IAEA Learning Management System User Manual

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I: Introduction

About this manual

The IAEA Learning Management System (LMS) is a Moodle based platform dedicated to e-learning activities in the field of nuclear science and technology education under the patronage of International Atomic Energy Agency (IAEA). This LMS will provide you with a wide variety of opportunities, resources, and new strategies for nuclear education and training. LMS is an integral part of Cyber Learning Platform for Nuclear Education and Training (CLP4NET) which ensures high standards for nuclear education and training and establishes a framework for e-Learning capacity. This is achieved through the use of information and communication technology, in particular web based education and training to the maximum possible extent.

The purpose of this document is to make potential users familiar with IAEA LMS and its basic functions in order to facilitate proper and smooth use of these e-learning tools. This customized manual describes just essential functions and resources regular which users need for optimal performance.

This manual was developed to explain how to use/operate LMS being 'teacher' and 'student' user type. The manual is divided into two chapters reflecting functions, options and tools of each user type. Particular attention should be given to the chapter with instructions on how to get started using the site/platform and other chapters describing how to perform each operation once you have logged in.

1. What is an e-learning site?

Definition of e-learning

"The use of electronic information systems (especially internet technologies) to deliver or receive learning and training.

Comment: A common application of E-learning in the nuclear industry is general employee refresher training. Due to the large number of trainees, the relatively high cost of E-learning can be justified, and the flexibility of E-learning is well suited to allowing the trainees to complete the training when they have the time available. Also, a 'test-out' feature can allow trainees who already understand the material to complete a pre-test, and if successful to avoid spending time on topics in which they are already competent."

IAEA TECDOC-1586

An e-learning site is a learning management system.

"A learning management system is a software application installed on a web server which is used to administrate, distribute and track distance learning activities (or: electronic learning) in an institution or organization.

The main functions of a learning management system include management of users, resources and training materials and activities, access administration, monitoring and tracking the learning process, testing, generation of reports and management of communication services such as discussion forums, video conferences, etc.

A learning management system does not generally include authoring capabilities (for creating one's own content), rather is focused on the management of content created by different sources."

http://en.wikipedia.org/wiki/Learning_management_system

2. What is Moodle?

"Moodle is an Open Source Course Management System (CMS), also known as a Learning Management System (LMS) or a Virtual Learning Environment (VLE). It is a free web application that educators can use to create effective online learning sites."

http://moodle.org/

"Each course home page generally contains **blocks** on the left and right with the centre column containing the **course content**. Blocks may be added, hidden, deleted and moved up/down and left/right when editing is turned on.

Blocks provide additional information or functionality to the learner or the teacher. They are included in the standard Moodle package, but there is a set of non-standard blocks which can be added by the administrator.

Teachers with editing rights have a course administration block."

http://docs.moodle.org/22/en/Main_page

3. User types

There are 3 types of LMS users:

- **Students**, who have access to the materials and activities made available on the site/platform for facilitating learning by the teacher or the person who created the course content.
- **Teachers**, also known as professors, instructors, lecturers or evaluators, who are responsible for developing content and activities and delivering the course.
 - o <u>Editing Teachers</u> have full rights to run the course including changing the activities and grading students
 - o <u>Non-editing Teachers</u> can teach in courses and grade students, but may not alter activities
- **Administrator,** who is responsible for system functionality and administers access rights, keys, passwords, courses that are created, etc.

• Guests have minimal privileges and usually cannot enter text anywhere. They only can enter a course only if it is an open course.

4. Requirements for student and teacher PCs

A PC with an internet browser such as Mozilla Firefox, Microsoft Internet Explorer, Google Chrome, etc.;

Cookies activated;

Java and JavaScript enabled;

Pop-up windows enabled;

A stable Internet connection;

Sufficient memory to download and open web content such as images and videos;

Speakers to listen to sounds;

Adobe Reader to open files in PDF format.

5. LMS Languages

LMS allows setting up a course structure in several languages as per additional request. Here are the available languages:

English, Spanish, German, French, Russian, Bulgarian, Ukrainian, Korean, Japanese.

6. Logging to the system and editing profile

6.1 How do I register to the system?

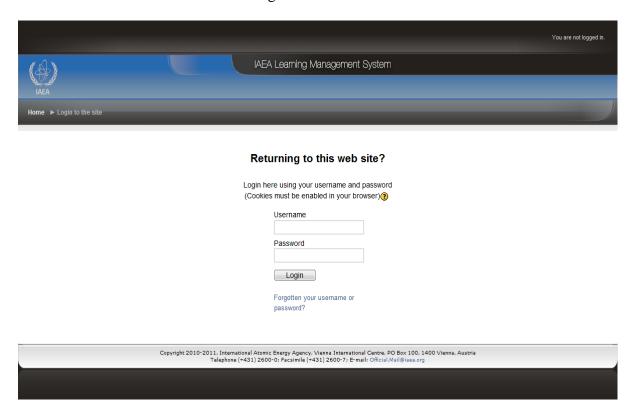
In order to register, one needs to contact the system administrator and request registration. In order to obtain registration, it is required to submit his/her First Name, Last Name, City and Country by email.

6.2. How do I log in to the site?

Once the system administrator has informed you by email that you may log in to the site, open a web browser and access LMS through CLP4NET. You can access LMS by clicking on it on the CLP4NET main page :

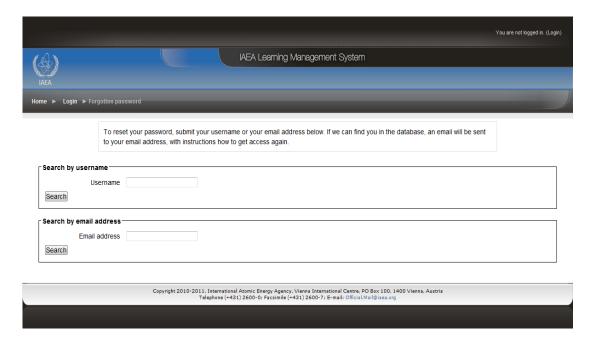


The screen will then show the following:



Your **Username** is always your email address as provided to the system administrator.

Your **Password** can be obtained by clicking on *Forgotten your username or password?* below the Login button on the same login screen and entering your email address (**Username**) in the second box "Search by email address" below:



Your **Password** will be sent to you by the system administrator via Email.. Once the password is obtained you will be able to login to the system by inputting your **Username** and **Password** on the initial login page.

6.3. How do I change my password?

Log in to the site using the username and the password provided by the system administrator.

Once inside the site, from the Settings menu on the left click on Change password.



A dialogue box appears in which you must enter the password provided by the system administrator **once** and the new password you would like to use from now on **twice**.

Then click on the Save changes button.

6.4. How do I edit my profile?

It is advisable to edit/upload your profile right after your will log in for the first time. This step will save your time and simplify your communication within the system.

Log in to the site using the username and the password provided by the system administrator.

Once inside, click on *Edit profile* from the *Settings* menu on the left to update your personal information. You can add/modify any type of obligatory data such as name, address, institute etc. and optional data such as, for example, your picture.

When you have finished entering information, click on the *Update profile* button at the bottom of the page.

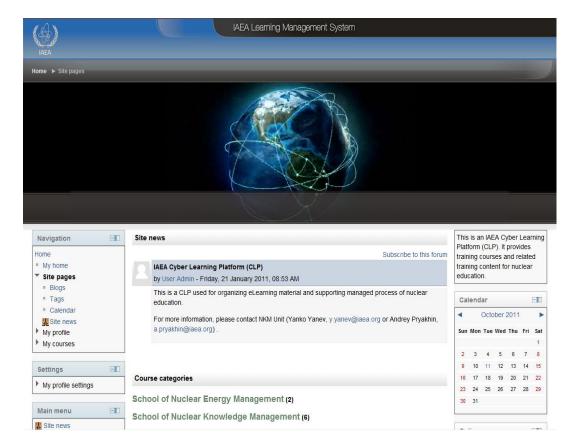
6.5. How do I view my profile?

Once inside, click on your name, which is in the upper right corner, and a window will open with your profile information.

