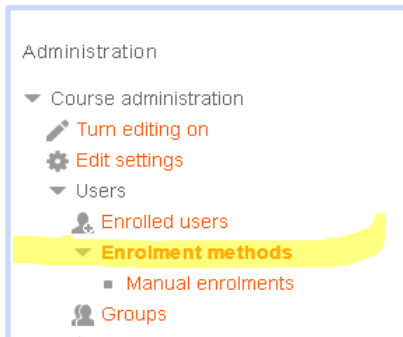
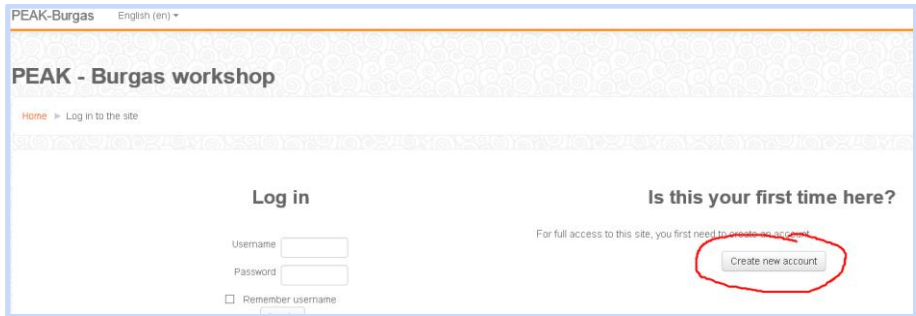
ReCAPTCHA secret key
recaptchaprivatekey

Default: Empty

String of characters (private key) used to communicate between your Moodle server and [Google reCAPTCHA](#).

Of course it is optional and you can do it later if there are multiple registrations of student-robots on your platform.

Now, when a student goes to your Moodle platform for the first time, he/she is allowed to create an account and then log in the platform and enrol on the courses if the courses are open or if they have received an enrolment key from the teacher.



- To set up the “*Enrolment methods*” in a course.

The enrolment settings could be changed by the editing teacher in a course or by the manager in all the courses on the platform.

To set this up, you have to go to the course of which we will change the Enrolment method. Then, in the administration block, choose “*Course administration*” / “*Enrolment methods*”.

Here you can see that the “*Manual enrolment*” is enabled and you can enable “*The self enrolment*” (Student) and/or the “*Guest access*”. To enable a method, just click on the corresponding icon like in the example below:

Enrolment methods

Name	Users	Up/Down	Edit
Manual enrolments	0	↓	✕ ⓘ ⚙
Guest access	0	↑ ↓	✕ ⓘ ⚙
Self enrolment (Student)	0	↑	✕ ⓘ ⚙

Add method

Choose... ▼

And then, if you want not to allow all the students to enrol on your course, you can specify an enrolment key by clicking the icon that represents a wheel just next to the icon used to enable the self enrolment method.

Self enrolment

Self enrolment

Custom instance name

Allow existing enrolments ?

Yes ▼

Allow new enrolments ?

Yes ▼

Enrolment key ?

Use group enrolment keys ?

No ▼

An enrolment key enables access to the course to be restricted to only those who know the key. If the field is left blank, any user may enrol on the course.

If an enrolment key is specified, any user attempting to enrol on the course will be required to supply the key. Note that a user only needs to supply the enrolment key ONCE, when they enrol in the course.

Chapter 6. Some Extra Applications for Creating Teaching Resources

6.1. Hot Potatoes Program for Creating Interactive Tests



Hot Potatoes 6.3 is a set of programs developed by the University of Victoria, British Columbia, which enables you to create 6 types of exercises for use on the Internet. The exercises created using Hot Potatoes can be successfully integrated in various platforms for e-learning and distance learning, therefore they are always included in online and distance training performed with LMS like Moodle, Dokeos, Claroline, etc.

The program is free for non-commercial use. The latest version of Hot Potatoes (2013) does not require a special registration code; registration can be completed by filling in the name/s of the user, when they access the program for the first time.

6.1.1. Installing Hot Potatoes for Windows

You can install Hot Potatoes using the standard method: you can download the program from the official Hot Potatoes site [30], the Download section and then you should select the first file for download - Hot Potatoes 6.3 installer.



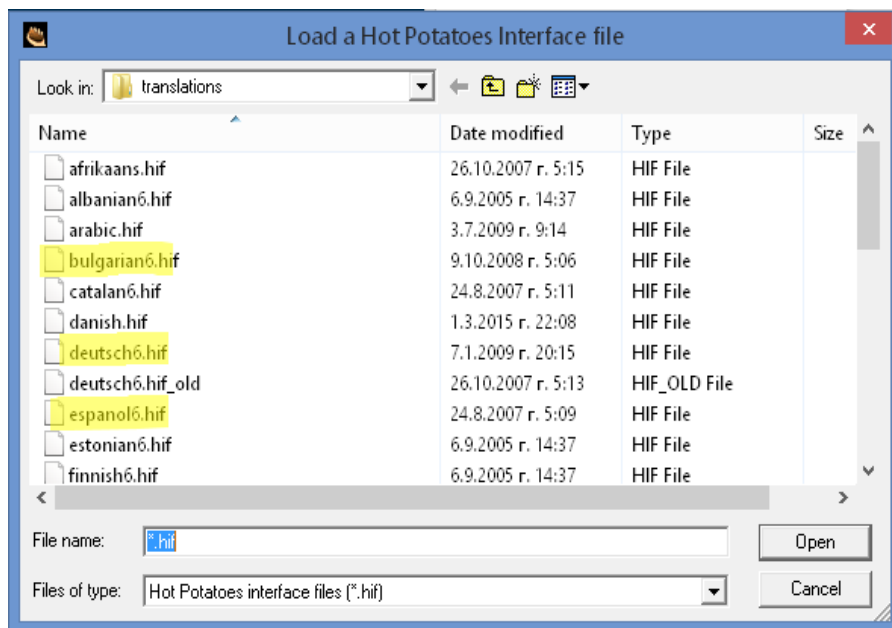
The file is downloaded and saved on the user's computer and then it is installed using the standard method, like most programs.

