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ONLINE / OFFLINE ASSESSMENT PLATFORM

User Guide

FAST
For Safety and Trust!

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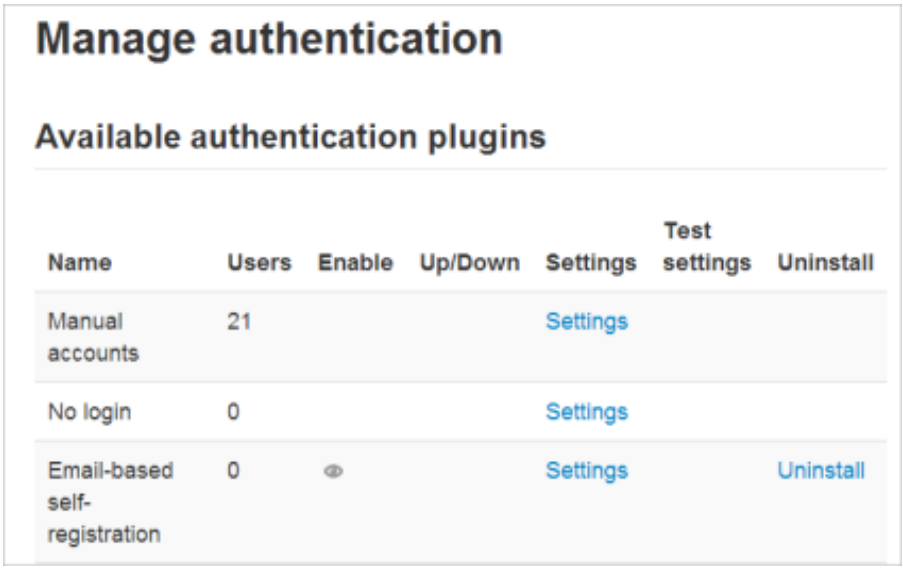
I. ONLINE ASSESSMENT PLATFORM

1. Adding users

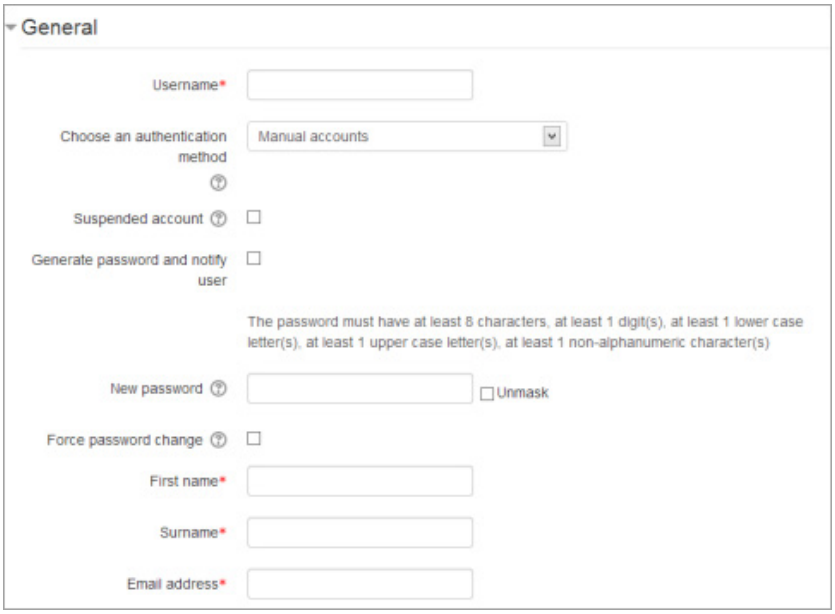
Manual account creation

Manual authentication is enabled by default in the platform.

Manual Login Plugin Location (path): *Site Administration > Plugins > Authentication > Manage authentication*



An administrator or manager can manually create new user accounts in the: *Site administration > Users > Accounts > Add a new user*



General Section

Username

The user will use this username to log into the platform. It must be unique.

Authentication method

The setting specifies how the e-Learning platform will verify that the password specified by the user is correct. Accounts created by an administrator use the **Manual Accounts method**, and accounts that users have created using the email self-registration method use the **E-mail based self-registration method.**

Suspended account

Suspended user accounts cannot log in or use platform services.

Generate password and notify user

The platform will generate a temporary password and send an email to the user with instructions on logging in and changing it.

Password

This is the user's password. A user can change his password through the menu: User menu > Preferences.

First Name

Surname

Email address

Password reset notifications, forum notifications and other messages are sent to this platform email address. Duplicate email addresses are not allowed on the platform by default. This setting can be changed if "Allow accounts with the same email" is activated in Site administration > Plugins > Authentication > Manage authentication. This may lead to security or privacy issues, for example the changed password confirmation email.

Email display

This setting controls who can see the user's email address.

City/town

Country

Timezone

Language

Description

Self-registration via email

This plugin allows users to create their own accounts via the “Create new account” button on the platform login page.

Enabling email auto-registration plugin

1. In Site administration > Plugins > Authentication > Manage authentication select the eye icon next to the self-registration plugin
2. Select “Email-based self-registration” from the “Self registration” drop-down menu in the “Common settings” section (at the bottom of the page, after the table of authentication plugins)
3. Save the changes.

Warning: Enabling self-registration may allow spammers to create accounts on the platform to use forums, blog posts, etc. for spam. This risk can be reduced by limiting self-registration to certain email domains by setting those email domains allowed in the Site administration > Plugins > Authentication > Manage authentication section. Self-registration may also be enabled for a short period of time to allow users to create their accounts, and then disabled afterwards.

Tips:

- Regularly check the user list for suspicious names and emails and/or users in the system who are not enrolled in courses.
- Potential users may not receive the account confirmation email due to the fact that it ended up in the spam folder, or was rejected by the email server, or the email address entered is invalid, etc. These accounts can be manually confirmed by an administrator.

2. User management

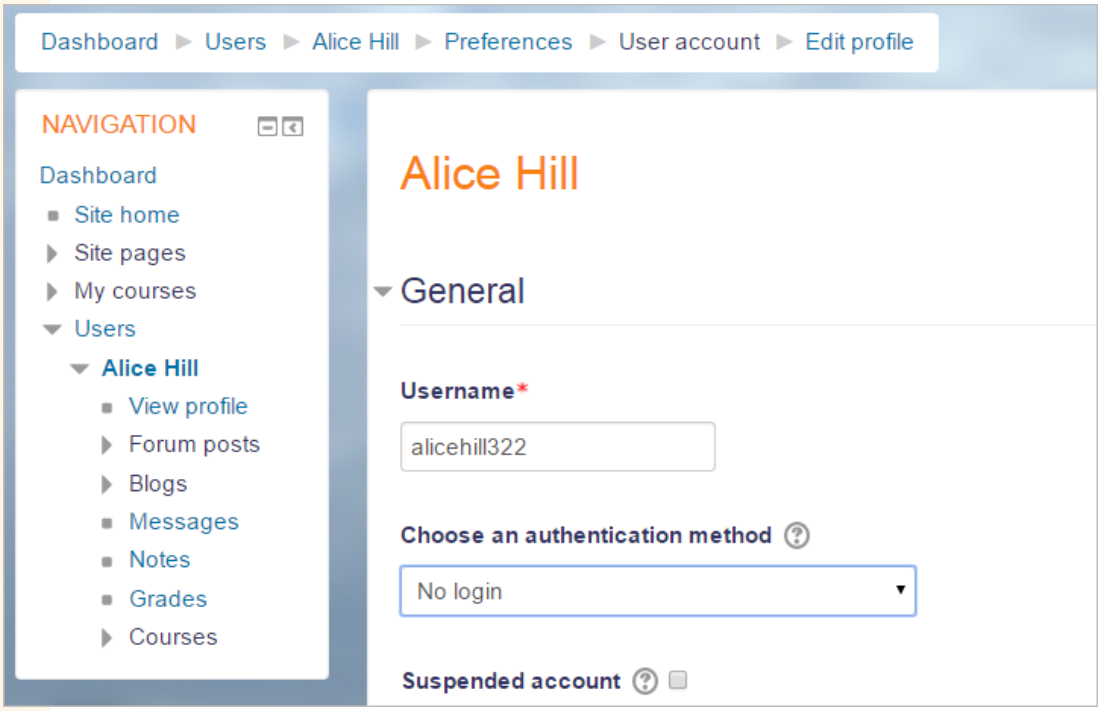
Deleting an account

An account can be deleted by clicking the delete icon next to the user’s name.

Attention: Deleting an account results in the permanent deletion of user data. If you want to keep the data, it is recommended to suspend the user account instead.

Account suspension

An administrator can suspend an account by selecting the eye icon next to that user's account in the user list. The administrator can also suspend an account by checking the "Suspended account" option in the "Edit profile" page of that account.



The administrator can also select "No Login" from the "Choose an authentication method setting" drop-down menu, also from the user's profile page. Different users must have unique email addresses in their profile, even when email is not enabled. When using the "No Login" setting, the account email cannot be reused to create another account.

Bulk users' actions

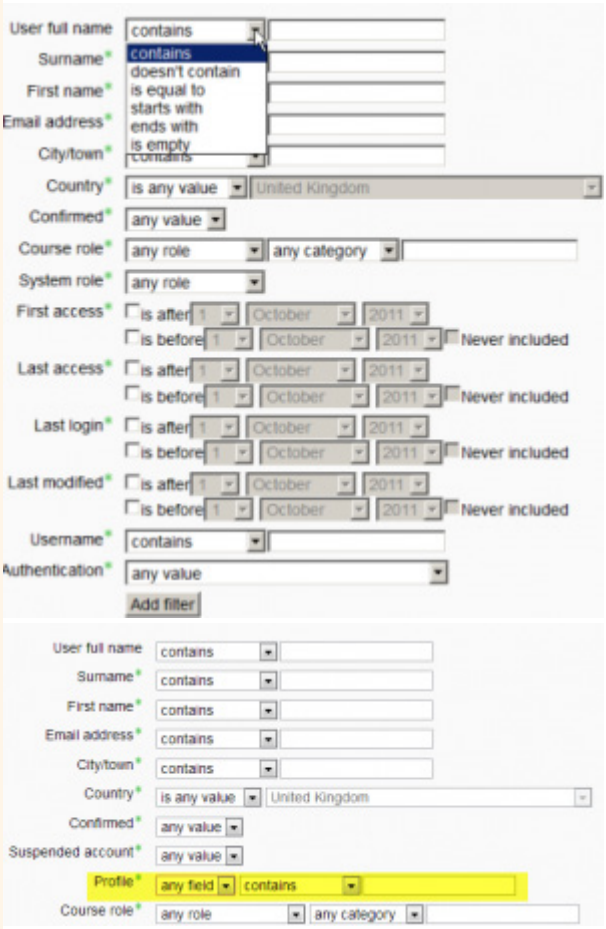
To perform bulk actions on the user go to Site administration > Users > Accounts > Bulk user actions. Administrators can select users by creating a filter and then do any of the following:

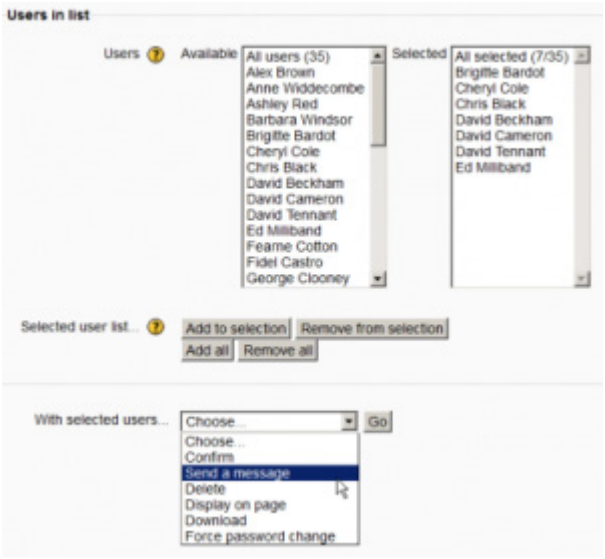
- To confirm accounts created by self-registration based on email, which have not been confirmed by the user.
- To send a message
- To delete accounts
- To display the list of those users on a page
- Download user data to a file

- Force users to change their passwords
- Add users to a cohort

Other bulk actions

1. If you know them, choose the users from the available list or click on “Show more” to see more filtering options.
2. Users can be filtered by name, surname, email address, city, last login, username, registration type.
3. Select users from the list.
4. Choose a filter from the drop-down menu.
5. Click the “Add filter” button.
6. Select from the left box those users you need and move them to the right box.
7. From the “With selected users...” drop-down menu, choose the action you want to perform, then click “Go”.





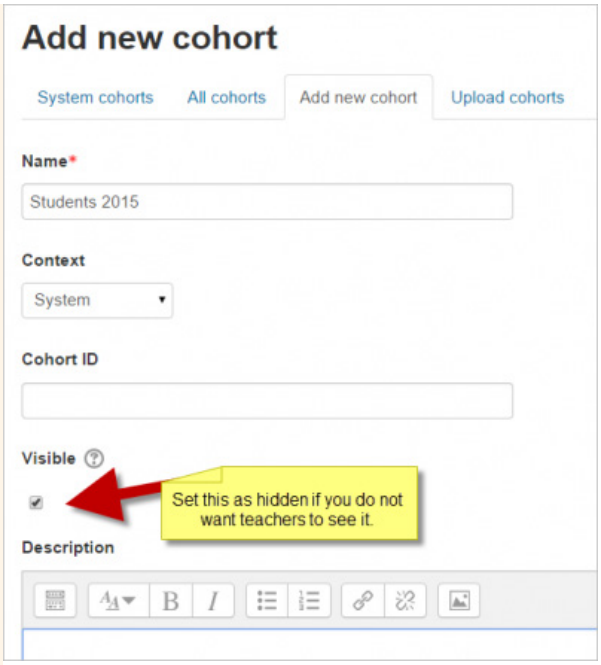
User Cohort

About Cohorts

Cohorts are site-level or course category-level groups. The purpose of cohorts is to allow all cohort members to be easily enrolled in a course. This can be done using 'Cohort sync' which, as the name suggests, synchronizes cohort membership with course enrolment. Alternatively, a cohort can still be manually enrolled in a course.

Creating a cohort

1. Cohorts can be created by platform administrators. Click on: *Site administration > Users > Accounts > Cohorts*



2. Select the “Add new cohort” tab
3. Note that in the displayed list, you can choose between making the cohort available at the site “system” level or at a specific course category level.
4. By default, cohorts are visible to users with the teacher role, but turning “Visible” off means they are not available for teachers to use in their courses.
5. Fill in the details and save the changes.
6. Select the ‘Assign’ link next to the cohort name from the list of available cohorts.