II: Manual for Teachers

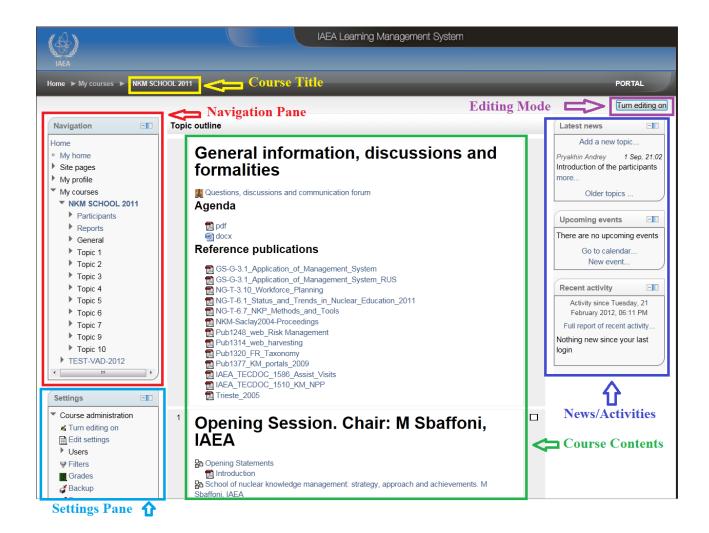
1. Getting started

- 1. Make sure all the *PC and System Requirements* are met before moving on to the next step.
 - 2. Open a web browser and access LMS through CLP4NET and log in to the site/platform as explained earlier.
- 3. Make sure you are logged in. If the screen shows a list of courses that looks like the one below, you are logged in to the site:



- 4. In the upper right you should see You are logged in as [your first name and surname] (logout).
- 5. If were not able to login, carefully double-check your information (username and password). If problems persist, ask for help from support staff or the system administrator.

1.1 Main course page view explanation



2. Course creation and management

2.1. How do I create a course?

Courses are created by the system administrators upon request of the teacher. Students must be enrolled on a particular course.

When creating a course, the system administrator must configure it using a form provided by Moodle where values are set for the following fields:

- Name and description;
- · Course format (weekly, by topic...);
- Number of weeks or topics;
- Dates on which it will be open.

For more detailed information, see:

http://docs.moodle.org/22/en/Create_your_own_course

The teacher sends the course creation information and his or her email address to the system administrator in order to get access to the created course.

Then the teacher provides the system administrator with a list of students giving their first names and surnames, email addresses, etc., and requests that the system administrator give them access to a particular course or allow them to self-enrol.

2.2. How do I grant access to students?

Each student can be enrolled himself/herself independently or this can be done manually by the course teacher. The enrolment method is predefined by the teacher before the course start.

To enrol students in a course, select *Users* from the *Settings* menu in the block to the left of the course and then select *Enrolment methods* under that.

You will then see the following:

- Self-enrolment, in which a student can simply enrol him/herself by clicking on the course name and will then receive an email confirming enrolment;
- Manual enrolment, whereby two lists are displayed. On the left are the possible students and on the right are those you will include in the course.

Select the role you wish to assign a student from the *Assign role* push button list, the date when the role becomes active in *Starting from*, and whether this is for a limited or unlimited period in *Enrolment duration*.

Click on the student's name in the list on the right and then click on the *Add* button, and the name will move to the list on the left and the student will be enrolled on the course.

If you have clicked on the wrong user, select his/her name from the list on the left and click on the *Remove* button to return that user's name to the list on the right with no assigned role for the course.

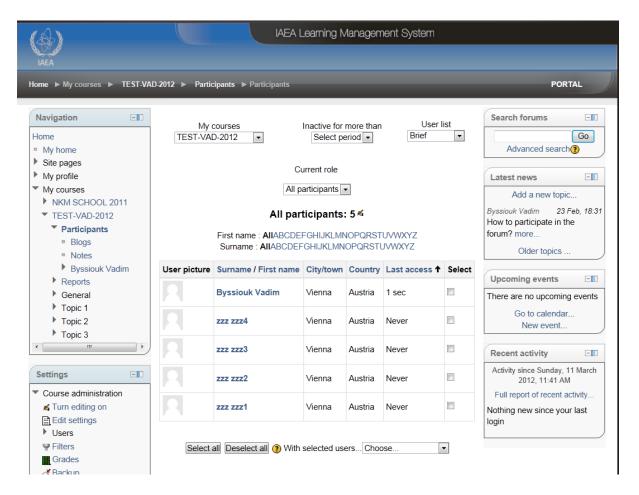
2.3. How do I view student profiles?

Enter a particular course by clicking on the relevant course name.

In the block to the left you can see a menu called Navigation as shown below.



Click on *Participants* under the course for which you wish to see the list of students, and the entire list of students can be displayed, as shown below:



This screen gives you the following options:

The option *Inactive for more than* allows you to select a range of days of inactivity and see which students were not active on the site during that period;

The option *Current role* allows you to select a role and display the students assigned that role;

The option *User list* allows a more detailed view of the student list to be displayed;

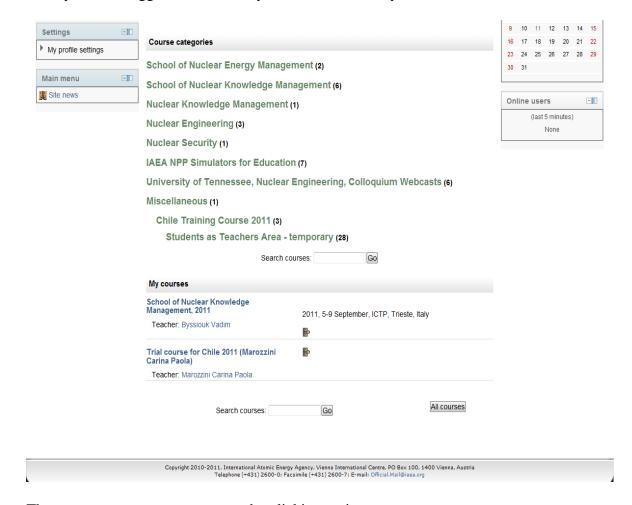
Clicking on a student's name displays his or her entire profile.

If the list of students is longer than one page, you can move to the next page by clicking on the next number or on the number of the page to which you wish to go. You can also choose a letter of the alphabet to display a list of students whose first name or surname begins with that letter.

You can see a list of students on your other courses by selecting the course under *My courses* on the same student screen.

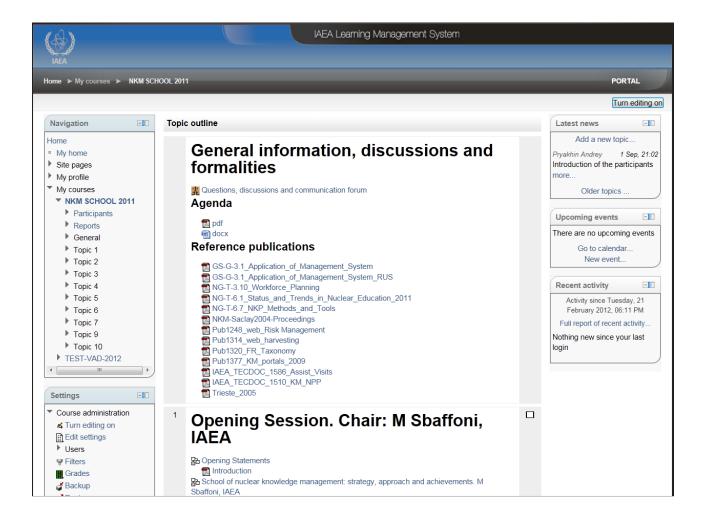
2.4. How do I add content to a course?

Once you have logged in to the site you will see a list of your courses, as shown below:



Then you must access your course by clicking on its name.

The course is displayed without the editing options, as shown below:



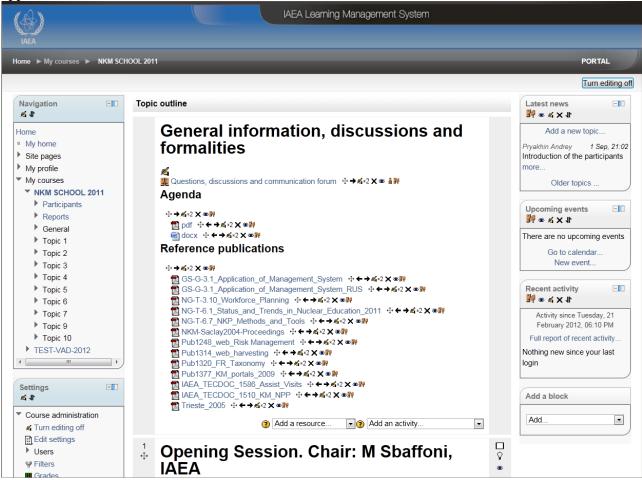
There are two blocks with options (one on the right and one on the left) and in the centre of the screen are the course sections to be used (edited) to upload the course content and present the course activities.

The menus in the block on the left can be minimized to make more room for the central block, which is the course itself.

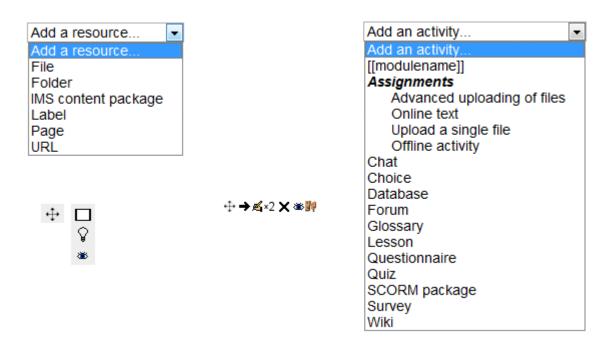
To start adding content, click on the *Turn editing on* button in the upper right or in the *Settings* menu in the block on the left. This function enables you to add/edit/delete/update contents of the course.