When you install the program for the first time, you can choose the language for the program interface. If necessary, the language for the interface can be changed later.

The language can be changed as shown in the figure below:

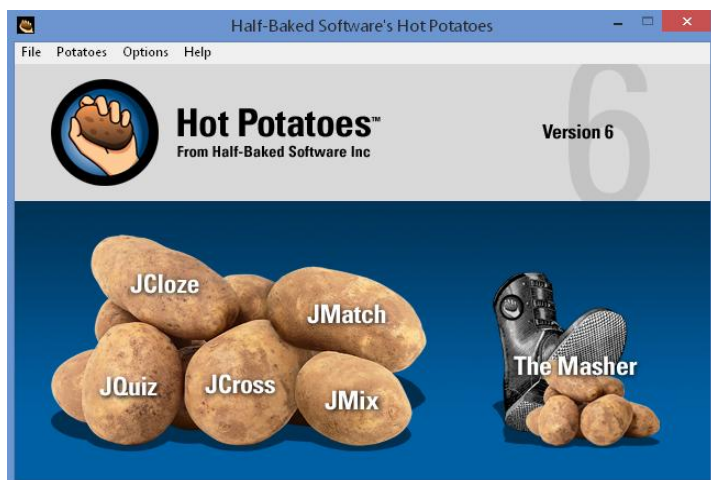


You select *Options/Interface/Load interface file* and the user can choose one among many languages, into which the program has been translated. In order to ensure the smooth performance of the program in a certain language, you have to choose the language file from the dropdown list:



6.1.2. Hot Potatoes Homepage and General Introduction

The Hot Potatoes suite homepage enables the user to choose the desired program:



- **JCloze** - it is used to create gap-fill or cloze exercises - a part of a word or a whole word, expression or a clause.
- **JQuiz** - it is used to create multiple-choice quizzes - with one correct answer, with more than one correct answers or with a predefined number of correct answers.
- **JMatch** - it is used to create matching or ordering exercises - to match synonyms, synonyms with antonyms, to order a text, a definition or a certain term.
- **JCross** - it is used to create crossword puzzles, used as a learning tool.
- **JMix** - it creates jumbled-sentence exercises.
- **The Masher** - it is designed to combine on one page exercises that have already been created using the other programs or to export them to the distance learning format SCORM.

6.1.3. Useful Tips for Hot Potatoes

There are several good reasons for choosing Hot Potatoes:

- *intuitiveness* – the program is easy to learn, regardless of the computer literacy of the teacher; a teacher can create a page with interactive exercises for his/her students in a short time and post them on the Internet or integrate them on a platform for e-learning or distance learning;
- *the possibility to customize the program* – the separate modules which comprise the program can be modified in such a way that they will correspond to the maximum to the requirements of the teaching purposes; the student feedback can be customized; comments and recommendations can be included; the buttons, colours, fonts and font size can be changed depending on the design that we seek to achieve;
- *the possibility to insert links to other sites* - it allows the teacher to recommend extra work, which will enable the student to complete the exercise successfully;

- *multimedia* - version 6 of Hot Potatoes, inserting audio, video, images and flash animation is much easier and intuitive compared to previous versions of the program or other similar programs.

Some useful tips before you start work with Hot Potatoes

These useful tips are intended for everyone who lacks experience with Webpages and files, used on the Internet. In order to avoid the usual initial difficulties, it is extremely important how you arrange and name your files.

When you work with this program, various files are created and used, which have to be organized properly. It is strongly recommended to make separate folders for the files created with the program (they have file extensions .jcz, .jmt, etc., depending on the module that is used and they have the icon characteristic for the program), a separate folder for the generated files which are Web pages (their file extensions are .htm or .html). When you name files, we recommend that you use the Latin alphabet and avoid punctuation marks, intervals and capital letters.

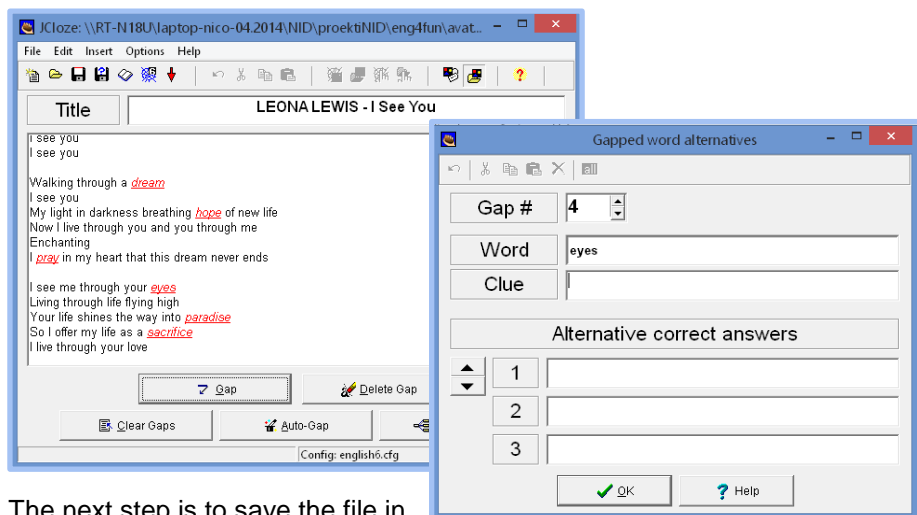
You should always save the files, created with the program, so that you can make further corrections or edit the Internet files, since, once created the Internet files cannot be edited, they can only be replaced with new files based on the existing and edited Hot Potatoes files.

6.1.4. The JClose Program for Creating Gap-fill Exercises

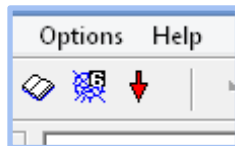
It is a good idea to start with creating a gap-fill exercise first, since it is the easiest and the fastest, provided that you have prepared a text in advance and you have an idea which words will be removed from the text.