Name	Cohort ID	Description	Cohort size	Source	Edit
Teaching staff 2014-5	T1		89	Created manually	
Admin staff	A1		45	Created manually	

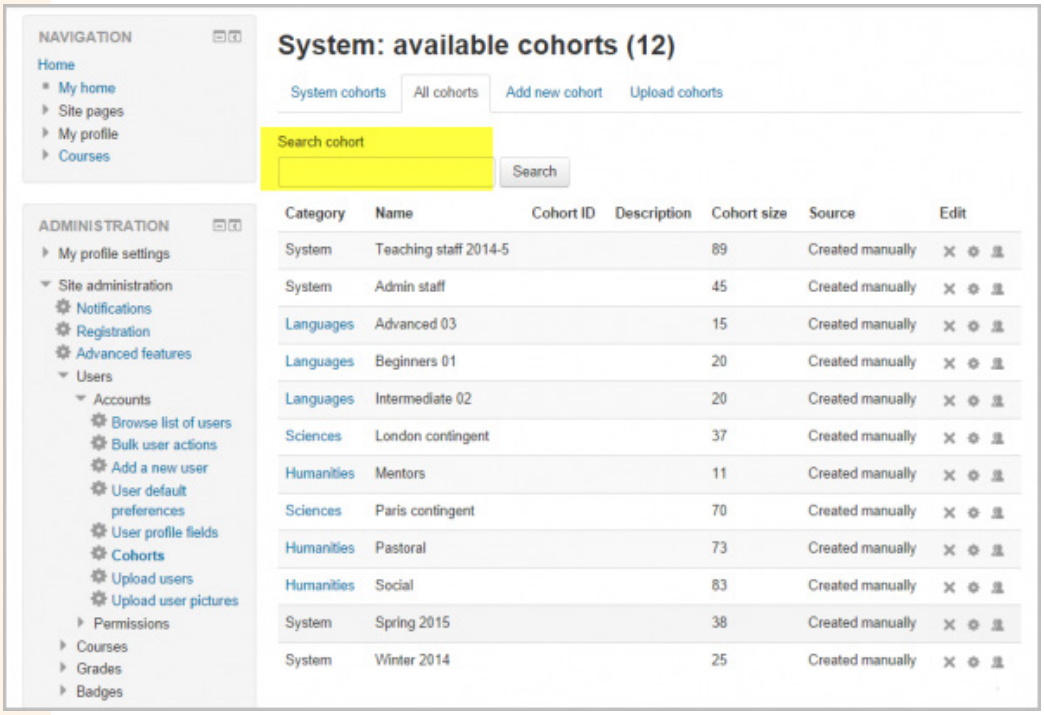
7. Select potential users from the displayed list, then click the “Add” button.

Adding users to a mass cohort

1. Go to “Site administration > Users > Accounts > Bulk user actions”.
2. Find users by setting a filter.
3. Add users from the available list to the selected list.
4. Select “Add to cohort” with the desired users.

Searching for cohorts

When a platform has a large number of cohorts, keywords can be entered in the “Search cohort” boxto search or filter available cohorts.



Category level cohorts

Cohorts that have been created at the course category level can be located by selecting the appropriate category and then clicking on the “Cohorts” link in the Actions Menu > Cohorts.

You can also access the page Site administration > Courses > Manage courses and categories and select Action Menu > Cohorts, next to the respective category.

Enrolling a cohort in a course

There are two ways to enroll a cohort in a course.

1. Cohort sync
2. Manual cohort enrollment

Using Cohort sync, if users are later added or removed from the cohort, they are automatically enrolled or removed from the course.

Manual cohort enrollment is a one-time action. Subsequent addition or removal of cohort users has no effect on course enrollment.

Manual enrollment of a cohort

To manually enroll all members of a cohort in a course:

1. Go to the Participants section of a course
2. Click on the “Enroll users” button and then select a cohort from the menu with available cohorts.
3. Select the “Enroll selected users and cohorts” button

3. Roles and permissions

A role is a collection of defined system-wide permissions that you can assign to specific users in specific contexts. The combination of roles and context defines a specific user’s ability to do something on any page. The most common examples are the roles of learner and teacher in the context of a course.

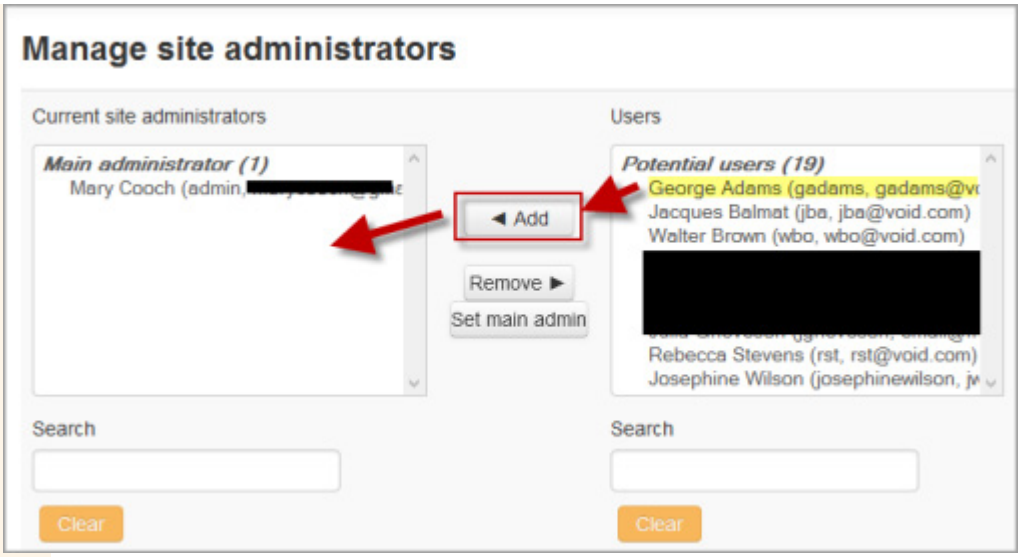
Standard roles

Website administrator

Platform administrators have full rights in the platform.

Users can be assigned the platform administrator role by another administrator in: *Site administration > Users > Permissions > Site administrators* but the role itself cannot be edited (or deleted!).

It is not recommended to have many admins on your platform. A good practice is to have only one or two, and assign the other users the Manager role with the necessary permissions.



Manager

The Manager role by default allows users assigned this role to access and modify courses, as well as perform certain administrative-level tasks related to courses, users, grade settings, etc.

Unlike the Administrator role, the Manager role is a role, whose permissions you can edit, but which is similar to Site Administrator (but much safer to use) due to its multiple default permissions.

Good practices for using the platform recommend assigning administrators the role of Manager rather than Site administrator.

Therefore, the Manager role allows a platform administrator to grant multiple rights on the platform to others who are assigned a Manager role, but without having to grant them full permissions on the platform.

Assigning the Platform Manager role

You can assign someone the Manager role in the platform (to allow them, for example, to add new users) by going to *Site Administration > Users > Permissions > Assign system roles* selecting the Manager role and selecting the chosen user.

When you do this, users in this role will only have access to some of the items in Site administration. They do not have access to areas such as Security, Server, Plugins, Appearance, or Advanced Features, which are accessible only to the group of users with the role of Site administrator. They instead have access to most settings and tools for managing users, courses and grades.

A user with the Manager role has the ability to assign other users the Manager role at the platform level. It also allows me to edit the permissions of the Manager role.

Assigning the Manager role at Category level

The Manager role can also be assigned at the category level rather than at the platform level.

Do this if you want a user to be able to access and manage all courses in a single category, but you don't want them to have access to any of the Site administration tools.

Go to: Site administration > Courses > Manage courses and categories > select a category > Actions menu > Assign roles > Manager > select a user > Add

A category-level Manager has rights only on the assigned category; to manage multiple categories, you will need to assign them the respective role in each category separately.

Users with the Category Manager role also have the right to manage any subcategory within that category, including the ability to create new subcategories and move courses within that subcategory.

They also have permission to create new courses in the assigned category.

Course creator

A user with the Course Creator role has the right (as the name suggests) to create courses. If the "Creators' role in new courses" setting in the *Site administration > Users > Permissions > User policies* section is left at the default "*Teacher*" mode, then the course creator is enrolled as a teacher in the course he just created and can edit course settings and sign up other users.

A user with the role of Course creator can also see hidden courses.

If a user is assigned a Course creator role at the course category level, the add new course button is only visible if that category contains at least one course.

Users with the Course Creator role are not automatically assigned the Teacher role in a course they did not create, even if that course is in the category they were assigned to.

Role assignment

A user can be assigned the role of Course creator at system level (in *Site administration > Users > Permissions > Assign system roles*) or at category level.

Teacher

Users with the Teacher role have almost full rights in a course, including adding or modifying activities and grading students. By default, teachers can assign Non-editing teacher or Student roles to other users.

By default, users are not assigned the Teacher role at the platform level, but on a course-by-course basis. The same rule applies to learners. Teachers are only allowed to teach the courses in which they have been enrolled.

Assigning the Teacher role to a user in a course

1. As a Manager or Site administrator, go to the “Participants” page within the course
2. Select the “Enroll users” button
3. Search for the desired user and select the Teacher role
4. Select the “Enroll selected users and cohorts” button

Assigning the Teacher role at the category level

As shown above, by default users are not assigned the Teacher role at the platform level. However, under certain conditions, you may want to assign a user or group of users the role of Teacher to all courses in a category, or to all courses in the platform, without having to enroll the user(s) each time course in turn. So you can grant this permission by editing the Teacher role (it’s more recommended to create a new role for this though). Go to Users > Permissions > Define roles > Select the Edit icon next to the Teacher role > Context types where this role may be assigned. Checking the box for “Category” allows a user to access all courses in a category. To assign a teacher to a category, navigate to that category, and use the Actions menu > Assign roles. In order for the Teacher role to be assigned to all categories, you must navigate to each category and repeat the previous operation.

If you want to give these rights to a limited group of teachers, you can create a new teacher role with these permissions enabled and assign them to only those teachers you want to assign them to.

Non-editing teacher

A user with the Non-editing teacher role has the ability to view and grade student activity, but cannot modify or delete any of the activities or resources.

In courses where groups of learners are used, the user with the Non-editing teacher role can be responsible for a certain group and will not have access to other groups. To make this possible, change this role’s permissions at the platform or course level so that it is blocked from accessing groups it is not responsible for. (*Site administration > Users > Permissions > Define roles > Select the Edit icon next to the Non-editing teacher role > Look for moodle/site:accessallgroups in the permissions table > Uncheck Allow*).

Student

A user with the Student role in the platform can participate in the activities of a course and view the resources of that course, but cannot modify them or see the class catalog. He can see his own grades if a teacher gives him this permission.

Administrators or teachers determine how a learner enrolls in a course and what they can see and do in the platform. These permissions may vary for each course or activity. For example, in one context learners can correct and grade the work of other learners,

be encouraged to explore everything in a course and interact with other participants. In a different context, the learner can be guided along a very well-defined path with minimal interactions with others.

Guest

Visitors can log in as a Guest using the “Login as a guest” button on the login page and access any course that allows guest access. In addition, users who have accounts created on the platform, can access any course that allows access to visitors without being obliged to enroll in that course.

Visitors ALWAYS have “read-only” access - meaning they cannot leave any messages.

They cannot:

- Post on forums
- Edit wiki pages
- Participate in a chat
- Take tests or quizzes
- Submit papers
- Add comments or data to Glossary or Database activities
- Get grades

Visitor access settings

To enable Guest users on the platform:

- In Site administration > Plugins > Enrolments > Manage enrollment plugins, make sure “Guest access” is enabled.
- In Site administration > Plugins > Authentication > Manage authentication, set “Guest login button” to “Show” if you want the button to appear on the login page.
- Visitors’ actions on the platform can also be recorded: Site administration > Plugins > Logging > Log guest access.

Authenticated user

When a user logs into the platform, they are automatically assigned the role of Authenticated user. A user will have additional roles in addition to Authenticated user depending on where they are in the platform, such as learner in a course.

By default, logged in users are allowed to edit their own profile, send messages, blog, and do other things outside of classes.

Assignment of roles

Context and roles

Apart from the role of manager and course creator, users do not normally have a site (or system) level role.

Even though offline you might be a teacher, when you are in the e-Learning platform, you might have a teacher role in the course you are teaching and a learner role in another course where you are studying for a degree.

Due to the way the platform works, role allocation is done for a specific context. A site and a course are examples of two different contexts.

System-level context

- To assign a role in context at the system level, go to Site administration > Users > Permissions > Assign system roles.
- Any roles assigned here apply site-wide. Therefore, it makes sense to assign only roles that need this functionality here. The manager and course creator roles are examples of two such roles. Assigning a teacher or learner role here would lead to the ability to teach / study in every course on the platform, which is not usually desirable.

Front page level context

- *Front Page settings > Users > Permissions > Assigned roles*
- Users who have a role in the system-level context no longer need to be assigned a role here as well.
- If you want to give a teacher rights to manage articles on the Front page, then you can assign him the role in the Front page.

Course Category Level Context

- Users can be enrolled in a category to save their enrollment in each individual course in that category.

Course-level Context

- Go to the Participants page
- Click on the “Enrol users” button and select the users you want to enroll.
- Select the role you want to assign.
- Select “Enrol selected users and cohorts”.

Block-level Context

- *Actions menu (corresponding to the block) > Permissions*

- You can assign roles to a block if, for example, you want certain people to see the block while it is hidden from others.

Activity-level Context

- *Access the activity > Actions menu > Locally assigned roles*
- An example of this would be assigning a learner the local teacher role in an individual activity, such as a forum, so that they can moderate their classmates' posts, while still retaining the learner role for the rest of the course.

User-level context

The user-level context is used for roles such as mentor, team leader, or parent. The role to be assigned must have "User" checked as the context type where it is to be assigned.

To assign a user the mentor role of another user, click on the user's profile, then on "Preferences", and then on "Assign roles relative to this user". If a mentor has a lot of users to take care of, it can be assigned to all of them at once, as follows:

1. Put all users to be mentored into a cohort.
2. Go to "*Site administration > Users > Permissions > Assign user roles to cohort*" page.

Hierarchy

By assigning a role to a user in a given context, you grant them the permissions contained in that role for the current context and all child contexts.

The list of contexts in hierarchical order is as follows:

- System (no parent)
- Front page (parent: System)
- Course category (parent: Parent Category or System)
- Course (parent: Category or System)
- Modules (parent: Course or System)
- Block (parent: Course or System)
- User (parent: System)

Roles can be inherited. For example, if a user is assigned a teacher role in a specific course category, the user will have that role in ALL courses in the category.

Roles will only work if the role assignment is done in the correct context. For example: a teacher role should be assigned to a user in the context of course category or in the context of a single course, a forum moderator role for a specific forum should be assigned in that specific forum.