The button switches to Turn editing off and the screen has the following

appearance:



You can work from a list of resources and a list of activities that can be added, and with icons or pictograms with which you can perform actions on each element you are going to add. Resources and activities explanation is provided in the corresponding subchapters down below



Here is the list of editing icons/pictograms:

Move to the right. When clicked, a new left-pointing arrow icon appears for moving in the opposite direction.
 Move to a different part of the course, either in the same block or a different one.
 Edit the item.
 Delete the resource. A dialogue box appears asking for confirmation. Note: Once deleted, an item cannot be recovered.
 Indicates whether the resource is visible to students. Clicking on it changes the icon to one for making the resource invisible to students (closed eye). By clicking on the eye you can toggle from one to the other.
 Clicking on this icon allows you to see only the block with the icon on it.

While you are adding content to a course, you can prevent students from seeing it while you are working.

To do this, select *Edit settings* from the *Settings* menu in the block to the left of the course and then select *This course is not available to students* from the *Availability* dropdown list.

2.5. Content allowed for uploading

Course content material must be developed before being uploaded to the site in order to avoid having to change document versions and to ensure the clarity and organization of the uploaded content.

Creating content material is the task of a team comprising: teachers, who provide the knowledge for the course to be developed; designers, who create an individual look for the course

without abandoning the institutional format; programmers, who convert the material into the format required by the site, search out tools for the creation of specific content such as lean video, image converters, etc.; and editors, who adapt the texts to the course's target audience, correct grammar and spelling, etc.

Uploaded files can include text, images, videos, SCORM and IMS content packages and sound files. All these are limited to a maximum size for uploading.

2.6. Resources

"Moodle offers a set of different resources that allow you to add any content to your course.

A **Text page** is a simple page written using plain text. Text pages are not pretty, but they can serve as a place to put some information. If you want more options for your page, you can add a **Web page** and make use of Moodle's integrated WYSIWYG editor.

If the resource already exists in electronic form, you may want to **Link to a file or a Web** or simply display the complete contents of a **File directory** in your course to give your students access to it. If you have an **IMS package**, you can add it to the course.

Use a Label to include instructions or information for any section of the course."

http://docs.moodle.org/22/en/Main_page

The essential resources types and its functions are described in the following subchapters.

2.6.1. Labels

A label is used not to link to another place but to place a short text in a block and you can organize the content.

A label is a resource and to add a resource you must be in edit mode (*Turn editing on.*)

From the list of resources select *Label*.

For this resource, all you need to do is enter the text in the box:



You can make changes to the text, centre it, change its size, etc. by using the icons in the toolbar at the top of the box.

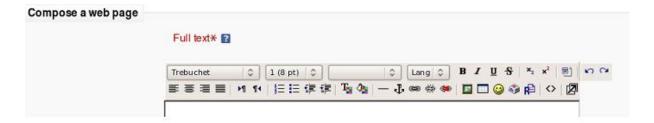
When you have finished, click on Save and return to course at the bottom of the page.

2.6.2. Pages

A page can be a text page, which is a plain page without formatting and is the simplest form in which to introduce content.

If you wish to introduce formatted content, use the editor's options to change font type, colour and size and to add images and multimedia, etc.

As you can see in the figure below, a great variety of formats can be applied, including changing the font of texts and inserting links to webpages, images, tables, emoticons, symbols and videos:

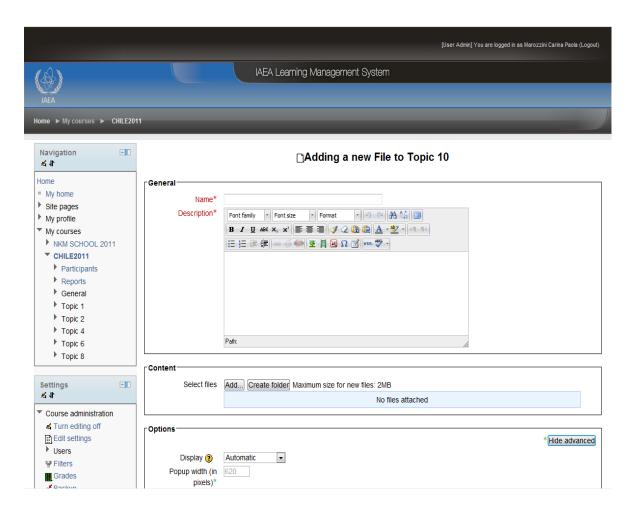


When you have finished, click on Save and return to course at the bottom of the page.

2.6.3. Linking to a file

To link to a file, select the File resource.

The screen that appears is as shown below:

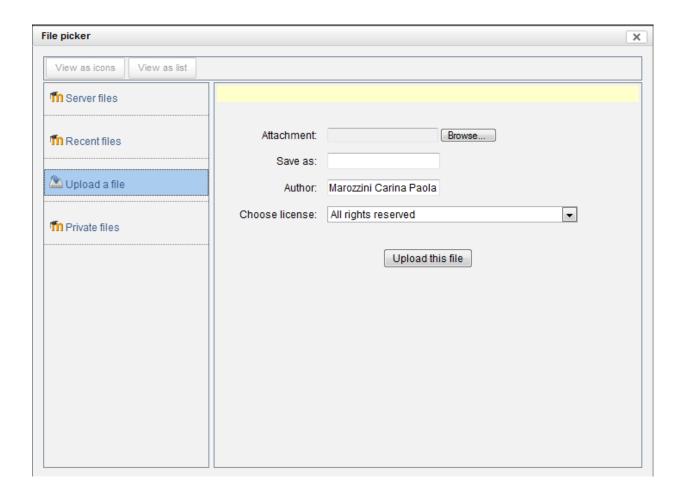


To link to a file, the file must be uploaded to the site. If the file you wish to link to has not yet been uploaded, you must upload it.

Let us look at the case where you must upload the file to the site.

Give the resource a name, add a comment if you wish and click on the *Add* button. You can create a folder before uploading the file by using the *Create folder* button. Please note that in order to let the desired file be downloaded later on more comfortably please select *Force Download* from the *Display* drop down menu. This will enable the requested file be downloaded in a separate window.

The following window open:



Click on *Upload a file* from the menu on the left.

Use the *Browse* button to locate the file on your computer and then use the *Upload this file* button to upload the file to the site.

The system administrator selects a maximum size setting for files to be uploaded to the site (2MB). Please take note that this value can be increased by selecting *Edit settings* from the *Settings* menu in the block to the left of the course and choosing a larger value from the *Maximum upload size* dropdown list.

If desired, you can give the file a new name in *Save as* or assign it a license under *Choose license*.

Then click on the *Upload a file* button to upload the file.

The main screen for this resource now shows the file under *Content*.

You can fill in other optional fields, for instance to specify whether you want the file to open in the same or a new window, whether you can navigate in it or not, etc.

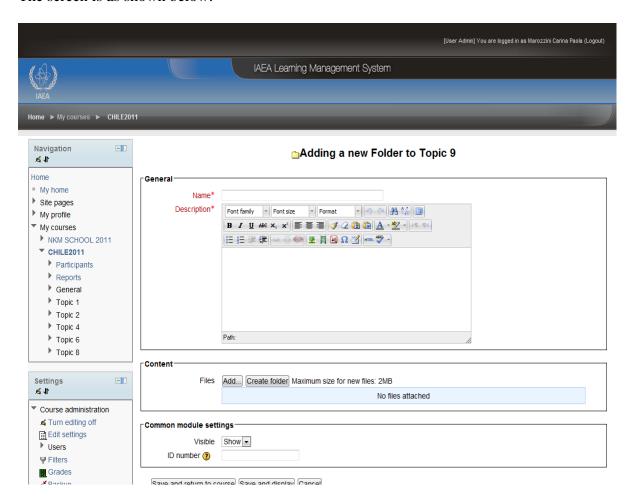
It is recommended that you use the default options, since they usually work best.

When you have finished, click on Save and return to course at the bottom of the page.

2.6.4. Folders

You can add a *Folder* resource to give students access to a collection of files.

The screen is as shown below:



You are required to give the resource a name and a description in the "General" box.

You then upload the files using the *Add* button in the same way as explained above for a *File* resource.

When you have finished, click on Save and return to course at the bottom of the page.

2.6.5. Linking to a website

To link to a website, select the *URL* resource.

Then enter a name and description, which are required information, and in *Content, External URL* enter the address of the website (URL) you wish to embed or else locate the address using the *Choose a link* button.

2.6.6. Example: How to insert video

For video located on a website, you have three options:

1. Use the *URL* resource.

Give the resource a name, add a comment if you wish, and then enter the Internet address (URL) in the box labelled *External URL*.

2. Use the *Page* resource.

First, you must obtain the code for the video you wish to embed.