The figure below is an example of an exercise in English.

The title is introduced in the corresponding line "*Title*" and the text is typed or inserted by using copy/paste. The words that the students have to enter in the gaps are marked in red. They are arranged in succession, you select the word with the mouse and then you click on the "*Gap*" button, next you can add the function help for the student "*Clue*" or alternate answers ("*Alternative correct answers*").



The next step is to save the file in the folder created for this purpose. You definitely have to keep this file, since all further corrections will be possible only by using it.



After the file is saved, the next step is to create a Web page file, which is intended to be published on the Internet, i.e. the file which allows you to view the exercise. You can save it by clicking on the button from the toolbar depicting a cobweb (which is the symbol of the Web). Then we have the opportunity to create and save a new file, it is advisory to save it in a separate folder, which is intended only for the Webpages.

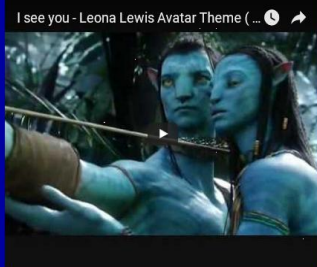
Here is the example that we used:

LEONA LEWIS - I See You

Gap-fill exercise

Fill in all the gaps, then press "Check" to check your answers. Use the "Hint" button to get a free letter if an answer is giving you trouble. You can also click on
 Note that you will lose points if you ask for hints or clues!

LEONA LEWIS - I See You



LEONA LEWIS - I See You

I see you
I see you

Walking through a

I see you

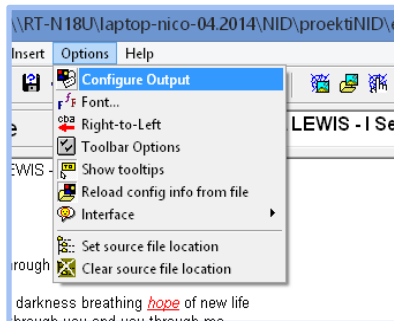
My light in darkness breathing of new life

Now I live through you and you through me

Enchanting

I in my heart that this dream never ends

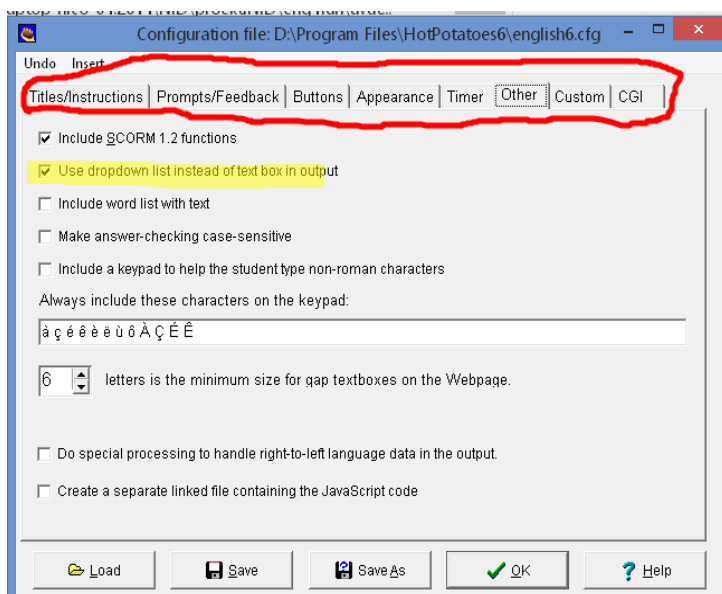
How to customize the created exercise



The program allows you to change the appearance of the exercise (the colour of separate parts, font and font size), you can modify instructions, add or remove buttons, as well as other components specific for this type of exercise.

In order to make these changes you use the Hot potatoes program, where you click on the "Options" menu/"Configure Output":

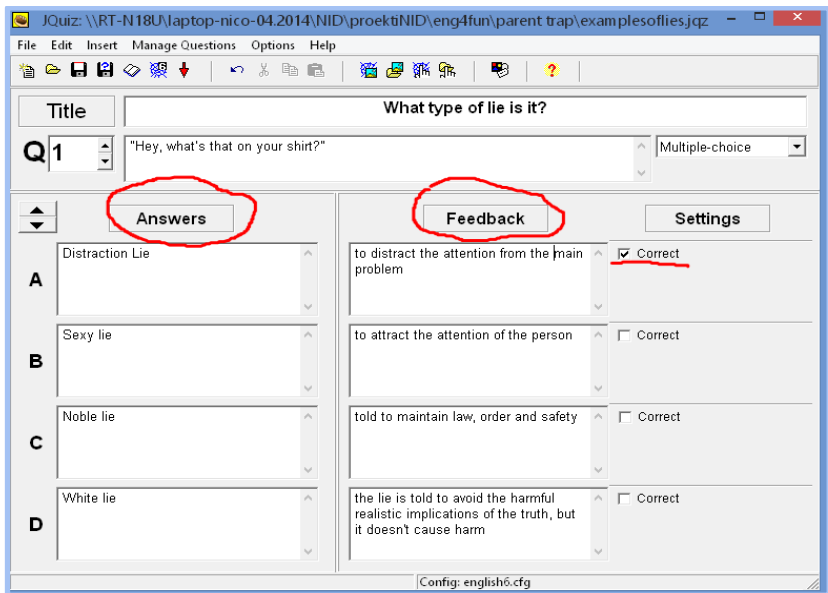
In this way we go to the main screen, from where all the changes are introduced. There are very interesting options for this type of gap-fill exercises, which every teacher uses in accordance with the teaching purposes that the exercise sets. On the screen below the option "Other" is selected. When you select the second option, as the figure shows, the student will not have to write the missing word in the gap, they will have to choose from a dropdown list.