Assigning the platform administrator role

To assign the Site administrator role go to: *Site administration > Users > Permissions > Site administrators.* Select the name on the right and move it to the left.

Verifying the roles assigned to a user

To check or verify the roles assigned to a user, go to their profile page, then under the heading "*Administration*", click on "*Preferences*".

In the "*Preferences*" page, under the "*Roles*" heading, click on "*This user's role assignments*".

Hidden roles

If you want to give users access to the course, but do not want them to be visible in the list of participants, use the "*Other users*" link in the course administration menu ("*Actions menu > More… > Users > Other users*"). Assigning roles in this way provides course access and editing rights based on the permissions set for the assigned role, without that user actually being enrolled in that course.

Multiple assignments

A significant part of the role infrastructure is the ability to assign multiple roles to a user (at the same time). The permissions of each role are merged to produce a set of permissions. For example, a user could have both teacher and learner roles in the same course.

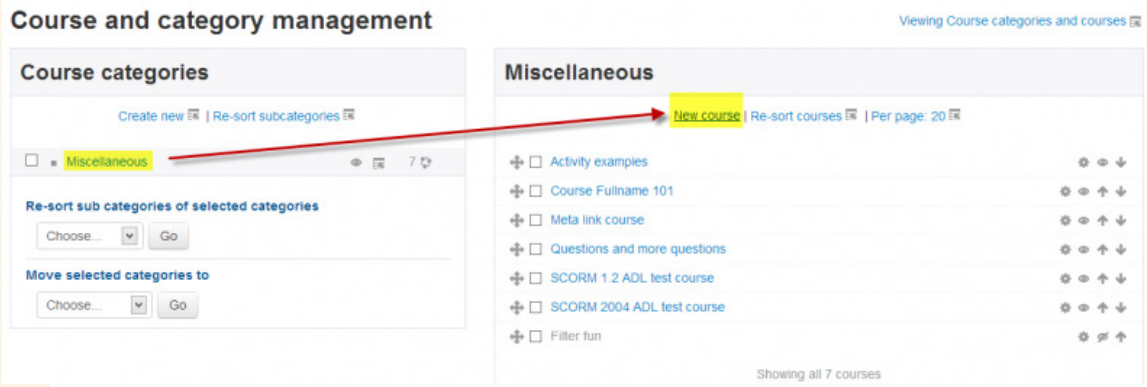
Make sure that if you change a user's role, you remove them from any other roles as necessary.

4. Adding courses

By default a user with the Teacher role cannot add a course. To add a course to the platform, the user must have the role of *Site Administrator, Manager or Course creator*.

To add a new course:

Site administration > Courses > Manage courses and categories



- Select the category you want the course to be in
- Select the "New course" button
- Enter the course settings and then select "Save and return" or "Save and display"

Deleting a course

Users with the Teacher role cannot delete courses from the platform. Those with the role of Site administrator or Manager can. Users with the Course creator role can only delete courses created by them, but only within 24 hours of course creation.

To delete

- From Site administration > Courses > Manage courses and categories
- Click on the course category and identify the desired course in the right column.
- Select the icon for "Delete".

Course categories

Course categories are used to organize courses for all users in the e-Learning platform. The default course category on a new e-Learning platform is '*Miscellaneous*' (although this can be renamed). Courses can all be put in this category. However, users will find it easier to find their courses if they are organized into descriptive categories.

By default, the list of courses in a category shows the teachers and summary of each course. If the number of courses in a category exceeds 9, then a short list without teachers and summary is displayed.

Adding a category

- Go to *Site administration > Courses > Add a category*
- Fill in the desired settings and select *"Create category"*

Alternatively, you can go to Site administration > Courses > Manage courses and categories

and select the “Create new category” button.

Editing a category

You can edit the settings of a category from *Site administration > Courses > Manage courses* and categories and selecting the icon for “*Edit*”.

Adding a subcategory

Site administration > Courses > Manage courses and categories

You can turn one category into a subcategory of another by checking the box to the left of its name, then selecting from the drop-down menu “*Move selected categories to*”.

You can create a new subcategory by clicking on the “*Actions menu*” icon to the right of the category you want to add it to and selecting “*Create new subcategory*”.

Hiding categories

Categories can be easily hidden or displayed via “*Site administration > Courses > Manage courses and categories*” and selecting the eye icon next to the category you want to hide.

Hidden categories are only visible to site administrators or those with the “*View hidden courses*” permission.

Course settings

General sections

Course full name

This is the title of the course. It is displayed as a link on the course listings, on the Front page, on the Dashboard and in reports.

Short name

This will be used in several places where “Course full name” is too long, such as the navigation block.

Course category

Course start date

This setting affects the display of activity logs and data in the weekly format topic.

If you are using the “*Weekly*” course format, the start date will appear in the first section of the course.

Course end date

The course completion date is used to determine whether a course should be included in a user's course list.

After the completion date, the course is no longer listed in the navigation block and is listed as completed in the learner's list of courses.

Users can still enter the course after the completion date; in other words the date does not restrict access.

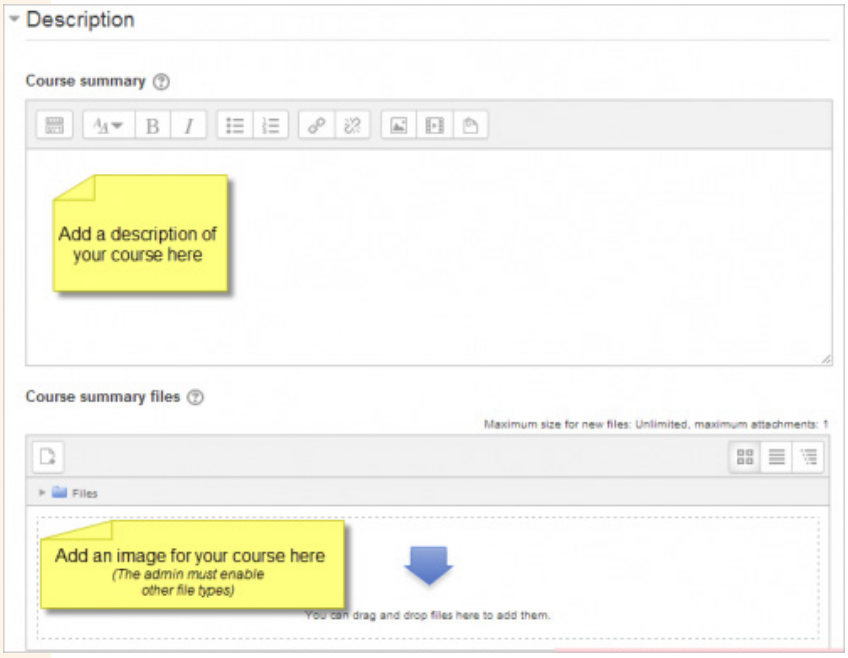
Calculate the end date from the number of sections

For weekly format courses only, the course completion date can be automatically calculated based on the course start date and the number of sections. If course sections (weeks) are added or removed, the course date is automatically changed.

Course visibility

With this setting you can completely hide your course. It will not appear in the list of courses of users, except for those with the role of Manager, Course creators, Teachers and any other user who has the ability to see hidden courses. Even if users try to access the course URL directly, they will not be able to access it.

The section of *Description*



Course format section

Hidden sections

This option allows you to decide how hidden sections in the course are shown to learners. By default, a small area is shown to indicate where the hidden section is, although users still cannot see hidden activities and texts.

Course layout

The course setting determines whether the entire course is displayed on one page or split across multiple pages.

Appearance section

Show gradebook to students

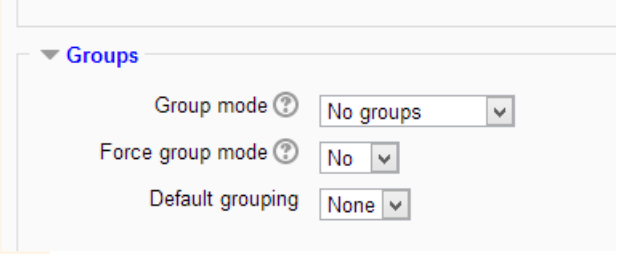
Here you can decide whether to allow learners to see the link to the notes. If the course does not use graded activities, it makes sense to turn this off.

Completion tracking section

Completion tracking must be enabled to use *„Activity completion"*.

Course completion criteria can also be based on activity completion criteria.

Groups section



Group mode

Here you can define the group mode at the course level via a drop-down menu. The selected setting will be the default group mode for all activities defined within that course. Setting group mode can affect what users see in the attendee list and who they can interact with in activities.

- *No group* - There are no groups, everyone is part of one big community
- *Separate group*s - Each group can see its own group, users from other groups are invisible.
- *Visible groups* - Each group works in its own group, but can also see other groups.

Force

If group mode is “forced” at a course level, then the selected group mode will be applied to every activity in that course.

This will override any activity setting that may have a special group setting.

Course format

A course format refers to the layout of a course.

Weekly format

The course is organized week by week, each section having a title with a specific date. The platform will create a section for each week of the course.

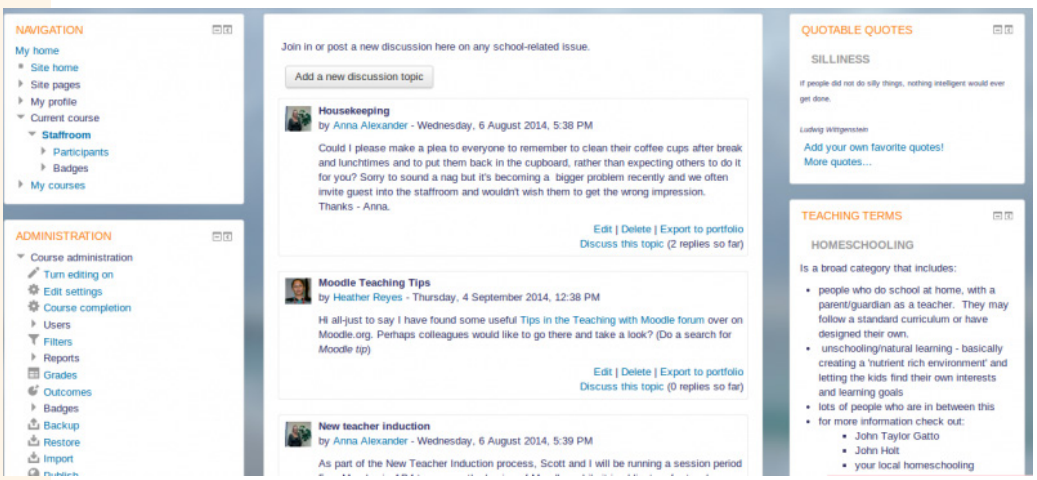
Tip: If you want all students to work on the same materials at the same time, this would be a suitable format.

Topics format

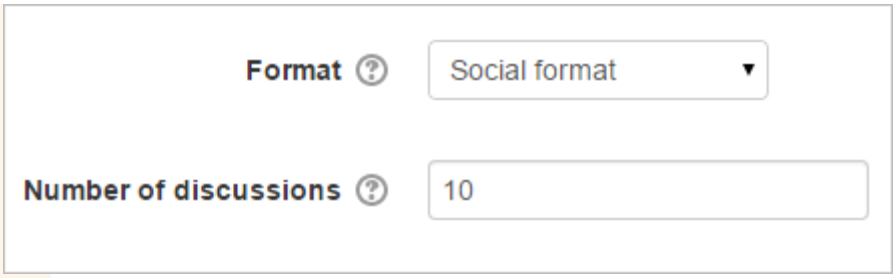
The course is organized into thematic sections to which a teacher can give titles.

Social format

This format is centered around one main forum, the social forum, which appears listed on the main page.



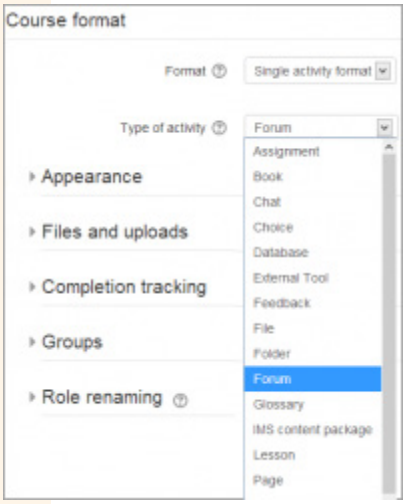
When you select the social format, you can specify how many discussions you want to display on the course page:



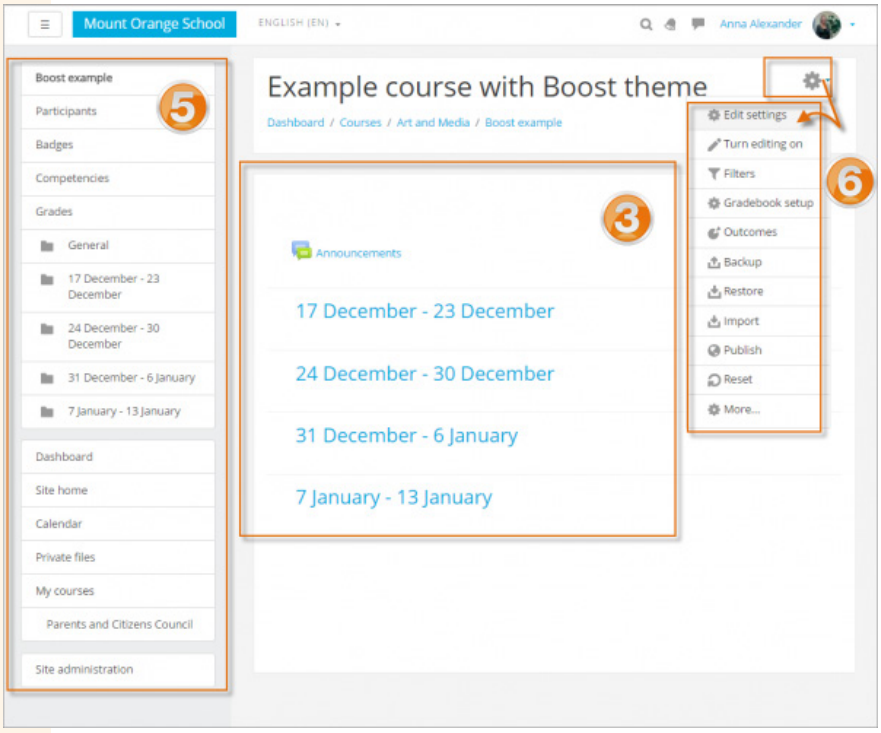
Activities and resources can be added to a part using the block „*Social activities*".

Single activity format

The "*Single activity*" format has only one section and allows the teacher to add only one activity to the course. When the "*Single activity*" format is selected, a drop-down menu appears from which the teacher can choose the activity they want to use.