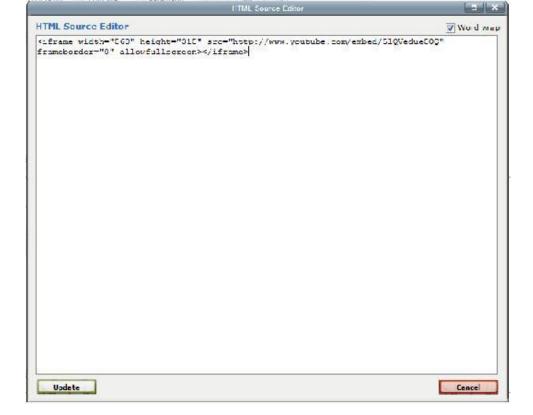
When you have done that, add the resource to create a page.

Give the resource a name and a description and click on the icon for editing HTML code in the *Page Content* section.



A window opens into which you paste the video code you copied. Then click on the *Update* button.

The window will look like the one below:



When you have finished, click on Save and return to course at the bottom of the page.

3. Embed the video in the main body of the section.

To do this, edit the section using the editing icon and follow the directions given under number 2 above for creating a web page, since the process for embedding video code is identical.

2.6.7. Another example: Uploading an image

For an image located on a website, you have the same options as for video.

If, however, you have the image in a file you can upload it to the site and place it in a section using the icon for adding images:



2.6.8. How do I delete a resource?

If you wish to delete a resource, click on the delete icon which appears next to the resource:



"You will receive with a request for confirmation:

Are you absolutely sure you want to completely delete Resource 'Prueba Otro PDF' ?

Click Yes to delete the item.

2.7. Activities:

"There are a number of interactive learning activity modules that you may add to your course. Student work can be submitted and scored by teachers using the Assignments or Workshops modules. They can be scored automatically using Quizzes, or Hot Potato exercises can be added.

Communication may take place via **Chats** and **Forums** for discussion and **Consultations** for getting one's preferred options. Students can work collaboratively by using **Wikis** and they can also use **Blogs**.

Content can be presented and managed using **Lessons** and **SCORM** activities. Teachers can create **Glossaries** of keywords related to the course and the option exists to allow students to do the same.

Surveys and Databases are very useful activities in any course."

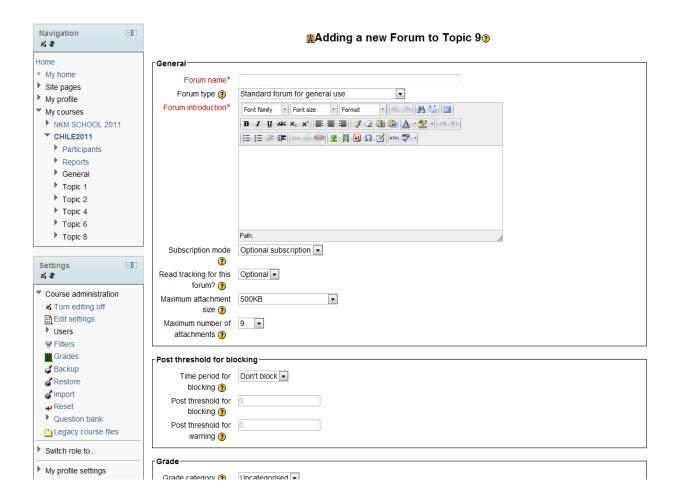
http://docs.moodle.org/22/en/Activities

The essential activities types and its functions are described in the following subchapters.

2.7.1. Forum

A forum is an activity and to add an activity you must be in edit mode (*Turn editing on.*) From the list of activities select *Forum*.

The screen displayed is as shown below:



Different kinds of forum are available:

General forum, like the one created by default when the course is created.

Learning forums, which are created in the course content sections.

The basic information for a forum includes the following (* indicates required information):

- **Forum name*:** Name of the forum.
- **Forum type:** The following types are possible:
 - A single simple discussion: This is used to discuss a specific topic set by the teacher. There is only one topic and one discussion thread.
 - Standard forum for general use: This is used for discussions of more general and open-ended topics and in which topics arise over the course of the forum. It allows multiple discussions without restriction and is the most common type.
 - Each person posts one discussion: This is like a general forum, except that each user (student or teacher) can start only one new discussion.
 - Q and A forum: This requires that a student respond to the question in order to be able to see other students' replies. After the initial reply, students can see and respond

to other students' replies. Questions are added by clicking on the *Add a new question* button.

• Standard forum displayed in a blog-like format: This a forum for general use but in the format of a blog.

The forums screen looks the same for students and teachers except that the teacher, under the heading *Add* (*Add a block*) has a list of additional items that the teacher can use and has the ability to edit/reconfigure the forum.

- **Forum introduction*:** This is a description of the main features of the forum: its objectives, participation time, whether participation is optional or required, etc.
- Subscription mode: The options are forced subscription, optional subscription or no subscription. A person who subscribes to a forum will receive email copies of every post made in that forum. One subscription option allows a student to subscribe and unsubscribe at will, while another forces the student to remain subscribed.
- **Read tracking for this forum:** This marks a user's read and unread messages and can be set to allow the student to decide whether or not to activate it by selection *Optional* from the drop-down menu.
- Attachment: Forum posts can have documents attached to them. You can set the maximum size for each attachment using *Maximum attachment size* and the maximum number of attachments using *Maximum number of attachments*.
- **Post threshold for blocking:** This can be used to set the number of messages that one student can send within a specified period of time. Setting *Post threshold for blocking* to 0 disables blocking. If blocking is disabled, warnings are automatically disabled as well.

Time period for blocking is the period during which a student cannot send more than a specified number of messages. Selecting *Don't block* disables blocking.

Post threshold for warning is used to set the number of messages students can send before receiving a warning that they will be blocked from sending messages. Setting it to 0 disables the warnings.

• Ratings: Moodle offers 5 ways to aggregate ratings automatically to calculate a final forum grade for the gradebook: Average of ratings, Maximum rating, Minimum rating, Count of ratings and Sum of ratings.

While the default setting allows only teachers to rate forum posts, a forum may be configured to allow students to rate each other as well.

- **Group mode:** There are three options:
 - No groups;
 - Separate groups (members of a group can see their own group but not other groups);
 - Visible groups (members work within their group but can also see other groups).

This makes it possible to create separate forums for different groups, although forums of the type *Single simple discussion* cannot be set up with separate groups.

When you have finished, click on Save and return to course at the bottom of the page.

Closing forum

To close a forum, enter edit mode and choose *Forum administration* from the *Settings* menu in the block on the left. Under that choose *Permissions* and then click on *Prevent icon* (X) for the student role for the capabilities *Start new discussions* and *Reply to posts*.

Other features:

- The student's profile photo appears in each post.
- The author of a post can make changes to it if desired by clicking on *Edit*. This option is available for 30 minutes after a post is published; after that the post can no longer be changed.
- Discussions can be viewed in nested form, in threaded form, with the most recent posts first or with oldest posts first.
- The author of a post can choose to have a copy sent to his or her own email address.

2.7.2. Quizzes

A quiz has two components: a body and a pool of questions.

When you create the body of a quiz you are creating a container for the questions and defining the rules for interacting with the quiz.

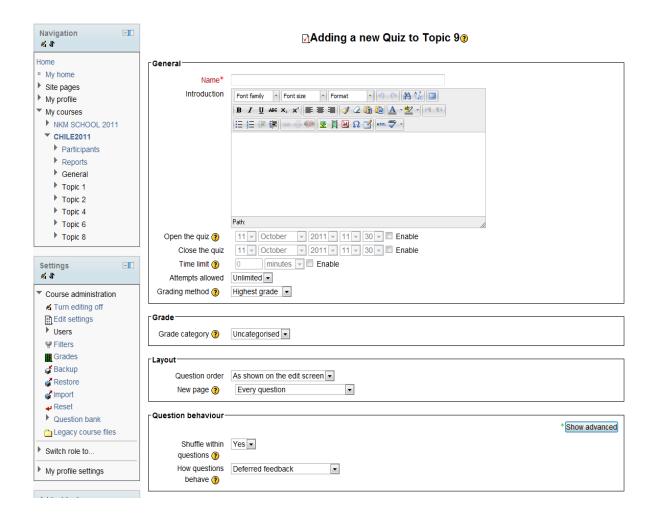
You can create a general pool of questions for use in all course activities, or you can create questions for use in one particular quiz only.