In order to load other translations (for example the Bulgarian one), we click the “Load” button (at the bottom, on the left). Unfortunately, a large part has not been translated yet and it is still in English. Every teacher can translate or write his/her own instructions and save them, so that he/she can use them in other exercises. The translation file is loaded from Program files (Hot Potatoes 6) Translations. The translation that you have created can also be saved there as well as the new instructions which can be used again.

6.1.5. The JQIuz Program for Creating Multiple-choice Quizzes

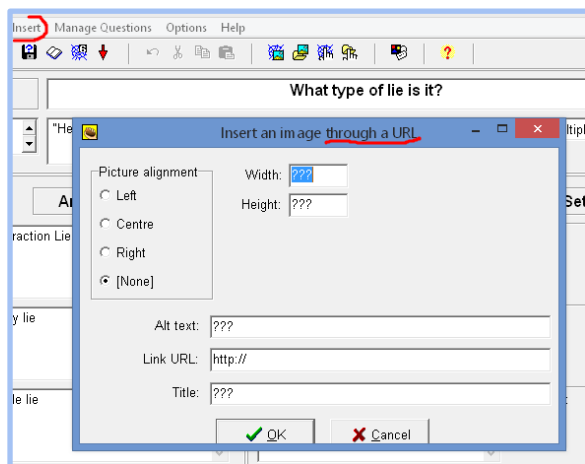
This type of exercise is one of the most widely used from the set of programs and it allows you to create multiple-choice quizzes, with one or more options to choose.



The image above shows an example of a multiple-choice exercise. On the screen you can see the title of the exercise and the first question with four options to choose from, you can also see which the two correct options that have to be selected are, when completing the exercise.

The right-hand column is for comments or feedback that the student gets when he/she chooses an option. The comments section is very important when the exercise is intended to teach, not to test or assess the student. Reference to Internet-based learning resources can also be inserted in this feedback, which will help students to complete the exercise successfully.

If you want to add a new question, you have to use the arrows below the title, on the left, which navigate you to question two, three, etc. You can also add images in the question fields, answer fields and feedback using the toolbar from the menu. When you add images intended to be completed by students on the Internet, you have to add the image on the Internet in advance (for instance, in the course you are creating) and when you insert the image, you have to insert the link URL and some other details, as it is shown in the figure below:



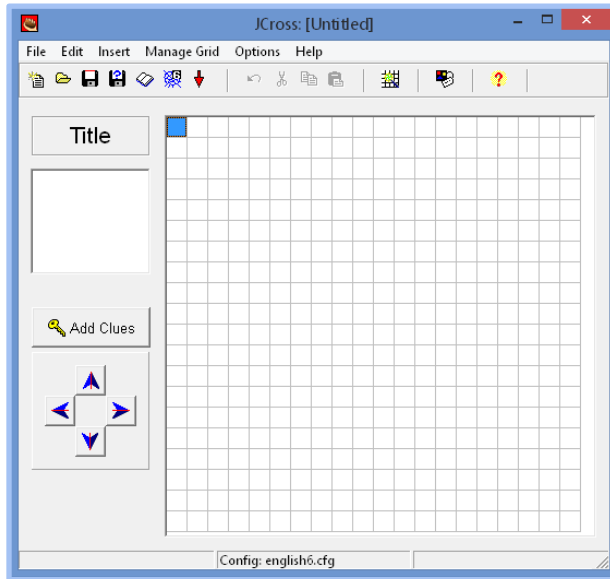
The webpage to be published on the Internet is created in a way similar to the one described for JCloze and you have to use the button with the cobweb.

The exercise can be customized using the same method described for **JCloze**.

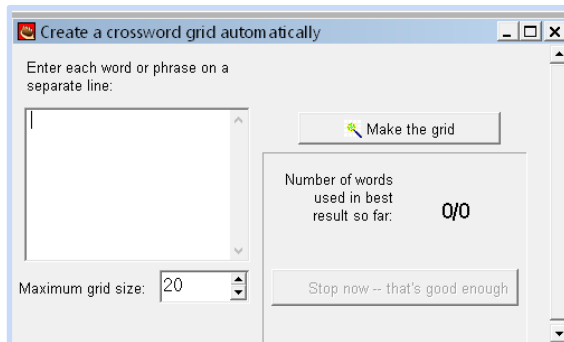
6.1.6. The JCross Program for Creating Crossword Puzzles

This type of exercise enables you to create interactive exercises in a crossword puzzle format. Hot Potatoes is among the few software products which allow the creation of this type of exercise.

A crossword puzzle and how to build it is demonstrated with an example of an exercise in English. The next figure shows a screen with a blank crossword:

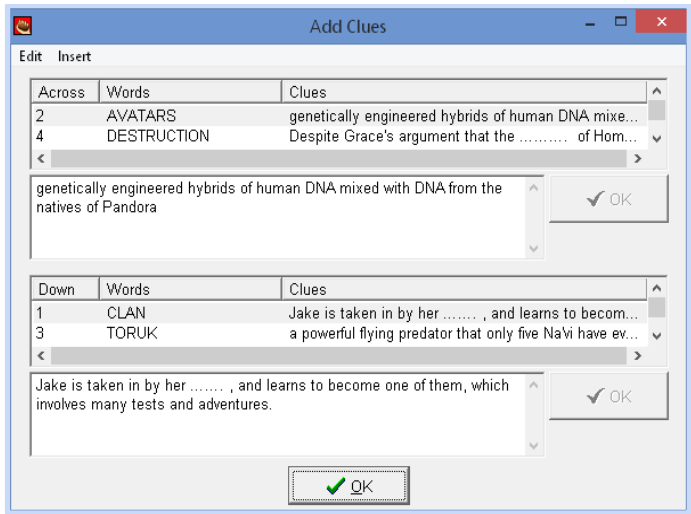


After you enter the title and before you enter the words for the crossword, you have to click on the "Manage Grid" button from the toolbar and select the option for automatic creation of the crossword grid "Automatic Grid-Maker".