Home page of a course



3– Course section – the section where activities and resources are displayed

5 – Navigation Block

6 – Actions Menu

Course section editing

- Turn editing on from Actions Menu > Turn editing on
- Click on the pencil icon (1 in the image below) to quickly rename the section
- Click on the "Edit" menu (2 in the image below) to edit the description and other settings.

Adding of new course sections

- Turn editing on from Actions Menu > Turn editing on
- Click on “Add topics/weeks” in the bottom section
- Select the number of additional sections you want and select “Add topics/weeks”

Deleting course sections

With editing enabled, click the “*Edit*” link to the right of the course section you want to delete, then from the menu that appears, click “*Delete*”. Note that all activities in that section and their user data will also be deleted. Use “Recycle bin” to restore the deleted section if you change your mind.

Blocks

To add a block to your course page:

- Turn editing on from Actions Menu > Turn editing on
- Select a block from the “Add block” menu

Activities and Resources

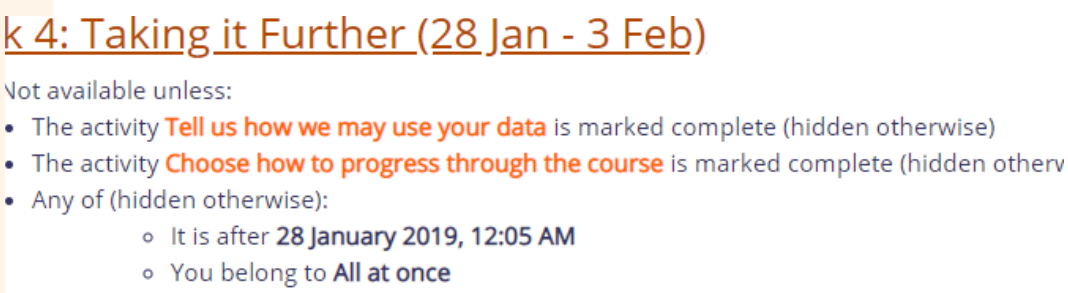
To add an activity or resource to your course:

- Enable editing from the menu *Actions Menu > Turn editing on*

- Click on "*Add an activity or resource*" to open the menu of activities and resources.
- Select an activity or resource, then click the "*Add"* button or simply double-click the name of the activity or resource.

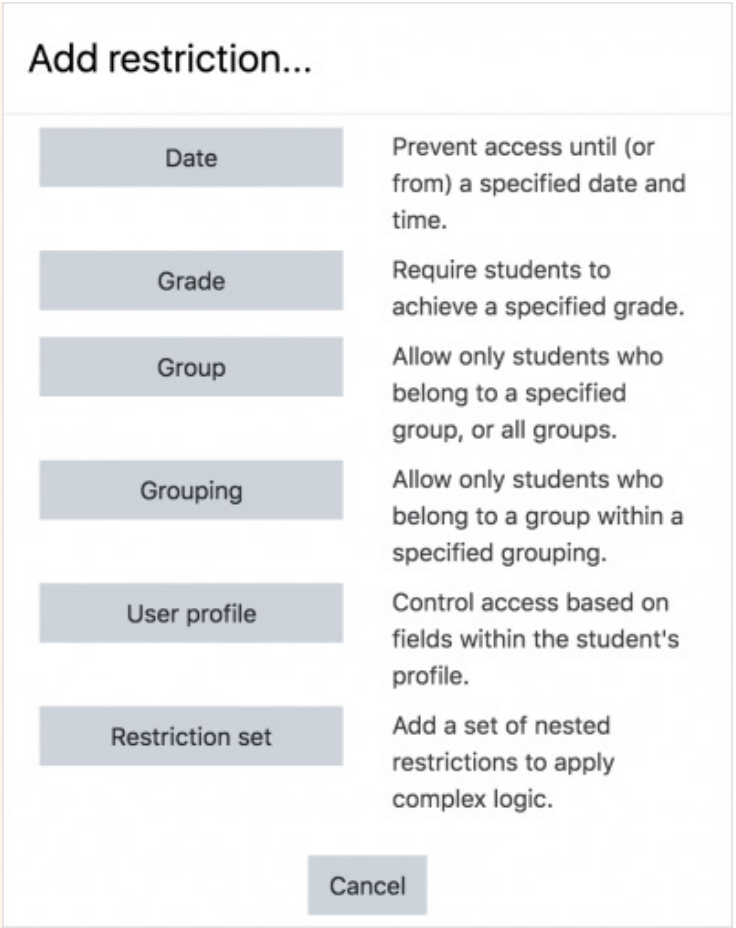
Restricted access

The restricted access feature allows teachers to restrict the availability of any activity or even a course section based on certain conditions, such as date, grade earned, and completion of an activity.



In the settings page of each activity there is a section for restricted access settings: "*Restrict access*".

In this section select the "*Add restriction*" button and a menu of options will open.

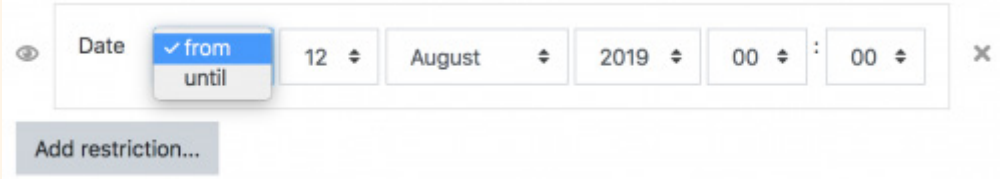


The restriction can be based on completion of another activity, date, grade, student group or grouping, or even user profile fields.

The “Restriction set” button also allows for more complex criteria that require multiple conditions to concatenate.

Timing

Access can be restricted from / until a specific date and time.

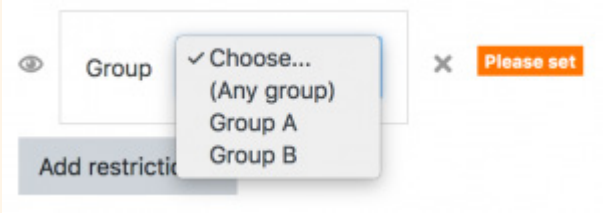


Grade

You can specify a condition for any course grade: the total course grade or a grade from any other activity. You can enter either a minimum value (at least a percentage), a maximum value (less than the percentage), both, or neither. The activity will only be accessed if the learner has a value for the specified grade and falls within any range of specified values. You can add multiple grade conditions. In this case, all conditions must be met for the activity to appear.

Group

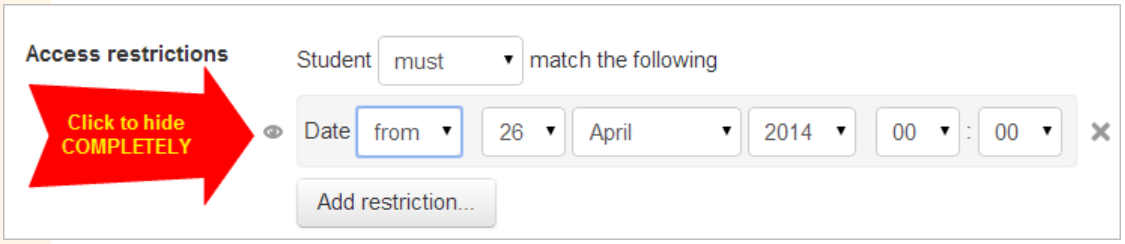
If groups or groupings of learners are used in the course, it is possible to restrict the activity to a specific group.



Hiding conditions

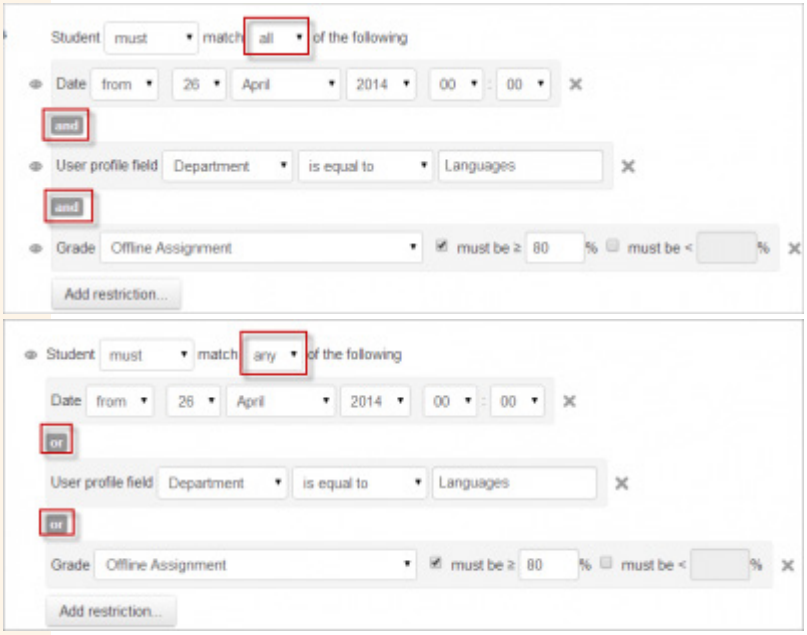
If the eye icon is unchecked, then learners who do not meet that part of the condition will not see the activity at all.

If the eye icon is checked, then learners who don't meet that part of the condition will see the activity, but it will be marked as inactive and will have information about why they can't access it yet.



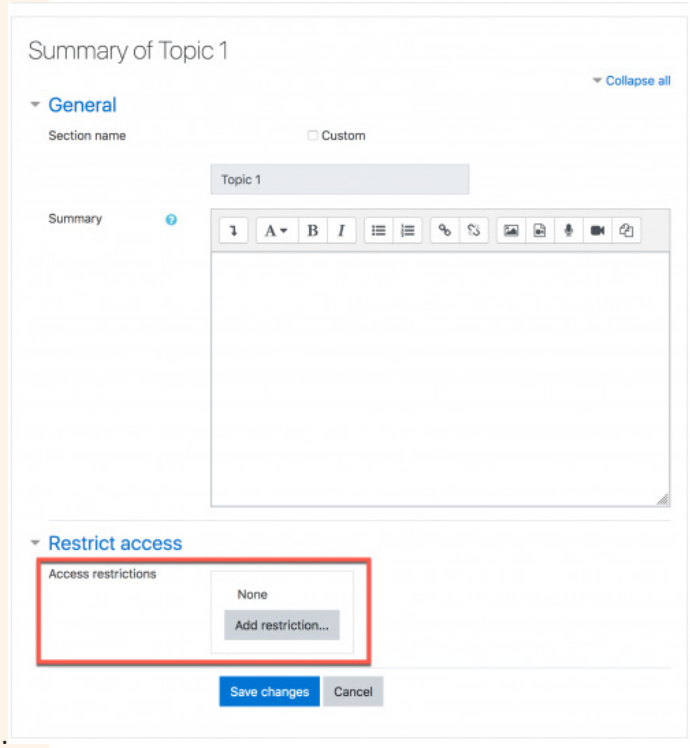
All or one of the conditions

Further restrictions can be added by clicking the "Add restriction" button again and it is possible to specify that either ALL conditions or ONE of the conditions are required before the activity is available.



Restrict access to a section of the course

It is possible to restrict access to activities and resources in a course section by specifying access conditions in the settings for that particular section. Go to *Edit > Edit week / topic > Restrict access*



Hidden / “orphaned” activities

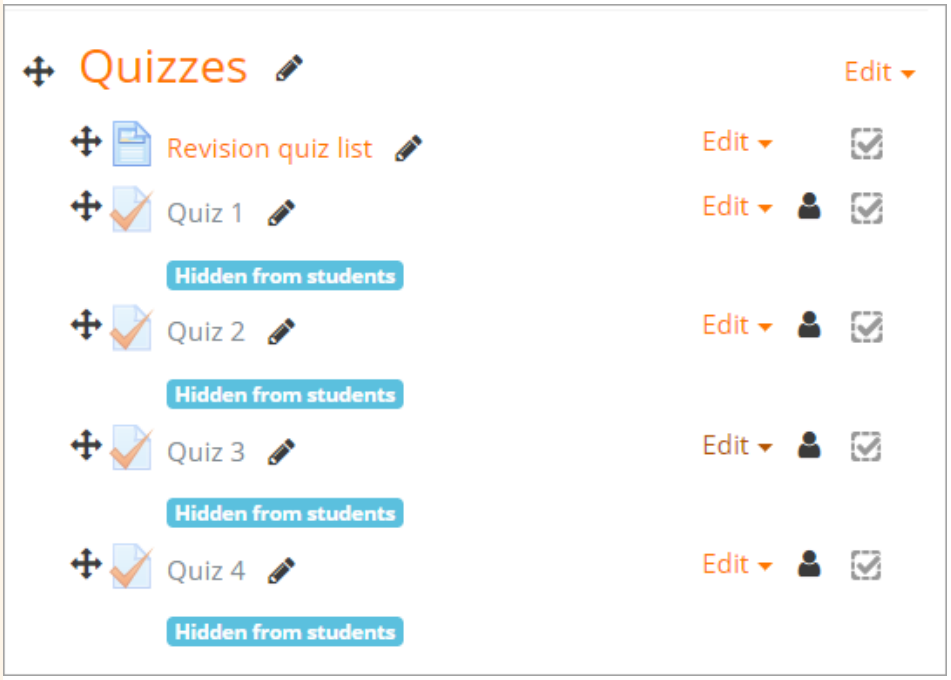
These types of activities are not visible on the course page but can be used by learners.

Enabling functionality

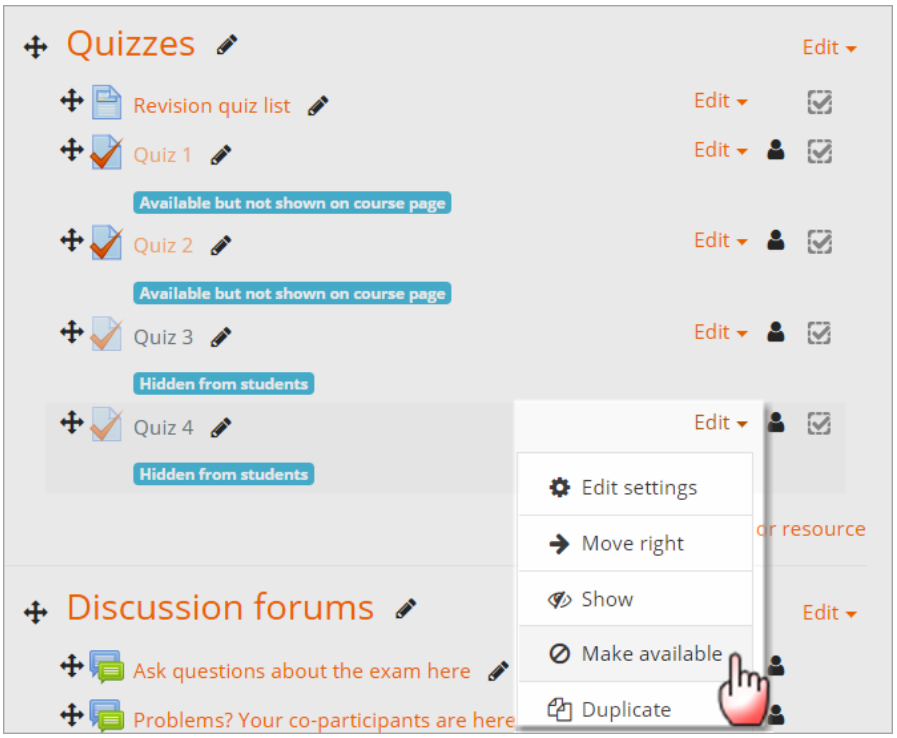
From Site administration > Advanced features, administrators can enable “Allow stealth activities” in courses.