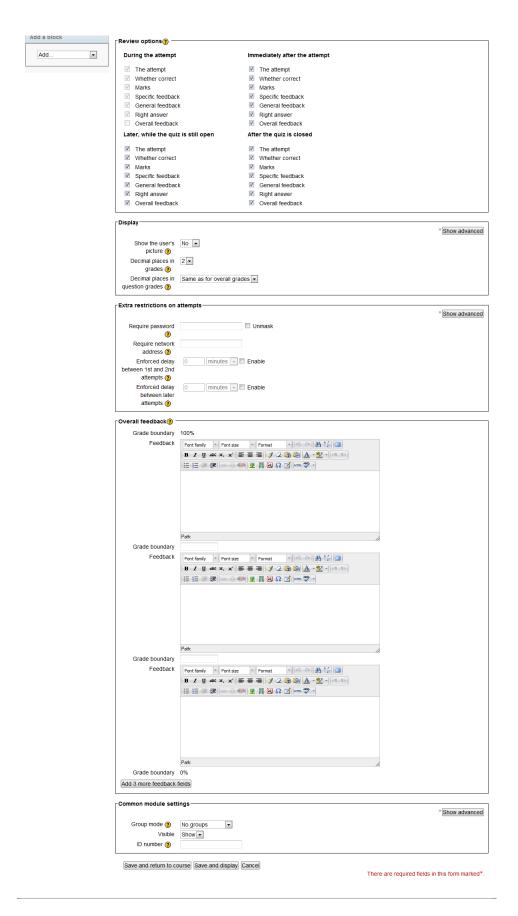
Let us look at how to create questions for use in one particular quiz only.

To create a question bank for the entire course, refer to:

http://docs.moodle.org/20/en/Question_bank

From the activities list select *Quiz* and be in edit mode (*Turn editing on.*). The following screen is displayed:





You are required to enter a name. The description includes all instructions for taking the quiz, such as the number of attempts allowed, whether wrong answers are penalized, etc. Then start setting the rules for the quiz:

- Open the quiz and Close the quiz: Here you can enter the time and date as of which the quiz can be seen and the time and date by which it must be completed. You must check the *Enable* box in order to enter times and dates.
- **Time limit (minutes):** Instead of a completion date you can specify the time in minutes. You must check the *Enable* box in order to enter the number of minutes.
 - Attempts allowed: This determines the number of attempts a student is allowed to make.
- **Grading method:** If you allow the student to make multiple attempts, you must indicate which score will be recorded. The choices are *Highest grade*, *First attempt*, *Last attempt* or *Average grade*.
- Layout: You can set the number of questions per page and specify under *Question order* whether or not the questions will be shuffled randomly in each quiz displayed.
- Each attempt builds on the last: If you allow students to make multiple attempts, by setting this to *Yes* you can allow them to see how they answered the last time.
- How questions behave: You can allow students to check the answer to each question as they go along by choosing *Adaptive mode*, or require that they wait until they have finished the entire quiz by choosing *Deferred feedback*. In this way you can allow students to make a number of attempts at each question. In addition, you can specify whether or not a penalty will be deducted for failed attempts by choosing between *Adaptive mode* and *Adaptive mode* (no penalties).
- **Review options:** Here you can choose whether students are shown the answers along with their scores, the correct answers and general or specific feedback. You may also specify when these are shown: immediately following an attempt, later while further attempts can still be made, or after the quiz has been closed.
- **Display:** Options to display or not display the user's photo, to specify the number of decimal places in the grade, etc.
 - Extra restrictions on attempts has the following settings:
 - **Require password:** A password can be added to the quiz.
 - **Require network address:** Access is restricted to a certain range of IP addresses.
 - **Browser security:** A new window will open that does not allow navigation to other sites.
 - Overall feedback: This is what is shown to students once they have completed the quiz.

For example, if for a score of 100% the feedback is "Excellent" and for a score of 80% the feedback is "Very good", students with scores between 80% and 100% will see the "Excellent" message.

• Common module settings: Settings for working in groups.

When you are finished, click on Save and return to course at the bottom of the page.

The quiz is scored automatically and can be rescored if the questions are changed.

2.7.2.1. Adding guestions

Click on the name of the quiz and then, from the *Settings* menu choose *Quiz administration*. Under that, choose *Question bank* and the following screen will appear:

Question bank

Select a category: Default for Final test (43) v Also show questions from sub-categories Also show old questions Show question text in the question list The default category for questions shared in context 'Final test' Create a new question ... Page: 1 2 3 (Next) Last modified by Created by Question First name / Surna First name / Surna ☐ Q38 - What are the main benefits of applying knowledge manage ☐ Q 1 × User Admin □ Q39 - Give at least three examples of methods/tools/approaches △ □ ▼ User Admin □ Image: Q20 - During this meeting we discussed three types of knowledge Q Q Image: Q20 - During this meeting we discussed three types of knowledge Q Q Image: Q20 - During this meeting we discussed three types of knowledge Q Q Image: Q20 - During this meeting we discussed three types of knowledge Q Q Image: Q20 - During this meeting we discussed three types of knowledge Q Q Image: Q20 - During this meeting we discussed three types of knowledge Q Q Image: Q20 - During this meeting we discussed three types of knowledge Q Q Image: Q20 - During this meeting we discussed three types of knowledge Q Q Image: Q20 - During this meeting we discussed three types of knowledge Q Q Image: Q20 - During this meeting we discussed three types of knowledge Q Q Image: Q20 - During this meeting we discussed three types of knowledge Q Q Image: Q20 - During three types of kno ■ I Q21 - The following phrase "The flight departs from Vienna at 8 a Q4 X User Admin Q22 - What does MOODLE stand for □ Land Company Co E Q25 - Who were typically the owners of nuclear information in 19€ ✓ 🕻 🔍 🛊 🗙 User Admin ■ Q26 - A comprehensive access structure to the resources which < < \(\) \ X User Admin</p> ■ Q28 - Who within the organization should emphasize the importar Q4 Tx User Admin ■ I Q29 - Formal training can develop knowledge but know-how and ≼ Q IN X User Admin Q31 - The objective of an IAEA NKM Assist Visit is to 🚄 🔍 🌓 🗙 User Admin □ In Q33 - The best approach to ensure that knowledge workers (expe < □ 1 x User Admin</p> Page: 1 2 3 (Next) Show all 43 With selected: Delete Move to >> Default for Final test (43)

On the screen you see:

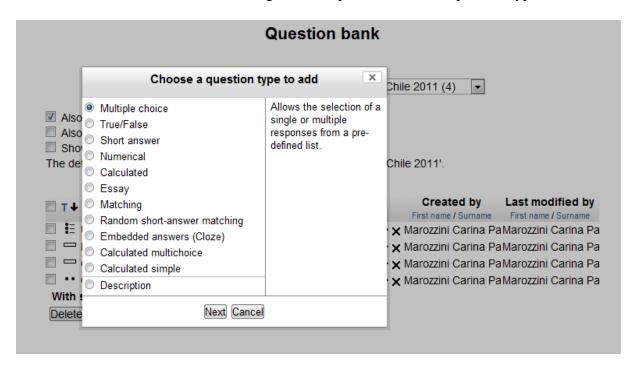
- A dropdown list of categories to select from, which may contain questions created at another time or may be empty;
- Three options for also displaying questions from subcategories or questions created previously;
- A Create a new question button;
- Below the button, the list of quiz questions, which is initially empty. In the figure above four questions can be seen.

This manual shows you how to create questions which are specific to your quiz and then how to select from the categories list the one which has the name of the quiz you created.

By default, the category selected in *Category* is the one which is for your course.

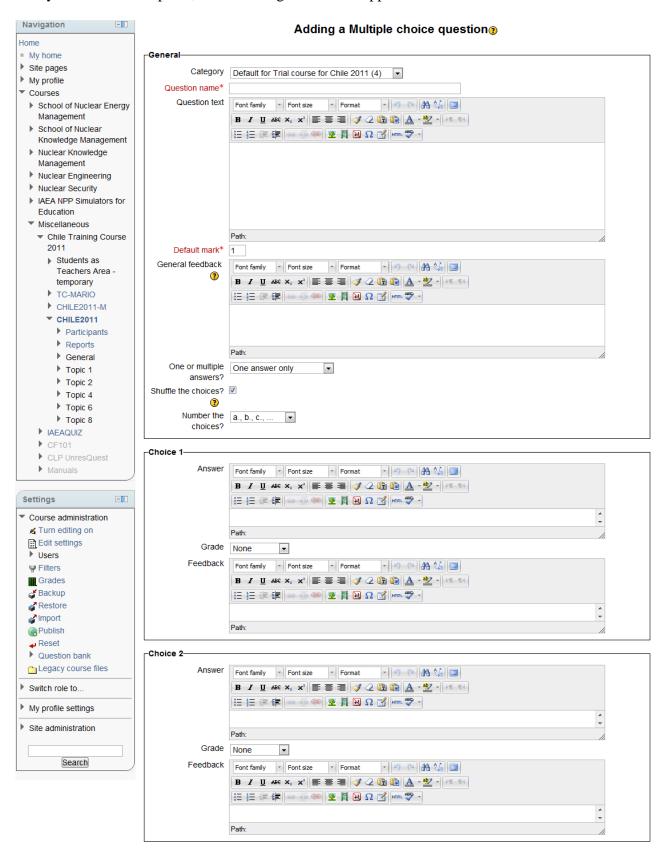
Click on the *Create a new question* button. A list of question TYPES will appear. Choose the type you wish to create.

In this version of Moodle, the window gives an explanation of each question type.