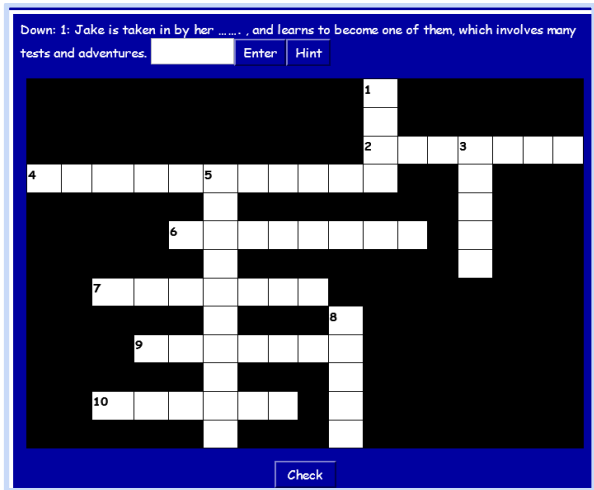


At this stage you have to enter the words (without the definitions), then you click the "Make the grid" button.

You have to use the “Add Clues” button to enter the definitions for all the words. Words are added one by one, both horizontally and vertically and after each entry you have to confirm with the “OK” button.



To create a Webpage and to customize the exercise you have to use the method described for **JCloze**. The figure below demonstrates what the crossword looks like as an Internet page:



With the **JMatch** and **JMix** modules you can create exercises using the same method described for the modules above.

6.2. Enhanced Video Creation Tools - A New Way to Integrate Video in Class

Many teachers use video both in and outside the classroom for learning purposes. Video can provide a fantastic resource and stimulus for teaching and learning and can be a powerful instructional tool. It is authentic, and because it is authentic, it is motivating. It can be accessed from a range of devices. There is a variety of ways to use video in school, such as “Guess the dialogue of a short clip with the sound off”, “Translate and order an interesting dialogue or conversation”, “Say what you see in a scene with a clear succession of events”, “Do shadow-reading trying to speak simultaneously with the characters on screen”.

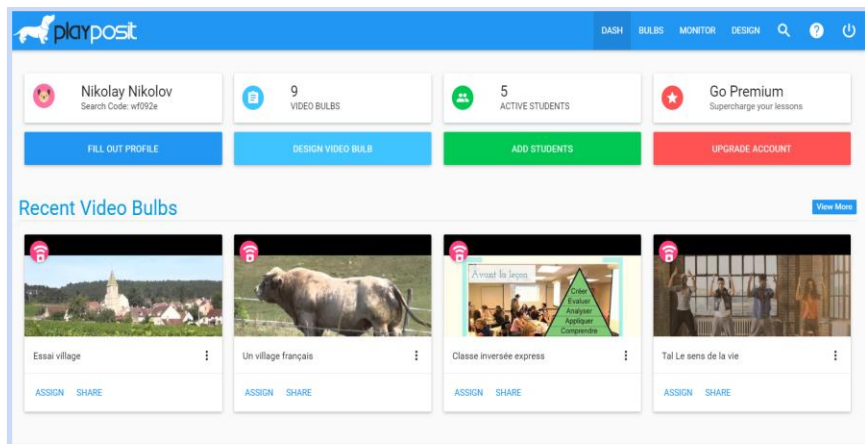
An interesting and relatively simple and fast way to organize flipped-classroom work is the use of tools created in the objectives of enhancing videos (pedagogical or authentic) with quizzes, pauses for reflection, by adding audio comments, or even a new audio track for the entire document. Some online tools or services, such as EDpuzzle [26] and PlayPosit [34], designed for pedagogical use, support the whole pedagogical organization in order to design online learning as part of a flipped class. Instead of downloading the enhanced video capsule created with these tools, the teacher can keep them online and has on hand tools to create a class, enrol students, assign tasks to them at the base of the capsules video according to a predefined schedule and timing, to follow and to evaluate the work carried out in the classes by the learners.

6.2.1. PlayPosit Overview

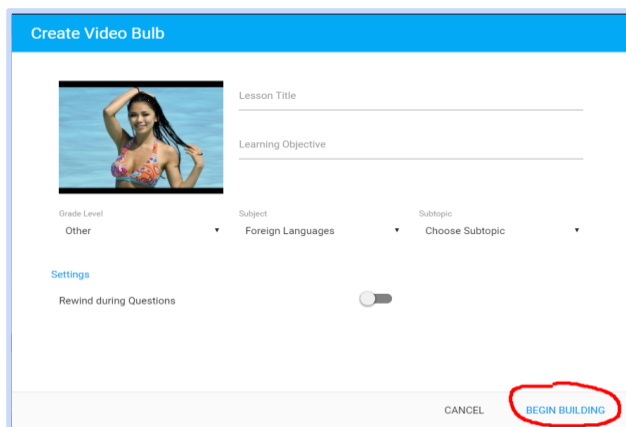
PlayPosit is a free, interactive, and easy to learn online platform that increases student engagement by allowing teachers to embed questions with explanations inside videos. Built by teachers, for teachers, PlayPosit allows lessons to be differentiated, and is perfect for formative assessments, preventing students from skipping content.

6.2.2. Signing up and Building Lessons

Educators sign up for PlayPosit with either Google or an Edmodo account. Once the account is created, teachers are assigned a unique teacher search code they share with their students. This allows students to access the teacher-created lessons, which can be public or private. After signing up for an account, teachers can start building their lessons.



The picture above is a screenshot when the teacher is in his/her account of the application. You can see the name and the search code of this teacher, the video bulbs (lessons) created and the active students.



Building a lesson is just as simple as signing up for an account and it starts by clicking on “Design”. Next, the teacher simply copies and pastes the URL of a video from YouTube, Vimeo, or Teachertube. Teachers give each

lesson a title, enter the learning objective, select the grade level, topic, and a subtopic, and then select “*Begin Building*”. Teachers can add multiple choice questions and provide students with an explanation for each response. They can add questions where the students have to write an answer or a “reflexive pause” to make them think about something in the video.