Functionality

1. Turn on editing from Actions Menu > Turn editing on
2. From the Edit menu next to the activity / resource select “Hide”



3. From the same menu “Edit” select “Make available”



4. Don’t forget to share the links to these activities for learners to access.

5. Course enrollment

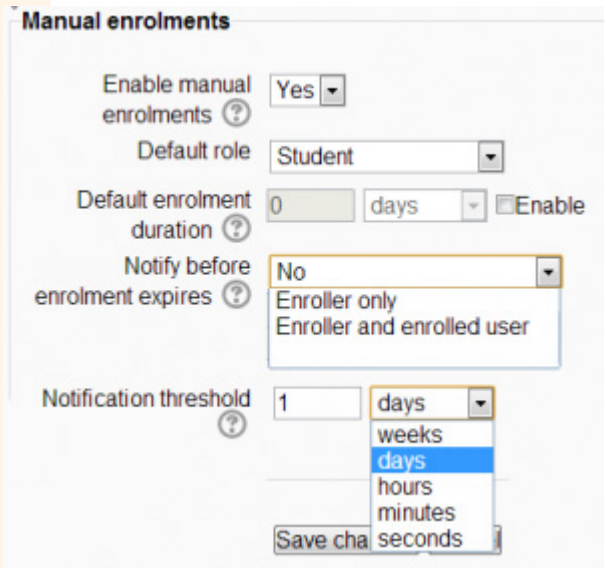
Manual enrollment

Check if you have active manual enrollment in the course

In a course go to the “*Participants*” page and from the “*Actions Menu*” menu select “*Enrollment methods*”. On the page that opens, make sure “*Manual enrollments*” has the eye icon turned on.

Changing manual course enrollment settings

An administrator or manager can edit the current manual enrollment method settings, and set the default enrollment period and default role by accessing the "Edit" page link next to the enrollment method in the section „*Manual enrollments*".



It is also possible for students and/or teachers to be notified when their course enrollment expires by selecting "Enroller only" or "Enroller and enrolled user" from the "Notify before enrollment expires" drop-down menu and a limit of time in "Notification threshold".

Enrollment of learners

5. Go to the "*Participants*" page of the course
6. Select the "*Enroll* users" button
7. Use the "*Assign roles*" drop-down menu if you want to change the role you are

assigning

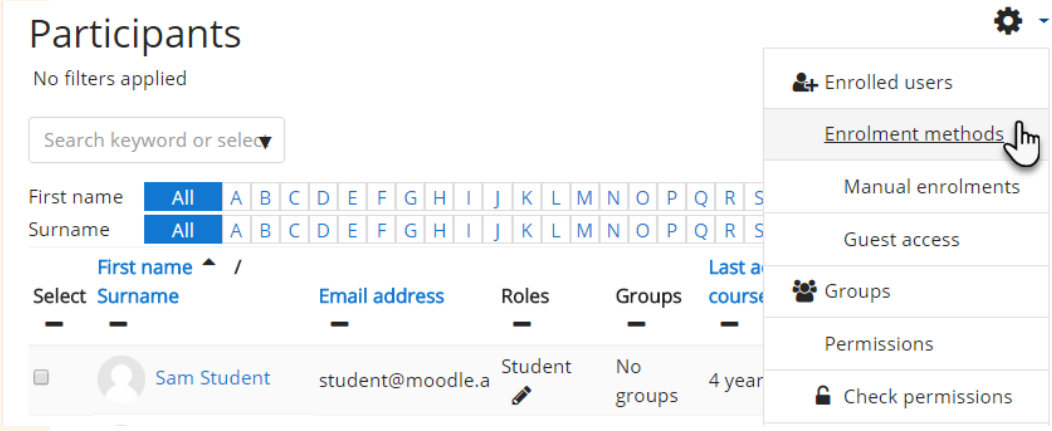
8. Select "*Show more*" if you want to expand the default opt-in options. Here you can change the registration duration
9. Search users and selections
10. At the end select the "*Enroll selected users and cohorts"* button

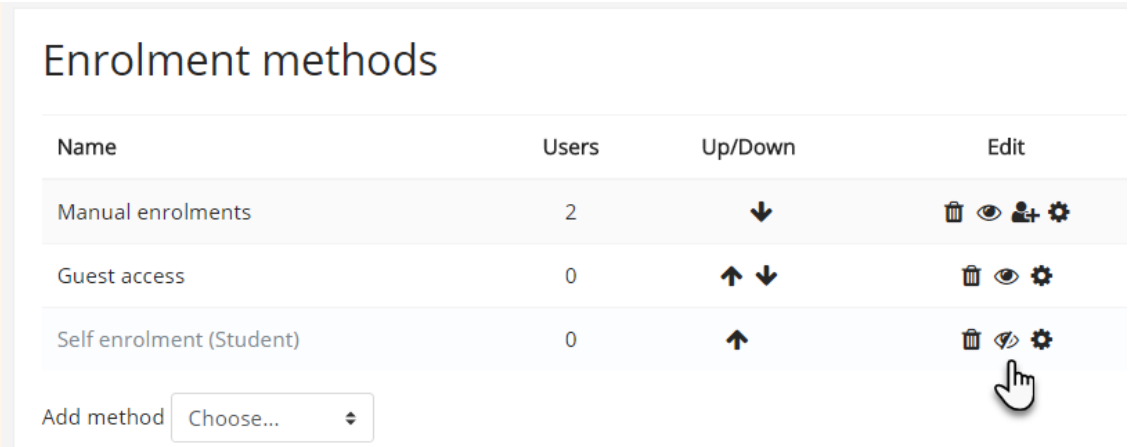
Setting the enrollment period for each student

1. Go to the "Participants" page
2. Select the icon for "Edit" next to a user
3. Edit the data as needed and save the changes "Save changes"

Self-enrollment

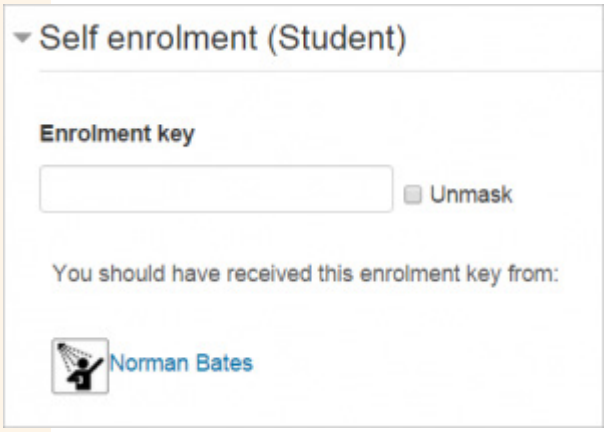
Self-enrollment is the method by which users can choose to enroll in a course, either immediately by clicking on "*Enroll me in this course*" or by typing an enrollment key provided to them. The self-enrolment plugin must be activated by the site administrator in *Site administration > Plugins > Enrollments > Manage enrollment plugins* and must also be added and activated within the course where it is intended to be used: "*Participants*" within of the respective course *> Actions Menu > Enrollment methods.*





Adding an enrollment key to a course

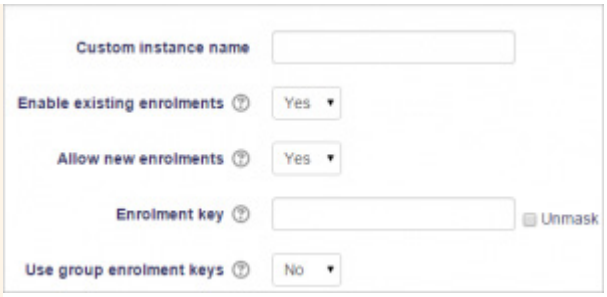
If you only want a certain group of users to self-enroll (and not everyone), then you can set an enrollment key that you then pass to them to use when they access the self-enrollment screen.



Setting an enrollment key

1. *"Participants"* from the respective course> *Actions Menu* > *Enrollment methods*
2. Select the *"Edit"* menu next to the self-registration method

1. Add your enrollment key in the box provided.



2. Save the changes

Adding a group-level key for course enrollment

If you want users to directly enroll in a course group, you can set a group-level enrollment key that you then pass to them to use when they access the self-enrollment screen.

Setting a group-level enrollment key

1. Follow the steps above to add a course enrollment key
    - If you do not set a master enrollment key for the course, then anyone can enroll without a key, and users will not be put into groups.
    - Users in groups do not need to know the main course enrollment key, only the group enrollment key.
    - Users who are not part of a group can use the main course registration key
2. Change the "*Use group enrollment keys*" setting to "*Yes*".
3. Save the changes, and then go to the "*Actions Menu*" button from the main page of the course >*More... > Users > Groups > Create group*
4. Add a group-level enrollment key. This will be the key used to register for the course.

**The following settings shown below can be modified by accessing the "Edit" link next to the self-enrollment method in the Participants > Actions Menu > Enrollment methods page.*

Canceling the registration of students who were not active in the course

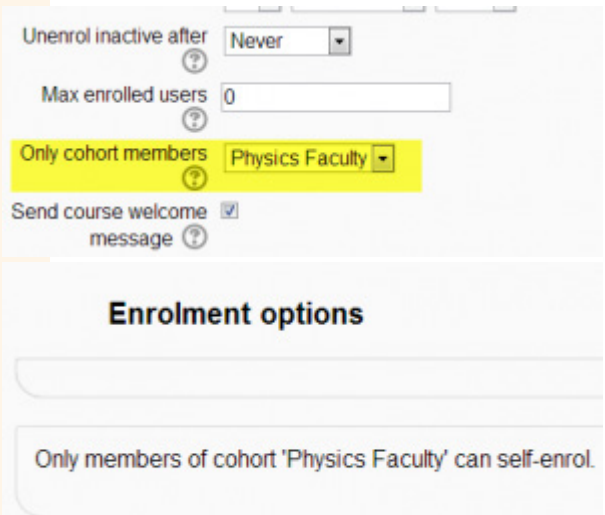
Choose the number of days from the drop-down menu "*Un-enroll inactive after*"

Setting a maximum number of learners per course

Enter the maximum number of students you want in the course in „*Max enrolled users*".

Accepting self-enrolment only for learners who are part of a cohort

If you have cohorts configured at the platform level, then you can enable auto-enrollment only for specific cohorts by selecting the cohort name from the drop-down menu *„Only cohort members*".



Sending a welcome message to new users

Users may receive the following email message when they self-enroll in a course:

„Welcome to {Course name}

If you have not done so already, you should edit your profile page so that we can learn more about you: {link to profile page}"

You can set to send a custom message. The following variables can be included in the message:

- *Course name*
- *Link to user's profile page*
- *User email*
- *User fullname*

Cohort sync

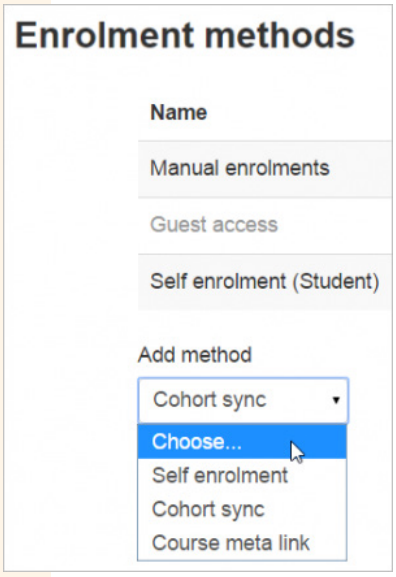
Cohort sync is for automatically enrolling members of a cohort into a course. If a user is added or removed from that cohort, then they are automatically enrolled or automatically unenrolled, respectively. In other words, Cohort sync synchronizes cohort membership with course enrollment.

To be able to use it, it must be activated by an administrator in *Site administration > Plugins > Enrolments > Manage enroll plugins.*

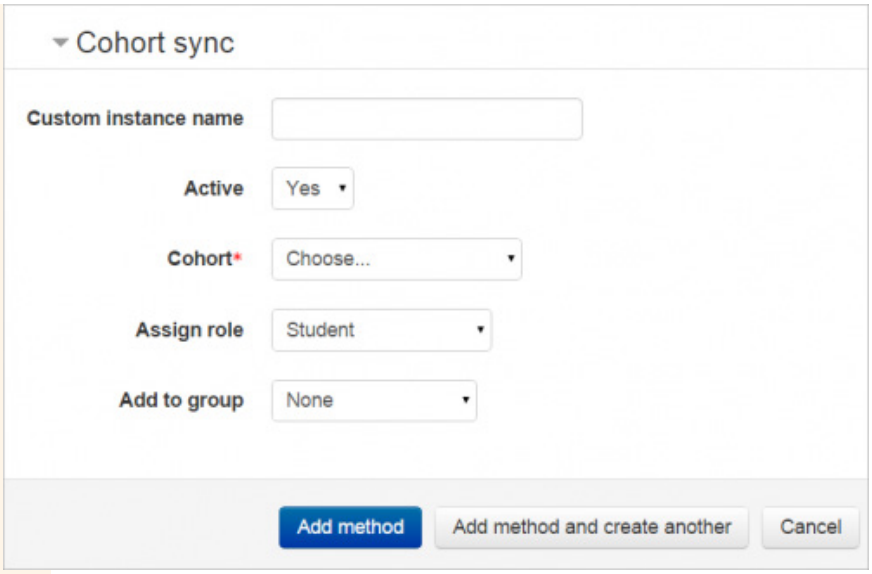
Enrolling a cohort in a course

Note: For the "Cohort sync" option to be accessible, at least one Cohort must exist and be available either at the site level or at the category level in which the course is located.