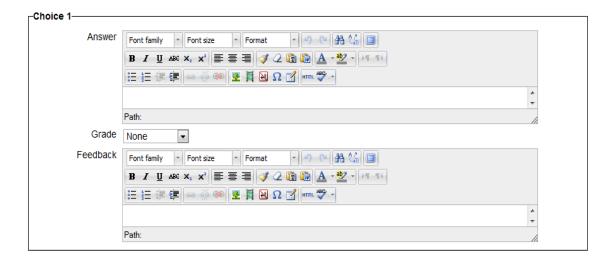
• Multiple choice: Questions with a choice of one or more possible answers.

When you choose this option, the following screen will appear:



Proceed as follows:

- Select the category under which you wish to save the question;
- Give the question a name to distinguish it from others;
- Enter the question text;
- Indicate the mark for the question;
- Enter a general feedback text that does not depend on the answer;
- Indicate whether there is one or multiple correct answers;
- Choose whether or not you want the possible answers to be shuffled;
- Choose whether you want the answers to be labelled with numbers (1. ... 2. ... 3. ...), letters (a. ... b. ... c. ...) or not at all;
- Set a value for the penalty, if you want there to be one;
- Give at least **THREE** answer choices, each with a grade and feedback. Each answer has a box on the screen like the one below:



The grade is the percentage of the total points possible for the question.

The percentage can be chosen to be positive or negative. A negative percentage is applied to wrong answers so as to prevent students from guessing at random.

For example, if a multiple-choice question with two correct answers is worth 10 points, choosing only one of the two correct answers would get you 50% of the possible points, i.e., 5 out of 10.

• Finally, you can also give feedback for correct answers, partially correct answers or incorrect answers. This is used especially for questions with multiple correct answers in order to give better feedback on students' choices.

When you have finished, click on the Save changes button.

Remember that the feedback will be seen by students if you set the *Review options* for the quiz.

• **True/false:** This is a question with only two possible answers: True or False.

• **Short answer:** Students type a short phrase or a word which is compared with the model possible answers created by the teacher.

To create a question of this type proceed as follows:

- Select the category under which you wish to save the question;
- Give the question a name to distinguish it from others;
- Enter the question text;
- Indicate the mark for the question;
- Set a value for the penalty, if you want there to be one;
- Enter a general feedback text that does not depend on the answer;
- Indicate whether capitalization should be taken into account when comparing the student's answer to the one you enter to determine whether or not it is correct. This will determine, for instance, whether the teacher will accept a student answer of "iaea" as well as "IAEA".
- Give at least **ONE** possible answer. The asterisk character (*) can be used as a wildcard. The first match found will be the one scored.

When you have finished, click on the Save changes button.

• Numerical: Students may only answer with a numerical value.

This type of question can also be used for formulas, if the system administrator has enabled that feature. Special character filters in the editor mode can be used to write the formula correctly.

To create a question of this type,

- Select the category under which you wish to save the question;
- Give the question a name to distinguish it from others;
- Enter the question text;
- Indicate the mark for the question;
- Set a value for the penalty, if you want there to be one;
- Enter a general feedback text that does not depend on the answer;
- Enter a correct answer with a score, along with the acceptable error. For example, if the answer is 5 but you will accept 4 or 6 as correct, the error would be 1.
- If the teacher will accept answers in different units, the unit and unit multiplier can be specified.

When you have finished, click on the *Save changes* button.

• **Matching:** Students see two lists, one with questions and one with answers, and must match a question from one list with an answer from the other.

For more details, see: http://docs.moodle.org/20/en/Matching_question_type

• Random short-answer matching: Same as the last, but the answers in the second list are shuffled.

For more details, see:

http://docs.moodle.org/20/en/Random_Short-Answer_Matching_question_type

- **Description:** This is used to insert text in the middle of the quiz. It is not a type of question.
- Calculated: This is similar to the numerical question type, but it allows you to create individualized numerical questions by using placeholders (for example {x} and {y}) which are given new random values each time the question is accessed.

For example, if the problem you want to create is "Calculate the area of a rectangle", you can create a question using two placeholders, one for the length and one for the height. In *Correct answer formula* you would then enter "= {base} * {height}.

When a student takes the test, Moodle will pick random values for the length and the height and evaluate the student's answer based on the result from the *Correct answer formula*.

Don't forget to include the placeholders in the body of the question that appear in the formula. That way, students can see the random values picked by the site and can calculate the correct answer.

• **Essay:** A written essay. This type of question is graded manually.

Students are presented with a text box of several lines into which they may type a free-response text of unlimited size. The size of the text area, which can also be scrolled, is specified in *Input box size*.

It is possible to allow the attaching files.

It is not necessary to enter possible answers for this type of question.

• **Embedded answers (Cloze):** This is a question containing more than one type of question, for example a multiple choice, a short-answer and a numerical question.

For more detailed information, see:

http://docs.moodle.org/20/en/Embedded_Answers_(Cloze)_question_type

Once you have created questions, you can move them from one category to another.

To do this, select the category containing the question you wish to move. Select the individual question and under *With selected:* choose the quiz category from the dropdown list and click on the *Move>>* button.

To add questions to the quiz, from the *Settings* menu select *Quiz administration* and click on *Edit quiz*.

You can add a new question or one from those already in the question bank.

Click on the *Add question* button. To create a new question, select the question type, click on the *Next* button and configure it.

To add a question from the question bank, select the category containing the question, select the individual question and click on *Add to quiz*.

You can also create random questions by using the Add a random question button.

To add questions to the quiz you need to delete all previous attempts, otherwise the buttons for adding questions will not be enabled.

When you have finished, click on Save.

In quiz editing mode you can also delete questions you no longer want to have appear in the quiz. For this, it is necessary to delete all attempts made to date.

2.7.2.2. You can see the students' answers

Once students start to take the quiz, you will have a lot of data available. Under the name of the quiz in the *Navigation* menu, click on *Results*, and you can see the number of quizzes that students have completed.

You can make certain page settings, for example to view only students who have not yet made any attempts or view all students, etc.

The table of results can be downloaded in various formats: OpenDocument Spreadsheet (ODS), Excel, tab-separated text, comma-separated text or XHTML.

If you want to see the marks for each question, check the *Show mark details* box and then click on the *Go* button.

Under Results you can choose Grades, Responses, Statistics and Manual grading to display the results in different ways.

Manual grading is for grading essay questions.

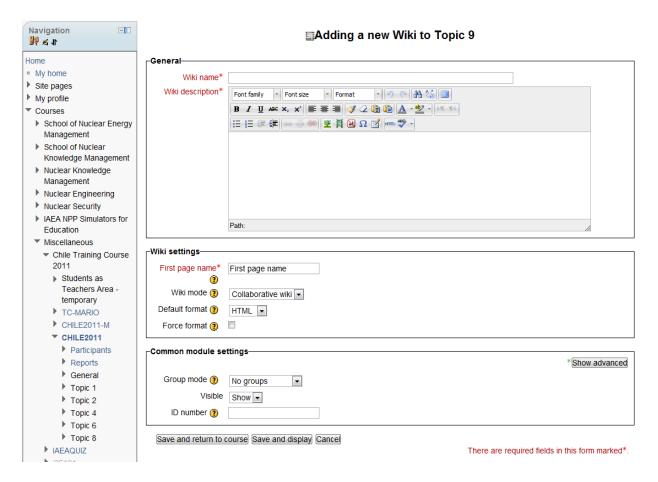
Below each student's name tag/button, there is a link called *Review attempt* which you can use to review that student's answers.

2.7.3. Wikis

A wiki makes it possible to create documents collectively in a simple mark-up language using a web browser.

Moodle's Wiki module allows students to work together on web pages, adding, expanding or editing their content.

To create a wiki, log in to the site in edit mode and from the activities list select *Wiki*. The following screen will appear:



Fill in the name, as it will appear in the course and on which the students will click, enter a description and choose under *Wiki mode* whether there is to be a single wiki for all students or one for each individual student.

These options are valid if the *Group mode* is set to *No groups*.

The remaining information can be left blank. When you have finished, click on the *Save and return to the course* button.

2.7.3.1. Insert content into the wiki

Click on the name of the wiki and the content editing screen appears with a menu of tabs.

Under the first tab you enter the content of the first page. It is recommended to have the content ready in advance in a plain text file and copy and paste it in.

Note that in this content what you expect the students to develop further must be enclosed in square brackets.

Let us take by way of example the topic of social networks.

On the first page insert the following content:

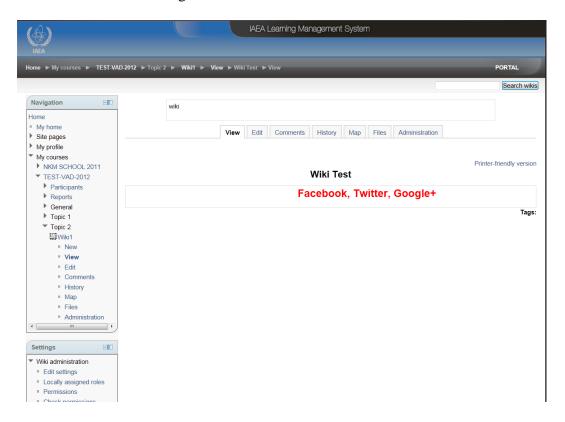
The leading social networks at present are Facebook, Twitter and Google+.