The screenshot shows a lesson interface for 'Un village français'. The main video player displays a rural landscape. The video title is 'Un village français' and the subtitle is 'apprendre un vocabulaire spécifique'. The video player has a progress bar and controls. To the right of the video player is a list of questions with multiple choice answers. The questions are in French and relate to the video content.

Un village français
apprendre un vocabulaire spécifique

01:07
La majorité des français habitent à:
A. Paris
B. Dans les grandes villes
C. Dans les villages
Oui, La France compte 36000 communes!

02:02
Un très petit village, composé de quelques maisons, c'est un

03:39
L'endroit où les femmes faisaient autrefois la lessive s'appelle:
A. un lavoir
B. un château
C. un château d'eau

03:43
Un endroit qui peut être habité ou visité:
A. un château d'eau
B. un château
C. un lavoir

05:03
Pour se rendre dans ces villages il faut prendre:
A. un TGV
B. un train local

Once the lesson is completed, teachers can assign the exercise to students. The sign-up process for students is even easier.

6.2.3. Assigning Lessons

Teachers can add up to 8 classes and each class is given a name and a description. To assign the lesson, the teacher has to select the class and click on the lesson to be assigned and then select a due date from the built-in calendar. And that's all!

The screenshot shows a lesson assignment interface. The main section displays 'Lesson 1' with the subtitle 'Idioms'. There is a button 'GET ASSIGNMENT DATA' and a 'DUE ON' date of 'SAT, DEC 31ST, 2016'. The interface also includes a 'PEAK' dropdown, a 'SORT BY' dropdown, and an 'ASSIGN BULB' button.

PEAK SORT BY ASSIGN BULB

Lesson 1
Idioms

GET ASSIGNMENT DATA

DUE ON: SAT, DEC 31ST, 2016

6.2.4. Monitoring Student Progress

To view student progress on the lesson, the teacher selects “*Monitor*”. PlayPosit provides a question-by-question breakdown and displays each class, lesson, and student progress in that specific lesson. This feature provides a complete picture of student performance and helps teachers identify which concepts may need further review or practice. This is one of the best features of this application because it not only shows which students have completed the lessons, but it helps to determine the difficulty of the lesson and the questions asked.

Student		Q 01	Q 02	Q 03	Q 04	Q 05	%
Dachev, Alexander	✱						0
Nikolov, Nikolay	✱	A	B	B	A	B	80
Spasova, Boyana	✱						0

6.2.5. Additional Support and Features

The comprehensive PlayPosit FAQ page provides answers to commonly asked questions about building, assigning, monitoring, and managing students. If you try PlayPosit and decide you want even more features, such as the ability to ask open-response questions or access to the more than 10,000 lessons in the public lesson library, an annual PlayPosit_pro subscription_is available for \$96.00. Additionally, teachers can download lesson grades in .csv format for easy analysis in Google Sheets or import into current gradebooks.

Getting Started →	Apps →
Zaption Migration Plan	Are there any guides on the PlayPosit-Edmodo integration?
Create your first Bulb	How does the PlayPosit app on Edmodo work?
Assign the bulb to your class	How does the Schoology app work?
Get your students uploaded	How does the Google Classroom Integration work?
Pull from any online video	How do I assign a bulb to my Google Classroom?
14 articles →	16 articles →

6.3. LearningApps for Creating Interactive Exercises

6.3.1. What is “*LearningApps*”? – A General Introduction

LearningApps.org [31] is a free Web 2.0 application for creating interactive exercises using small reusable interactive templates. It was developed in 2009 by the University of Education in Bern and is maintained by the nonprofit organization *LearningApps* - interactive learning modules.



This indispensable authoring tool enables teachers to use and apply different multimedia formats to build small blocks similar to the LEGO “bricks”, which can be used directly within a lesson or can be successfully embedded into learning platforms such as Moodle.

LearningApps offers a variety of templates (more than twenty) to create learning modules and learning games. There are six groups of task-type templates:

- ✓ *Quizzes* - multiple-choice quiz, The Millionaire game, word grid
- ✓ *Assignments* - matching pairs, matching pairs on images, allocation to map, group assignment, etc.
- ✓ *Sequence tasks* - sequence (Simple order), number line, group-puzzle
- ✓ *Writing tasks* - cloze test, crossword puzzle, hangman, table, free text input

- ✓ *Multiplayer tasks* - Order Challenge, Guess, Where's What?, Multiplayer Quiz (Horse race)
- ✓ *Tools* - app matrix, audio/video with overlay, chat, shared writing, calendar, mindmap, notebook, pinboard

The easy-to-use exercises divided into different categories and levels with clear rules, the elements of roleplay and competitiveness, the possibility to replay or restart and the immediate feedback enhance the students' motivation. The possibility to replay helps them to overcome some major difficulties and "concerns", for instance, in language acquisition - verb forms, choosing the proper conjugation, subject-verb agreement, the use of articles.

6.3.2. Setting-up an Account

To set up an account you need a valid email address and you follow the easy steps, similar to setting up an email account. Once you have created your account, you can choose the desired language (the platform supports 20 languages) and you can edit your profile. You can browse through applications (there are over thirty categories - Art, Astronomy, Chemistry, Languages, etc.) or create your own application. You can create your classes as well as create student accounts. The figure below shows how to set up your **LearningApps** account:

The image shows a screenshot of the LearningApps.org website with a 'Register new account' modal window open. The modal window contains the following fields and options:

- Register new account** (Title)
- Username** (Label) and (Input field)
- Email** (Label) and (Input field)
- Password** (Label) and (Input field)
- Repeat password** (Label) and (Input field)
- Security code** (Label) and (Input field)
- Register account** (Blue button)
- Cancel** (Text link)

The background of the screenshot shows the LearningApps.org homepage with a search bar, 'Browse Apps' button, and a 'Login' button. There is also a 'What is LearningApps.org?' section and a 'Tweets about LearningApps.org' section.