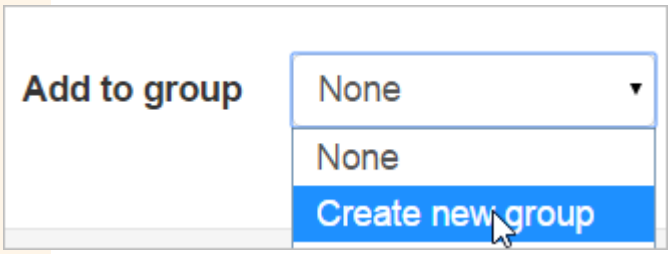
1. Go to "*Participants*" within the respective course *> Actions Menu > Enrollment methods*
2. Select "*Cohort sync*" in the "*Add method*" drop-down environment
3. Select the desired cohort and click on the "*Add method*" button



By default, teachers can add cohorts to courses, but a manager or administrator can hide certain teacher cohorts by unchecking the "Visible" option in the cohort settings or by clicking the eye icon in the cohort list.



When synchronizing a cohort to a course, it is possible to automatically add all cohort members to a group. A new group can also be created when the cohort is added.



Visitor access

The *"Guest"* access functionality allows users with the Guest role to view the content of a course.

1. Go to "*Participants*" within the respective course > *Actions Menu* > *Enrollment methods*
2. Activate the "Guest access" method by clicking on the eye-shaped icon next to the method, or add it from the "Add method" drop-down menu if you don't find it in the list
3. You can set an access password in the method settings page. Go to the *"Edit"* link next to the method.

Note: Visitors cannot access course activities.

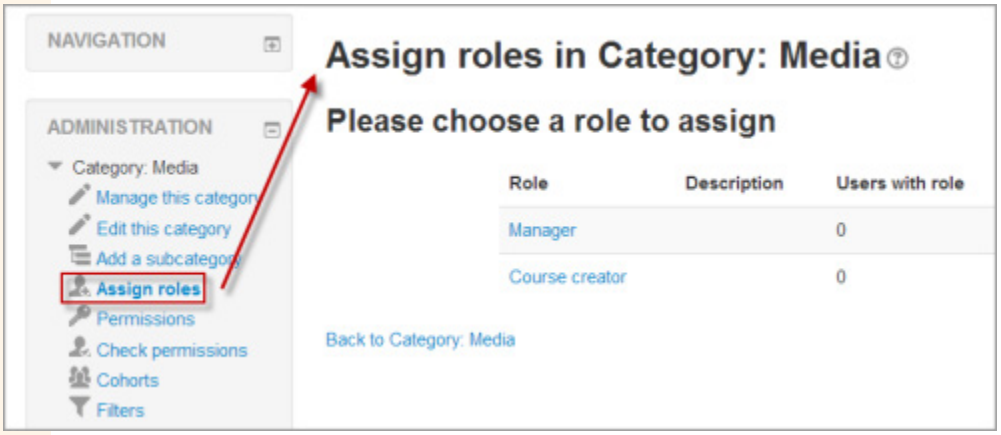
Enrollment in category

The category enrollment plugin allows users to be enrolled in all courses in a category.

1. To be able to use the category enrollment method, an administrator needs to activate the "*Category enrollments*" plugin in *Site administration > Plugins > Enrolments > Manage enrollment plugins.*

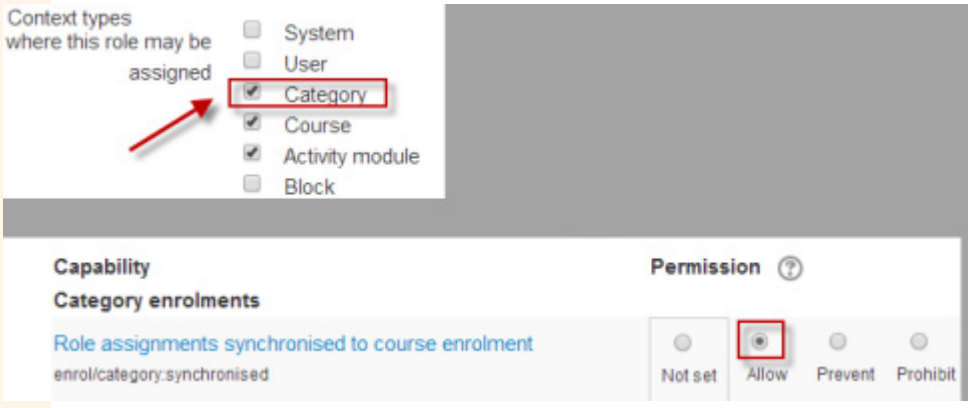
Careful! Using the category opt-in plugin may cause performance issues. It is recommended that you use Cohort sync instead, although this will require a Cohort sync method to be added to each course in the category.

2. Select the menu *Actions Menu > Assign roles*



3. The list of possible roles that you can assign will appear. The roles you see here are roles that have been assigned in the context of the category and that you can assign, i.e. the role has been checked by an administrator, in *Site administration > Users > Permission > Define roles > Select role > Edit, at field "Context types where this role may be assigned" context "Category".*

4. To ensure that new users will be automatically enrolled as learners / teachers in all new courses created in that category, an administrator must set the appropriate permission for the role in question in the section *Site administration > Users > Permission > Define roles >Select a role> Edit*



6. Resources

A resource is an item that a teacher can use for course support, such as a file or link.

With the "*Turn editing on*" option in the "*Actions Menu*" enabled, a teacher can add resources by selecting the "*Add an activity or resource*" button.

Common module settings

In the settings page for many resources and activities, there is a section called "*Common module settings*".

Availability

The "Availability" setting has up to three possible options (depends on whether "*Allow stealth activities*" is enabled by an administrator in "*Site administrator*").

„Show on course page"

The activity or resource is available to all students (subject to any access restrictions that may be set).

„Hide from students"

The activity or resource is only available to users with permission to view hidden activities. (by default, users with the role of Teacher or Non-editing teacher).

„Make available but not shown on course page"

To simplify the course page. A link to the activity or resource must be provided from somewhere else, such as another page resource.

Group mode

Groups are set at the course level.

When in the course settings, the *"Group mode*" field is activated and the "*Force group mode*" field is set to "*No*", the "" field within the activity can be:

„No groups"

There are no groups and all learners submit their individual work in one area.

„Separate groups"

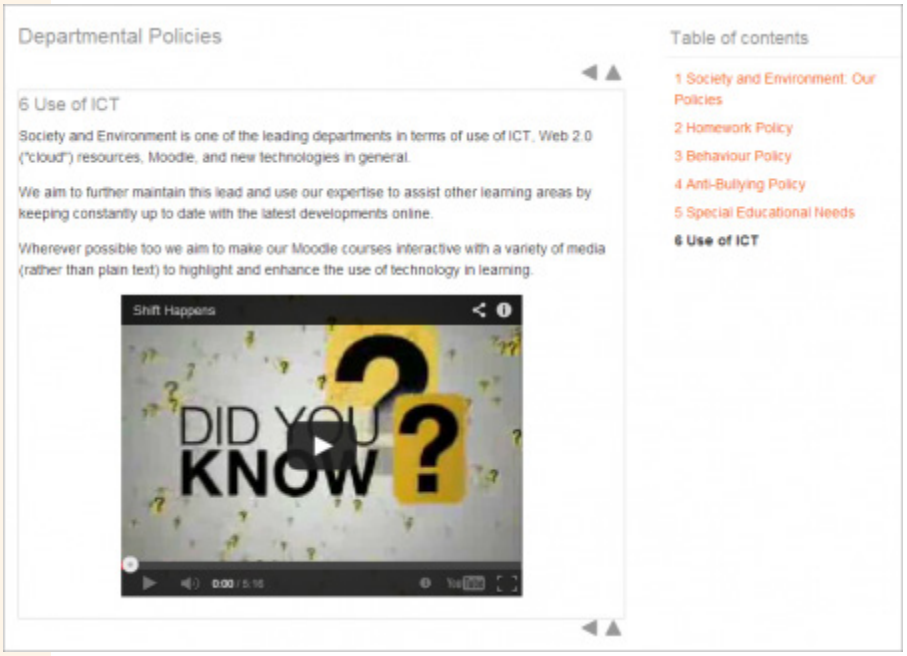
Learners submit their work and teachers can sort these works by group or view all participants.

„Visible groups”

All learners submit their work to one zone, but they can choose which group to associate their submission with before uploading.

Book

The “Book” resource makes it easy to create multi-page resources with a book-like format.



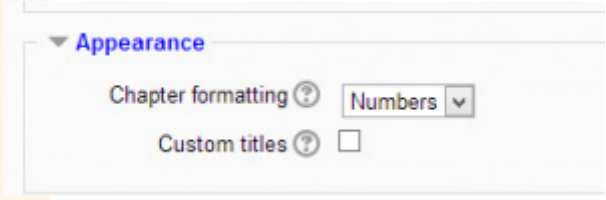
The “Book” resource allows you to have main chapters and subchapters. The “Book” resource is not interactive. However, you can make the “Book” links to various other activities in the course, eg quizzes, forums, etc. Multimedia materials can also be included.

Book setting

In the General section, settings such as resource name, description, etc. are added.

You can enable settings for restricted access in “Restrict access” and settings for activity completion in „*Activity completion*”.

Appearance

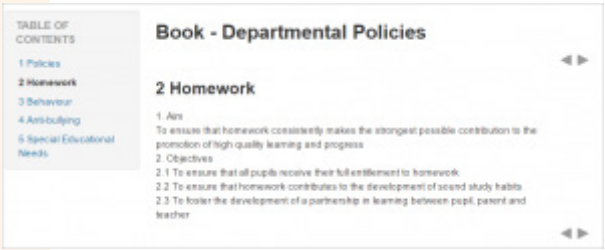


Chapter formatting

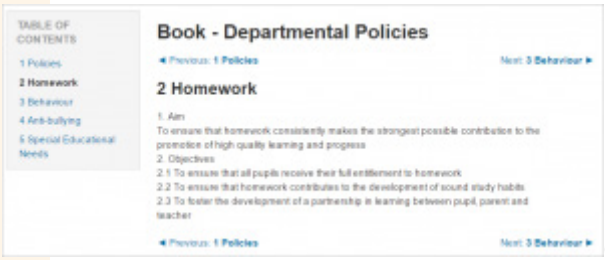
- *None* – chapter and subchapter titles are not formatted at all, use this setting if you want to define special numbering styles.
- *Numbers* – chapters and subchapters are numbered (1, 1.1, 1.2, 2, ...)
- *Bullets* – subchapters are right-aligned and shown with bullet points
- *Indented* – subchapters are aligned to the right

Style of navigation

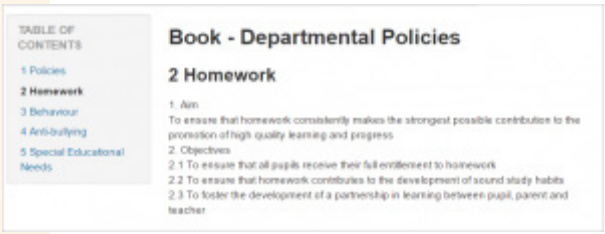
Choose between image navigation (1) or text link navigation (2) or no navigation „*Table of contents*" (3).



(1) – Image



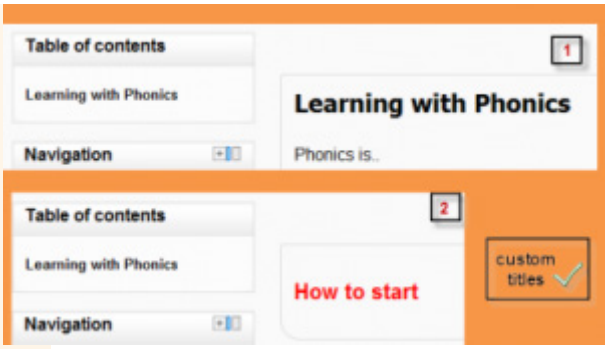
(2) – Link text



(3) – Table of contents

Custom titles

If you don't enable "Custom titles", the chapter title (the one that appears in the "Table of contents") will appear as a header at the top of the table of contents (1 below). If you enable "Custom titles", you will be able to create a title different from the one that appears in the "Table of contents" or it will not show any title (2 below). If you enable "Custom titles", you will need to enter the chapter title as part of the page content.

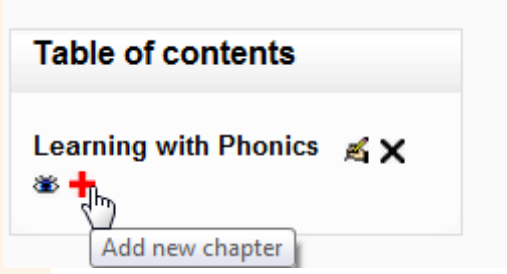


Adding chapters and subchapters

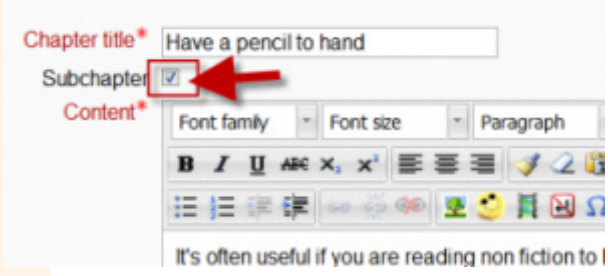
Chapter titles appear as links in the "Table of contents" to the right of the table of contents. It is recommended to keep the titles short.

To add a chapter:

1. Go to the "Book" resource. Select Actions Menu > Turn editing on or the top right button with the same name
2. Select the "+" icon in the "Table of contents", next to the chapter after which you want to add the new chapter.



You can add subchapters in the same way. A subcategory cannot have other subcategories.

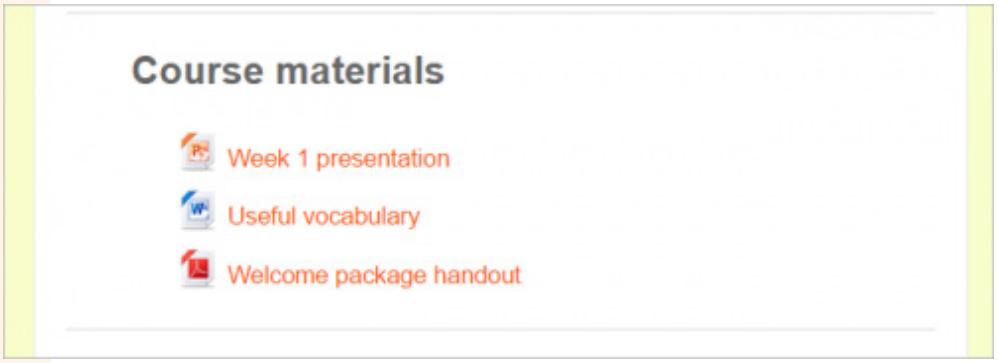


File

The platform provides an easy possibility for a teacher to present his course materials to learners, such as Word documents, PDFs or PowerPoint presentations. All types of files can be uploaded and accessed through the platform, but the learner must have the correct software to open them.