If you expect students to develop content around each of these, you must enter the text as follows:

The leading social networks at present are [[Facebook]], [[Twitter]] and [[Google+]].

When you have finished creating the first page of the wiki, save it.

You will see the following:



Under the *Edit* tab you can make changes to the content you have already entered.

Under the *History* tab you can see the history of the creation of the wiki's content, who contributed, which key words they included for development, when they created it, etc.

By clicking on the *Compare selected* button, you can see the changes that were made between the pages selected (green indicates text that was added).

Wiki colaborativa

Created: Saturday, 1 October 2011, 04:21 PM by carina.marozzini@cab.cnea.gov.ar

Diff?	Version	User	Modified	
•	5	Marozzini Carina Paola	07:41 PM	1 October 2011
• •	4	Marozzini Carina Paola	04:36 PM	
0 0	3	Marozzini Carina Paola	04:35 PM	
0 0	2	Marozzini Carina Paola	04:29 PM	
0 0	1	Marozzini Carina Paola	04:21 PM	

Compare selected

Under the *Map* tab you have a menu called *Map menu* to navigate using the various options available and to view specific locations in the wiki, such as the site map, new pages, orphaned pages (pages left without links), updated pages, the page index, etc.

Other features:

- Any student can edit content added by other students.
- Any student can add words in double brackets to create new pages.
- To avoid getting lost navigating the wiki, it is a good idea not to make the content many layers deep.

2.8. How does one evaluate students?

2.8.1. Grades

Many activities in Moodle, including for example forums and quizzes, can be graded. Grades can be numerical values or words/phrases on a scale.

To see the grades, click on *Grade* from the *Settings* menu in the block to the left of the course.

The screen will display a list of all students, their grades for each item and each student's overall grade, as shown below:



You can sort the list of students by first or last name by clicking on *First name / Surname* in the student column. The gradebook is initially sorted by last name.

The name of each student links to his or her profile and by clicking on the icon next to the student's name you can see his or her grades.

This is useful when a student is looking at the gradebook with the teacher and the privacy of the other students needs to be protected.

To the right of all the graded items there is a column showing the total. There are two arrows to the right of the heading *Course total* that allow you to sort the totals in descending or ascending order, respectively.

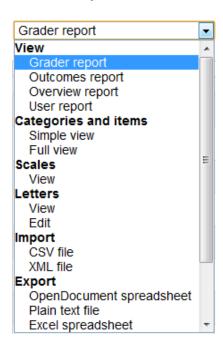
Clarification of terms used in the grades module:

The two main concepts for grading in Moodle are:

- Grades: the scores given to students in a Moodle course;
- **Gradebook:** the place where these grades are stored. Modules push their grades to the gradebook, but the gradebook does not push anything back to the modules.

The gradebook offers administrators and teachers tools for changing the ways in which grades are calculated, aggregated and displayed.

In addition, you can select an action from the following list:



View

This allows teacher to view the grades for an entire course or for any individual student.

• Categories and items

Categories are groups of graded activities which you can manipulate as a group. This is useful when you have many activities in a course.

There is no depth limit for the nesting of categories (a category can belong to another category). However, each gradable item can belong to only one category.

Scales

You can create a grading scale using letters or words.

To create a new scale, click on the Add a new scale button.

You must give the scale a name by filling in the *Name* box, and in the *Scale* box you enter each of the values separated by commas.

Once you have created the scale you can use it in any activity that can be graded, except for a quiz. Quizzes can only be graded numerically.

• Letters

In a letter scale each letter represents a range of values. The site has a list of letters that you can edit and overwrite.

• Import

You can import a list of grades from an XML file or a comma-separated or tab-separated text file.

• Export

You can export grades as a plain text file or OpenDocument or Excel spreadsheet.

2.8.2. Reports

When you click on *Reports* under the name of a course in the *Navigation* menu in the block to the left of the course, a screen will be displayed from which you can obtain information on an activity or a log of activities done by students and teachers in the course.

Choose which logs you want to see:

	Trial course for Chile 2011 (Marozzini Carina Paola)			
	All participants	▼ Today, 11 October 2011 ▼		
All activiti	es	▼ All actions ▼ Display on page	•	
		Get these logs		

Or watch current activity:

Live logs from the past hour

Activity report

Participation report

Statistics is not currently enabled

The choices you see under the title *Choose which logs you want to see* allow you to create a detailed report which can be displayed on the current page or downloaded as a plain text file or as an OpenDocument or Excel spreadsheet.

The choices under the heading *Or watch current activity* offer less detailed reports which allow you to see current activity in the course.

Live logs from the past hour gives you a report showing all participants and all their actions over the past hour.

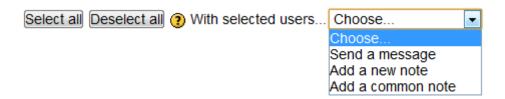
Activity report displays a list of activities and the number of times they were viewed without showing which student viewed them.

A *Participation report* allows you to select certain variables you want to see, such as module, period, role and action. This allows you to see whether each participant has participated (Yes or No) in the role, time period and action specified. You can select those who have not participated and send them a message to invite them either to participate or let you know the reason why they were not able to participate in an activity, etc.

2.8.3. How do I send messages to students?

By opening the list of students/participants and clicking on a student's name you can view that student's profile and send him or her a message by clicking on the *Send a message* link.

If you want to send a message to all the students, go to the bottom of the page, click on the *Select all* button to select all the students and from the dropdown list next to the *Deselect all* button select *Send a message*. The buttons are shown below:



2.8.3.1. To view your messages and contacts

In the *Navigation* menu, click on *My profile* and then on *Messages* to display a list of your contacts.

From the contacts list, you can delete a contact, see the message history and send that contact a message by clicking on the name.

In the dropdown list, you can see your contacts, your most recent messages and your unread messages.

In addition, by clicking on *Search* you can search for contacts, whether they are in your courses or not, and search for messages.



By clicking on *Messaging* from the *Settings* menu you can configure your messages by choosing, for example, whether to have an email sent to you or a pop-up appear to let you know that you have received a new message.

2.8.4. How do I view the course as a student sees it?

As a teacher, you see the administration options and the button for editing course content. To see the course from a student's point of view, choose *Switch role to* from the *Settings* menu, and under that choose *Student*.



To return to the teacher role, click on *Return to my normal role* from the same menu.

III: Manual for Students

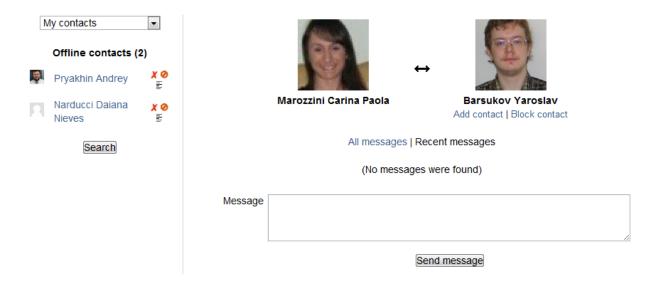
1. How do I take part in a course?

The teacher enrols students in a course after the administrator has granted them access to the site. If self-enrolment has been enabled, students need only click on the name of the course to enrol themselves. If it doesn't work please contact teacher and report the problem.

2. How do I contact the teacher and other students?

In the block on the left, you can see a menu called "Navigation". From the *Navigation* menu select *My courses*. Below the name of the course click on *Participants* to access the course participant list. Click on a student's name to view his or her profile and click on *Send a message* to send him or her a message.

The screen will appear similar to that shown below:



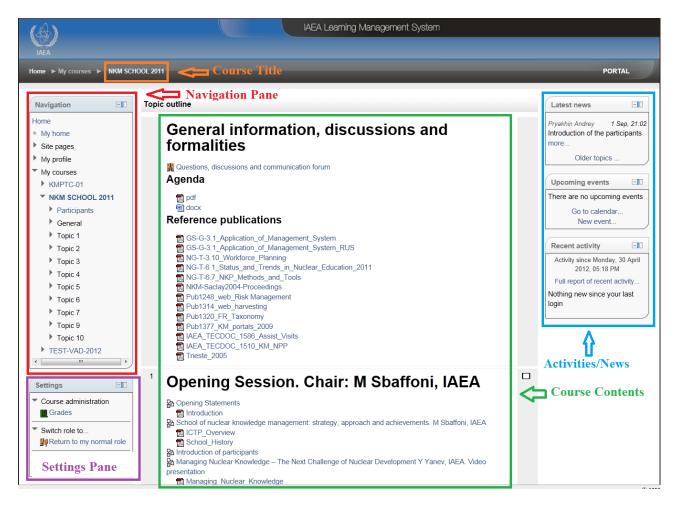
In the *Navigation* menu, click on *My profile* and then on *Messages* to display a list of your contacts.