6.3.3. Creating a Multiple-choice Quiz – “The Millionaire game”

“The Millionaire game” is a multiple-choice type of exercise that resembles the “Who wants to be a millionaire” game. A “Millionaire game” quiz and how to build it is demonstrated with an example of an exercise with future predictions in English.



To build this quiz you click on the “Millionaire game” icon. A screen appears with three example exercises. To create your own exercise you have to click on the top right-hand corner – “Create New App”. You have to write a title and a task description with instructions for students. The task description appears upon startup of the exercise. You can leave the task description field blank if no instructions are needed.

Then you proceed with the game questions – they gradually build up to greater difficulty – from easy through medium to challenging and, finally, to very hard. The figure shows how to build a “The Millionaire game” quiz:

The screenshot shows the 'Create New App' interface on LearningApps.org. The browser address bar shows 'learningapps.org/create/new=301'. The page has a yellow header with the LearningApps.org logo, a search bar, and links for 'Browse Apps' and 'Create App'. On the right, it shows 'Account settings: gergankirova' and 'My classes' / 'My Apps'.

The main form includes:

- App title:** A text field with the placeholder 'No title yet'.
- Display language:** A dropdown menu showing various language flags.
- Task description:** A section with the instruction 'Provide a task description for this App which is shown on start up. Otherwise leave it blank.' followed by a large empty text area.
- Game questions - very easy (500):** A section for creating questions. It includes:
 - Question:** A text field with a small 'A' icon.
 - Correct answer:** A text field.
 - Wrong answer:** Two additional text fields.
 - + Add another element:** A blue button.
- Game questions - easy (1'000):** A section for creating more questions, currently empty.

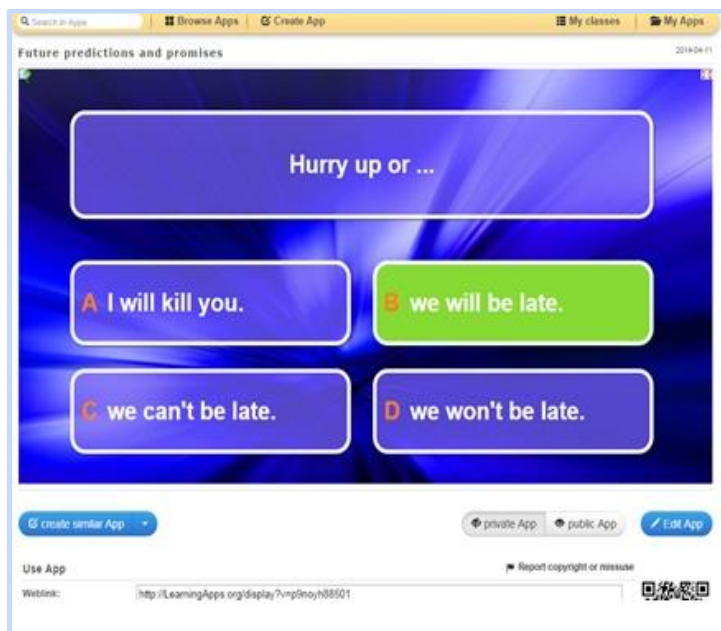
The Windows taskbar at the bottom shows the date and time as 18.00.

First you write the question, then you provide the answers – the correct answer comes first. You can delete a question level if you wish, by clicking on the trashcan on the left of the question field.

After you have filled in all the questions and answers, you have to provide feedback (a phrase or a whole sentence, for example "Great, you've found the solution!") that will appear when the user selects a solution. If you wish to provide hints for users, you have to fill in the "*Help*" field – the useful hint will appear in a small icon in the upper left corner when the user attempts to do the exercise.

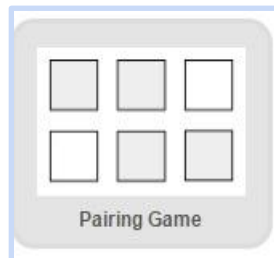
Once you have filled in all the required fields, you click the "*Finished editing and show preview*" button. The platform displays the exercise which you can save or edit if you wish. You can choose to save the application as private or public by selecting one of the buttons in the bottom right-hand corner. You can send your application as link or embed it into a webpage. The QR code and the link address of the exercise are displayed at the bottom.

Your exercise is now ready:



6.3.4. Creating a Matching Pairs Exercise - “*Pairing Game*”

The “*Pairing game*” is a matching type of interactive exercise, where the user has to click and find matching pairs of cards, which can be words, phrases, sentences or images. The “*Pairing game*” and how to build it is demonstrated with an example of a vocabulary exercise in English – food and containers.



To build the exercise you follow the same steps as in the “*Millionaire game*”. Click on the “*Pairing game*” icon.

A screen with three examples appears. To create your own exercise you have to click on the top right-hand corner – “*Create New App*”. Again you have to write the title and the task description in the corresponding fields. You can leave the task description field blank if no instructions are needed.

Then you set the matching cards size – medium, large or small cards. The size will depend on the number of matching pairs you want to include in the exercise. Next you have to provide the matching pairs for the exercise as shown in the figure below:

App title
Food and containers

Task description
Provide a task description for this App which is shown on start up. Otherwise leave it blank.
Match the types of food to the containers

Settings
Card size: medium cards
Pairs: medium cards, large cards, small cards
Provide the pairs:
Pair 1: a bar of
Pair 2: English
+ Add another element

Hide matched cards?
cards stay visible

Display language: Deutsch, English, Français, Italiano, Русский, Español

The module format allows you to match text (separate words or whole sentences) to images, images to images; you can also include listening by using the text input option. If you choose the “*Text to speech*” button, you can choose the language of input and you can preview the converted text by clicking the headphones symbol.