Files can be added by uploading from an external source, such as a computer or USB drive, or by drag-and-drop directly onto the course page. Both options require editing to be enabled *Actions Menu > Turn editing on*.

Note: How learners see the file will depend on the file type and its display settings. For example, a loaded PowerPoint presentation will not play as it would on a "Whiteboard" even if it is saved as "Show". Learners will be prompted to download it.



File Resource Setting

In the *General section*, settings are added such as the name of the resource, the description, as well as the file that will be uploaded to the platform.

You can enable settings for restricted access in "*Restrict access*" and settings for activity completion in "*Activity completion*".

Display

„Automatic"

The platform will choose the most suitable display method.

„Force download"

The user selects the file, which will be downloaded to their computer.

„Embed"

The platform will open the file in a separate page, the platform header and footer will be displayed on that page, along with the platform blocks, title and description of the file type resource (suitable for video files, pdfs, images).

„Open"

Similar to the "*Embed*" option, only in this case the file will be opened in a plain browser page, without header, footer, blocks or description.

„In pop-up”

Similar to the “*Open*” option, except that the file will be opened in a new, small, separate browser window.

„New window”

Similar to the “In pop-up” option, except that the newly opened window will open in a new browser tab.

Folder

A folder resource allows a teacher to display multiple course files together. The files can be of different types and can be uploaded all at once, as an archive that is then unzipped, or they can be added one by one in an empty folder on the course page.

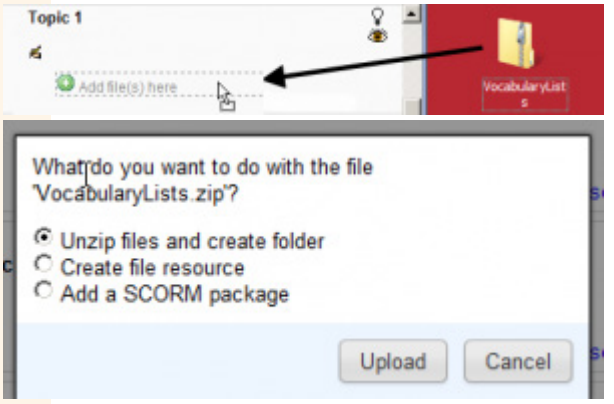
Platform folders are intended solely for organizing files, and not for other types of resources or activities.

Adding a folder in progress

If you already have a file folder created, you can upload it to the platform in two ways:

The first way (possibly faster)

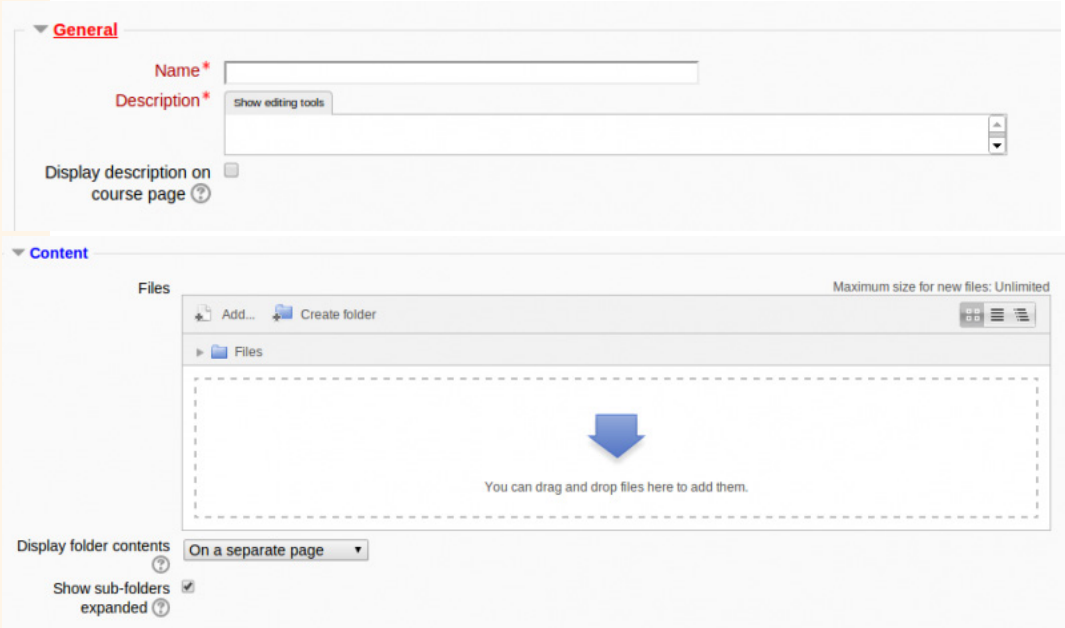
1. Activate *Actions Menu > Turn editing on*
2. Drag-and-drop the archived folder into the course section
3. Click on the action you want to perform on the folder (in our case “*Unzip”*) and select “*Upload*”
4. If necessary, you can edit the folder title by clicking on the pencil icon.



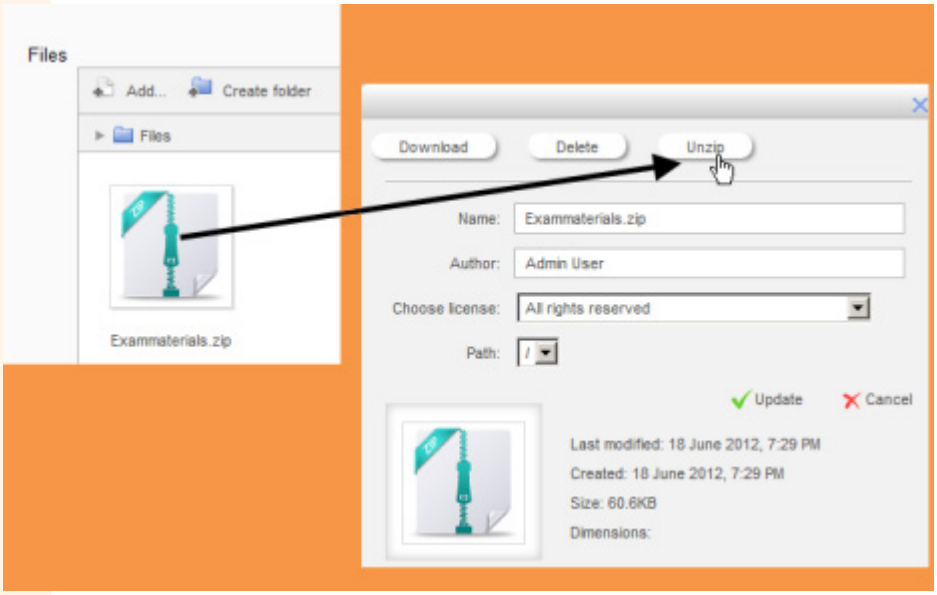
The second way

1. Activate Actions Menu > Turn editing on

2. Select the “Add an activity or resource” link, and from the displayed list select “Folder”.



1. In the “General” section, configure the folder title and a short description if desired.
2. In the “Content” section, add the desired folder as an archive.
3. To unzip the folder, click on the folder thumbnail and select “Unzip”



4. Click once more on the archived folder thumbnail, and this time select “Delete” to delete the original folder.
5. Set the display mode of the folder, if you want to restrict access to it or “Common module settings”.
6. Save the changes

Creating a new folder and uploading files to it

Use this method if you want to create a folder in progress and then upload files to it.

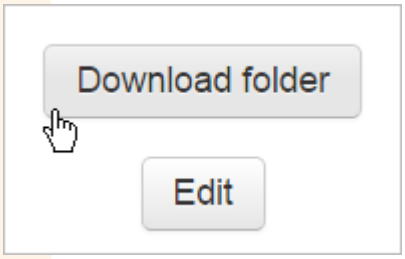
1. Activate Actions Menu > Turn editing on
2. Select the “Add an activity or resource” link, and from the displayed list select “Folder”.
3. Add the folder name and/or a description
4. Select “Create folder” if you want to create a subfolder
5. Upload the desired files
6. Set the display mode of the folder, if you want to restrict access to it or “Common module settings”.
7. Save the changes.

Display folder contents

Select whether you want the folder displayed on a separate page (default) or on the main course page with or without subfolders, and how to display the subfolders.

Show download folder button

If this option is enabled, then a button will be displayed so students can download the contents of the folder as an archive for offline viewing.



Label

A “Label” resource serves as a spacer in a course page. It can be used to add text, images or multimedia content among other resources and activities in different sections of the

course. It is a very versatile resource and can help improve the look of a course if used judiciously. Banners or various descriptions can be added to the "Label" to distinguish and highlight different areas.

On the other hand, excessive use of multimedia content (audio, video) in "Label" can slow down the loading of a course page.

Page

A "Page" resource links to a page that displays teacher-created content. The text editor allows the page to display multiple types of content, such as plain text, images, audio, video, embedded code, or a combination of all of these.

In some cases, it may be preferable to use the "Page" resource instead of uploading a word document, especially if the document contains read-only text that should not be downloaded.

URL

A "URL" resource allows the addition of a link to a web site or online file in progress. Teachers can use the "URL" resource to provide students with web links for research, saving the student the time and effort of typing in the address manually. URLs can be displayed in various ways - for example, opening in a new window so that a student can access and use the link, close it, and easily return to the original course page.

7. Activity

The activities are interactive materials that require the participation of the learners. To add an activity to a course, we enter the course, and select *Actions Menu > Turn editing on* from the upper right corner, and from the "*Add an activity or resource*" menu corresponding to a section of the course, we make the desired choice. Fill in the required fields and edit the settings conveniently. Later we can always return to these settings to modify them. At the end, press the "Save and display" button at the bottom of the page, to see the created activity, or "Save and return to course".

Assignments

The Assignment activity provides a way for learners to submit work to teachers for grading and feedback. The work can be written as online text or as uploaded files of any type that the teacher's device can read. Students can submit individual or group work.

Setting „Assignment" activity

In the "*General*" section, configure the name of the activity, the description, and you can upload a file that can be used as an example for students.

You can enable settings for restricted access in "*Restrict access*" and settings for activity completion in "*Activity completion*".

Availability

- *„Allow submissions from"* - This option prevents learners from submitting an assignment before the due date, but does not hide the purpose or the instructions or materials included.
- *„Due date"* – Submissions are still allowed after this date, but will be marked as late.
- *„Cut-off date"* – After this date, learners will not be able to submit work and the submit button will disappear.
- *„Remind me to grade by..."* – A date must be entered here for the activity to be displayed in the teacher's *Course overview* block and in the Calendar. It will only be displayed when at least one learner has submitted a paper.

Submission types

Here you can select how students will submit their work.

Note: If "*Submission comments*" are enabled, students will be able to add a note to their teacher when submitting their work.

- *„Online text"* – Learners edit their work directly in the platform using a text editor. A word limit may be set for redacted text.
- *„File submissions"* – Learners can upload one or more files of any type that the teacher can open.

Feedback types

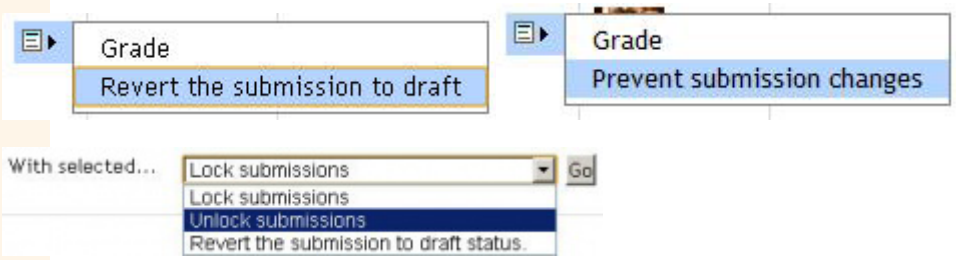
- „*Feedback comments*" – With this option enabled, raters can leave comments for each submission.
- „*Feedback files*" – This option allows grading users to upload feedback files at the time of grading. These files can be student work, notes, feedback files, audio feedback. This option enables the "*Feedback Files*" column in the activity grading section ("*View all submissions*" button).
- *„Comment inline"* – This option allows a teacher to provide feedback in the form of a comment directly on a work submitted as "online text".

Submission settings

- *„Require students click submit button"*

  o If set to '*No*' then learners can make changes at any time. (If a teacher wants to block the learner's ability to modify their work, they must access "*View all submissions*"; locate the learner and from the *"Edit*" column, click on the "Edit" link next to that learner and select "*Prevent submission changes*").

o If set to '*Yes*', learners can upload drafts of the paper until they are satisfied with the answer and ready to submit. By clicking the submit button, he tells the teacher that he has finished writing and that he wants his work to be graded. They can no longer edit their work. If he needs to change it again, then he needs to ask the teacher to mark the submitted work, at draft status again (Teacher access "*View all submissions" > locate the learner in the list > Edit > Revert the submission to draft*).



- *Attempts reopened*-If *"Require students click submit button"* is enabled, then students can submit a paper only once. You can change this here to 'Manually' and resubmit, or you can set 'Automatically until pass'' so learners can resubmit a paper until they get a passing grade.
- *Maximum attempts* – Decide how many resubmissions learners are entitled to.

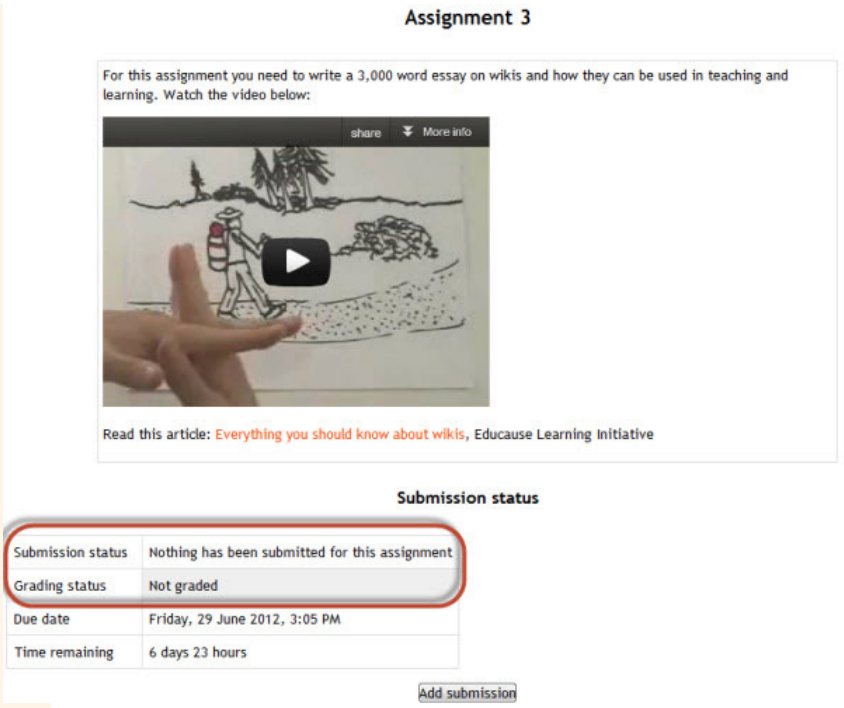
Groups' submission settings

Allows learners to collaborate on a single assignment. When grading, the teacher can choose to give a common grade and feedback for all students in the group or to give individual grades and feedback to each member.