From the list of contacts, you can delete a contact, see your message history and send a message to a contact by clicking on his or her name.

In the dropdown list, you can see your contacts, your most recent messages, your unread messages and all the course participants, whom you can then add as contacts, etc.

In addition, if you click on *Search* you can search for contacts, whether they are in your courses or not, and you can search for messages.

3. Main Course page view explanation



4. How do I download a file/resource

File type resources can be opened by clicking on the file name.

If the site has the means to read or execute the file, it will open the file directly (or automatically). If not, it will ask for the appropriate software which will open it.

From here choose the action you wish to perform.

If, however, you click on a file containing a photograph, for example, the image will open directly (automatically).

Depending on the configuration chosen by the teacher when uploading the resource, it may open in the same or a new window, force the file to be downloaded, etc.

The students cannot change this setting.

5. How do I participate in a forum?

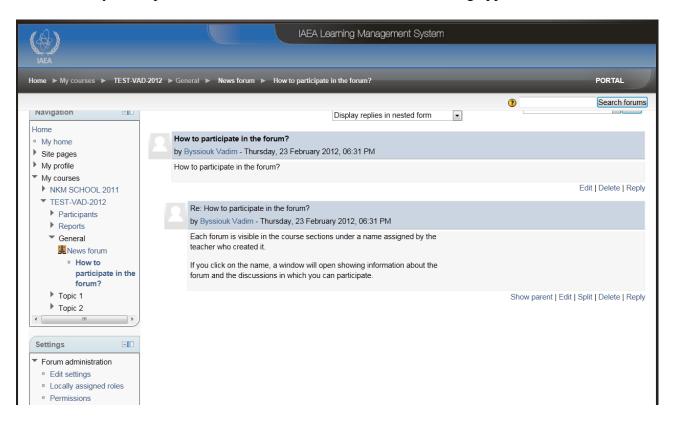
Each forum is visible in the course sections under a name assigned by the teacher who created it.

If you click on the name, a window will open showing information about the forum and the discussions in which you can participate.

Different types of forum are available. The format will vary according to the choices made by the teacher but the basic mechanics are always "raise an issue and discuss it".

The following types are possible:

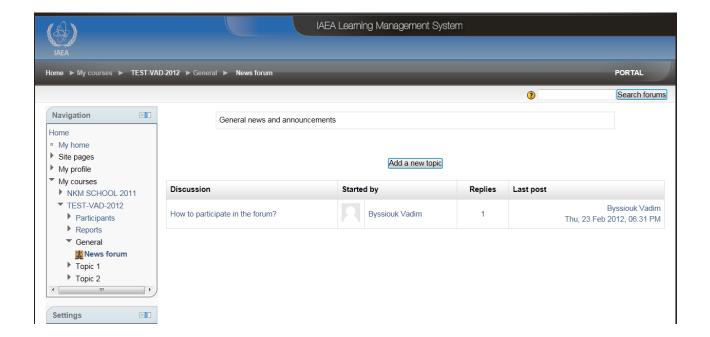
• A single simple discussion: This is used to discuss a specific topic given by the teacher. There is only one topic and one discussion thread. It has the following appearance:



The dropdown list at the top of the forum offers options for displaying the discussion topics and replies.

To reply to a post, click on *Reply* below the post in question, write your reply and click on the *Post to forum* button.

• Standard forum for general use: This is used for discussions of more general and openended topics and in which topics arise over the course of the forum. It allows multiple discussions without restriction and is the most common type. It has the following appearance:



Each student may add discussions to a given topic and also add a new topic for further discussion. These are added to the list of discussions.

To participate in a discussion, click on its name and reply in the same way as for a simple discussion forum. There are also options to choose from for displaying the replies.

The list shows the author of the discussion, the number of replies and the date on which the last post was made.

• Each person posts one discussion: This is similar to a general forum, except that each user may start only one new discussion.



This is the same as the previous type of forum, but each user can create one discussion.

• Q and A forum: This requires that the student respond to the question in order to be able to see other students' replies. After the initial reply, students can see and respond to other students' replies.



A list of questions appears in table form and other students' replies cannot be seen until at least one reply has been made.

To participate in a discussion, click on its name and reply in the same way as for a simple discussion. There are also options to choose from for displaying the replies.

In any type of forum the creator of a post can make changes to it within a given period of time. The default value is 30 minutes.

• Standard forum displayed in a blog-like format: This a forum for general use but in the format of a blog.

The teacher may decide to close the forum after a specified period of time. This means that students may no longer send messages and the forum remains open in read-only mode.

5.1. How do I search a forum?

Using the tool pictured below, you can search for a specific word in the text of posts in all forums of the course:

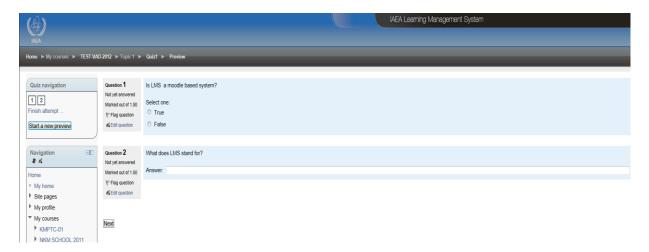


6. How do I take a quiz?

Only the teacher can configure some options of the quiz at the time the quiz is created. Therefore, it is recommendable for the students to check the conditions of the quiz – time restrictions, question types etc. before the quiz will take place.

Search forums

To take a quiz, you must go into the course and click on the name of the quiz to open it and see the questions chosen by the teacher. What you will see on the screen is something like the following:



Here you can see:

- Whether or not there is a *Check* button in each question;
- Whether it is possible to take the quiz only once or more than once;
- Depending on the teacher's settings, when more than one attempt is made a penalty may be applied for wrong answers when calculating the final score;
- The teacher can set the score for wrong answers to 0 or a negative value;
- Whether or not you can receive feedback when you submit answers for scoring;
- Etc.

These details will be explained to you by the teacher responsible for configuring the quiz.

The following buttons will always appear at the end of the quiz:



Use these buttons, respectively, to save the quiz without submitting it, to save the current page and submit it, or to submit the entire quiz and finish.

To see grades and comments for your attempts at the quiz, click on *Course administration*, *Grades* from the *Settings* menu and on the screen you will see all course activities and your grades.

You can now use the same menu to access the options Overview report and User report.

7. How do I use a wiki?

A wiki makes it possible to create documents collectively in a simple mark-up language using a web browser.

Moodle's Wiki module allows students to work together on web pages, adding, expanding or editing their content.

To start adding content to a wiki, click on its name and you will see its first content page.

The words or phrases followed by a question mark are the topics that the teacher is asking the students to develop.

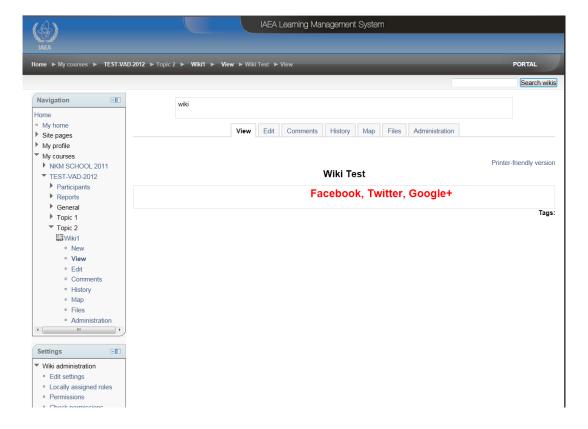
To develop a topic, click on the question mark. A page will open on which you can enter content. If you want this content to include more topics to be developed at the next deeper level, you must surround the word or phrase with TWO pairs of square brackets.

Suppose, for example, that your topic is social networks and you put the following content on the page:

The leading social networks at present are: Facebook, Twitter and Google+.

If you want more content to be developed around each of these three, you must enter the text as follows:

The leading social networks at present are: [[Facebook]], [[Twitter]] and [[Google+]].



When you have finished creating the page, save it. The page will appear as follows:

Under the *Edit* tab you can edit the content you have already entered.

Some pages may be read-only, if the teacher chooses so.

You can also add content to other pages created by other students within the same wiki.

Bibliography

- http://moodle.org/ in English
- Wikipedia
- Using Moodle Teaching with the Popular Open Source Course Management System, 2nd Edition, Jason Cole & Helen Foster

Glossary and acronyms

LMS: Learning Management System.

OpenDocument (ODF): a standard and open file format for the storage of electronic office documents such as spreadsheets, texts, graphs and presentations.

Post: A message published in a forum either as the start of a new discussion or as a reply within a discussion thread.

SCORM and IMS content packages: Two formats for exporting and importing complete courses compatible with other sites.