To add a new matching pair you have to click on the “*Add another element*” button. After that you proceed with the settings – the dropdown menu “*Hide matched cards*” allows you to decide whether cards should be hidden once they are opened or they will stay visible. The next steps – “*Feedback*” and “*Help*” are the same as in the “*Millionaire game*” settings. Once you have filled in all the required fields, you click “*Finish editing and show preview*” button. You can choose to save the application as private or public by selecting one of the buttons in the bottom right-hand corner. You can send your application as a link or embed it into a webpage. The QR code and the link address of the exercise are displayed at the bottom.

The figure below shows the ready exercise :

Food and containers

2014-04-13

Create similar App

private App public App Edit App

Use App

WebLink: <http://LearningApps.org/display?v=pnumrges201>

Fullscreen-Link: <http://LearningApps.org/watch?v=pnumrges201>

Embed: `<iframe src="//LearningApps.org/watch?v=pnumrges201" style="border:0px;width:100%;height:500px" webkit`

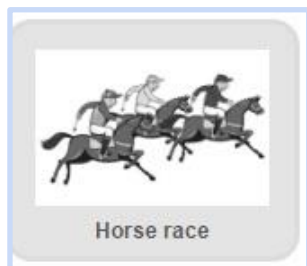
SCORM iBooks Author Developer Source

Report copyright or misuse

QR code

6.3.5. Creating Multiplayer Tasks – “Horse race” and “Where is what”

LearningApps allows teachers to create a variety of interactive exercises including multiple players - “**Guess**”, “**Where is what**”, “**Horse race**”, etc.



Students can play alone or they can compete with their peers in real time. They can use the chat provided within the exercise. The multiplayer exercise “**Horse race**” and how to build it is demonstrated with an example of an exercise on irregular verbs in English. First you select the “**Horse race**” icon from the **LearningApps** homepage, then you follow the same steps described above to build the exercise.

After you introduce the title and the task description, you proceed with the questions and answers. You can specify up to 15 questions and answers. First you write the question, then you provide the answers – the correct answer comes first.

Search in Apps | Browse Apps | Create App | My classes | My Apps

Display language: [Flags]

App title

Irregular verbs in English - The Past Simple Tense

Task description

Provide a task description for this App which is shown on start up. Otherwise leave it blank.

Choose the correct Past Simple tense form of the verb !

Questions and Answers

Specify up to 15 questions and their possible answers.

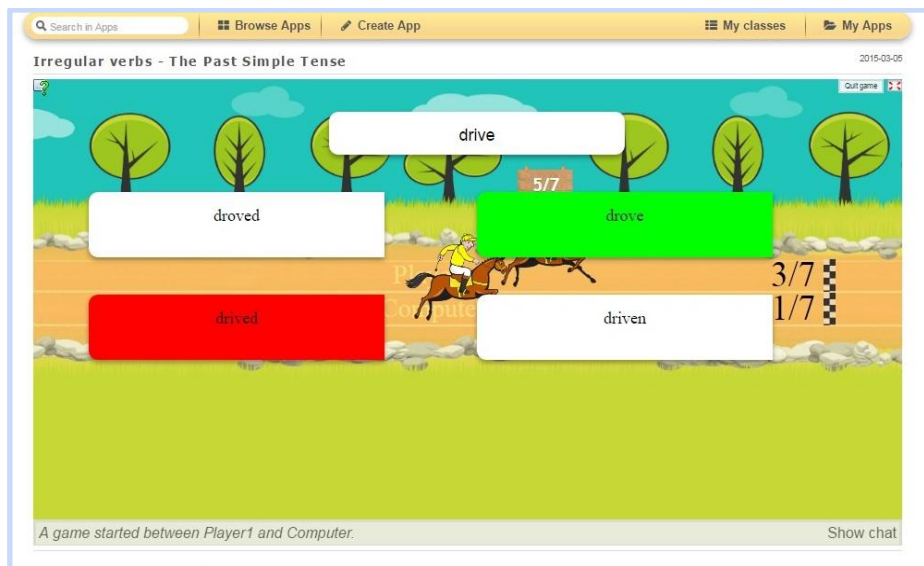
Question:	A	buy	Hint:	
Correct answer:	A	bought	Hint:	
Wrong answer:	A	buyed	Hint:	

Wrong answer: Text Image Text to speech Audio

Wrong answer: Text Image Text to speech Audio

[+ Add another element](#)

You can choose to introduce text, images, audio, video or convert text to speech by selecting the desired button. To add a new question you have to click on the “*Add another element*” button. Then you have to sort questions - questions can be displayed either randomly or in order. The next steps are the same as the those described for the exercises above. Once you have finished with the settings, your exercise is ready:



“**Where is what**” is very useful to create interactive exercises based on maps and set tasks for individual or group work. You provide a picture (map, number line, thermometer, etc.) as the background of the game board. In each game round a question is given. The question can be either a text or an image, an audio or a video with additional hint text. Then the correct place on the game board has to be found by the student(s). To create this type of exercise you select the “*Where is what*” icon from the homepage.



Then you write the title and description as described above. After that you select the game background image – the platform allows you to set the desired size and edit the image according to your needs. Next, you introduce the game questions one by one and you place the desired location marker on the map – you can choose different colours for the markers.

Game background image

Provide a picture (map, number line, thermometer ...) as the background of the game board.
You can use maps from sources like [Wikipedia](#).

Select image
 Size: 481 x 306
 Edit image

Game questions

In each game round a question is given. A question can be either a text or an image, an audio or a video with additional hint text. Then select the correct place on the game board, which is to be found.

Question 1: A It is opposite the bank in South Street Hint:

Location on board: Place marker

Color: ● ● ● ● ● ○

Save
 Cancel

Once you have introduced all the questions and the markers, you proceed with the settings - you can choose to display all possible marker positions as circles, as help for the user. In order to do that, you tick the box “*Show all possible marker positions*”. The next step is to sort questions - questions can be displayed either randomly or in order. To finish creating the exercise, you follow the steps described for the other modules.

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Promoting European Awareness and Key Competences





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