- *„Require group to make submission*" - If enabled, users who are not members of a group will not be able to submit work.
- *„Require all group members submit"* - This setting will only appear if the teacher has checked the "Require students click submit button" button. The work will not be classified as "submitted" unless all members of the group have contributed. After a student submits a contribution, the other members of the group will be able to see who has more to submit.

Using „Assignment"

To know how the student sees the topic, we can switch to the student role by accessing the "Switch role to..." link in the user menu, located at the top left of the screen.



The teacher can access the "*View all submissions*" link. You will be taken to a page showing a table of all learners who have submitted a paper and their names.

Chat

Chat allows participants to have a synchronous discussion in real time. The teacher must first create a chat room, for which he specifies the time when he waits for learners to log in. The session can be repeated during the course, or it can take place only once.

Chat setting

Settings such as activity name and description are added to the General section.

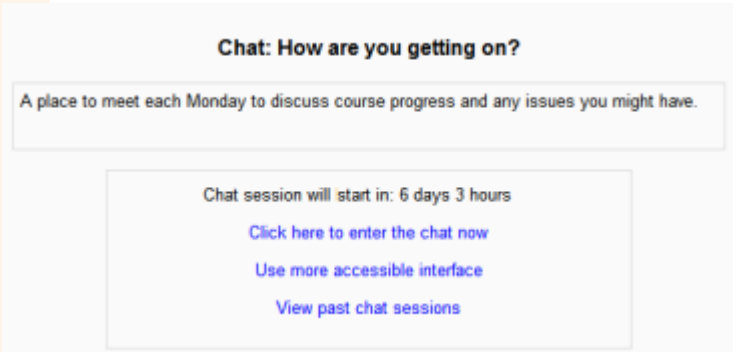
You can enable settings for restricted access in "Restrict access" and settings for activity completion in "Activity completion".

In the "Chat sessions" section you can set:

- the start time of the next session;
- how we want the session to be repeated (here we can choose between repeating the session daily/weekly at the same time, not repeating it or always keeping the room open and not showing the time when the conversations take place);
- the period for which we can save a transcript of the messages, under "Save past sessions";
- whether all users can view chat logs.

Using Chat Activity

Learners can access the chat at any time, not just at the set time. They can communicate with other learners who are there.



If we follow the "*Click here to enter the chat now*" link, we will use the regular chat version. This presents a text box at the bottom of the window for entering the message, which is sent to anyone who is logged into the chat when the Enter key or the "*Send*" button is pressed. The chat window updates periodically, every 5 seconds.

"*Use more accessible interface*" - The version without frames and JavaScript allows you to type your message in a text box and send it when you press the "*Submit*" button.

If we follow the link "*View past chat sessions*", we will be able to see all the chat sessions. Each of them can be viewed or deleted.

Choice

The Choice activity allows the teacher to ask students a multiple-choice question and collect their responses. It is like a vote cast by them. It can also be used for initial testing within a lesson.

Activity Choice setting

In the General section we add the wording of the question and set whether we want to display the options horizontally or vertically (usually the answers look better vertically, especially if there are many options).

You can enable settings for restricted access in "*Restrict access*" and settings for activity completion in "*Activity completion*".

In the "*Allow choice to be updated*" field, select whether to allow the choice to be updated (if yes, the student can change his mind, if not, the student decides only once);

If we select "*No*" in the "*Limit the number of responses allowed*" field, any number of participants can choose any option; if we select "*Yes*", the "*Limit*" field in the options below becomes active, allowing us to set the maximum number of participants who can choose that answer option.

Next, enter the answer options that the learners have to choose from in the "*Option"* fields and, possibly, the values in the "*Limit"* fields. If there are less than 5 answer options, we will leave the last fields blank.

If there are more than 5 answer options, we can add as many as we need by pressing the "*Add 3 field(s) to form*" button.

Next we can check in the "*Availability*" section that we want to specify the period of time in which answers to this choice are accepted, then we are allowed to set the initial and final moment.

Section of *Results*

- *„Publish results"* - we determine how we publish the results (we do not publish them, we show them to the students immediately after they have answered, we show them to the students only after the choice is closed, we always show them to the students).
- *"Privacy of results"* - the confidentiality of the results (if we show the names and answers of the learners or keep them anonymous);
- *"Show column for unanswered"* - if we show a column for unanswered questions (allows learners to see the number of unanswered questions).

Using Choice Activity

The teacher can view the responses given by the learners by following the link at the top right of the activity page "View x responses". A table will open with one column for each answer, with the name and picture of the students who chose that option. The result can be downloaded in a format chosen by the user by pressing one of the three buttons at the bottom of the page.

Database

The Database activity allows users to collaboratively build, display and query a bank of articles on a given topic. Articles can contain images, files, numbers, texts, URLs, and more.

Database setting

Settings such as activity name and description are added to the General section.

You can enable settings for restricted access in "*Restrict access*" and settings for activity completion in "*Activity completion*".

Entries

With "*Approval required*" the teacher determines whether student entries must be approved by someone with an appropriate role before they are visible to all users. This way students can be helped to produce quality work by giving them feedback before approving their article.

At "*Allow comments on entries*" the teacher determines whether to allow comments on articles. If so, they will only be seen in single-item-per-page view mode. Comments provide feedback to learners and can help them improve their work.

At "*Entries required before viewing*" the teacher writes how many entries each student must create, to be able to see what other users have worked on. Before this number is reached, the learner only sees the new article entry page.

Availability

"Available from" and "Available to" we can select when the database can be visible to learners.

If we check *"Read only from" and "Read only to",* we can select the dates between which the database can be consulted, but not edited.

The *"Available from/to"* settings override the *"Read only from/to" settings.*

Ratings

The "*Ratings*" section defines which roles are allowed to rate articles. Roles can be set using *the Actions Menu > Permissions menu* within the activity.

"*Aggregate type*" defines how the scores are combined to get the final catalog grade. We can choose between averaging the scores, considering the number of items scored, the minimum, the maximum or the sum of the scores. If we choose "*No ratings*", the activity will not appear in the catalog.

Using Database

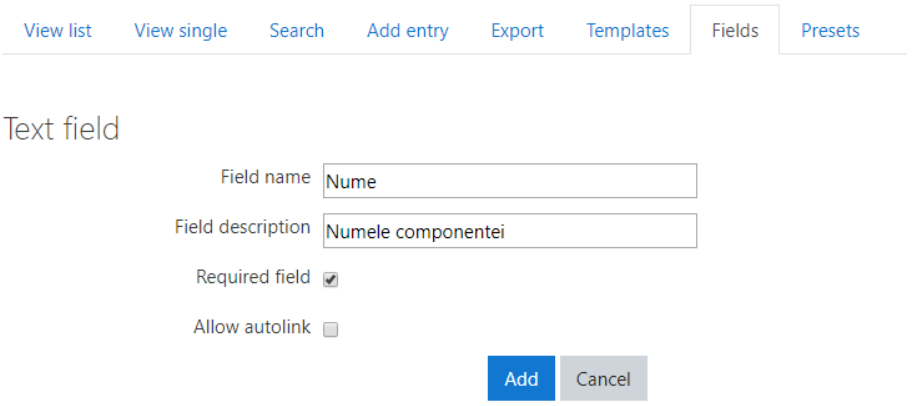
After pressing the "*Save and display*" button, we are led to the field definition operation, to establish the structure of the database and determine the type of information that can be entered by the learners.

Fields can have various default types:

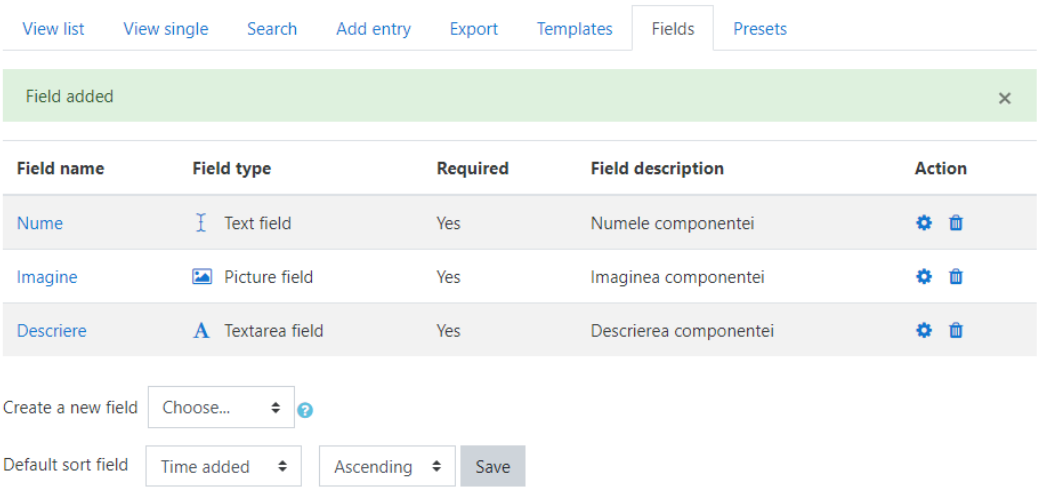
- *„Checkbox"* allows learners to tick one or more checkboxes;
- *"Dates"* allows learners to select the day, month and year from a drop-down list*;*
- *"File"* allows learners to upload a file from their computer;
- *"Picture"* allows learners to upload an image file;
- *"Latitude/longitude"* allows students to enter a geographic location;
- *"Menu"* allows students to make a choice from a drop-down menu*;*
- *"Multimenu" (multiple selection) a*llows students to make multiple choices in a drop-down menu by holding down *the Ctrl or Shift key;*
- *"Number"* allows students to enter a number;
- *"Radio button"* allows students to select a single option from a list;

- *"Text"* allows students to enter a text of up to 60 characters;
- *"Texting"* allows students to enter text longer than 60 characters and format it;
- *"URL"* allows students to enter a URL.

When we want to create a field of a database, after choosing the type we must enter its name, its description and possibly specify other options (for example the size of an image in the individual view and in the list view or the number of lines and of columns of a text area).



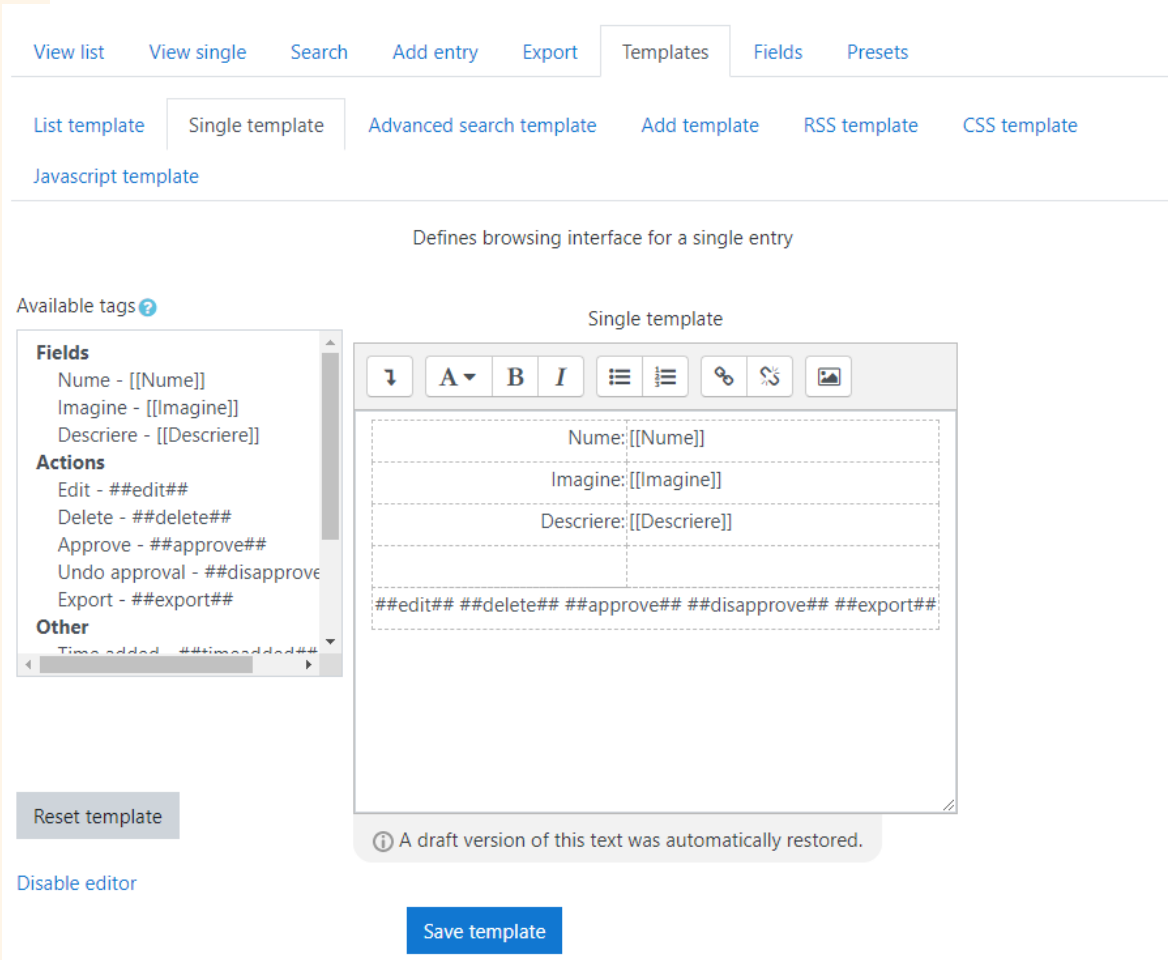
The created fields appear on the screen in a table. When the field definition operation is complete, press the Save button.



The next step is to edit the template for the user interface in "Templates". Defining the fields produces a default template that can later be easily improved.

Templates are HTML pages that contain tags for working with databases. On the left side of the screen there is a list of available tags, from where, by double-clicking, we can add

them to the template. At the end of the editing operation, we save the template, or reset it if we are not satisfied.



From now on users can add entries using the "*Add entry*" tab.

After adding items, they can be viewed one below the other on the "*View list*" tab or one by one on the page on the "*View single*" tab.

Feedback

The "Feedback" activity allows you to create and conduct surveys to collect feedback. Unlike the Survey activity, it allows you to write your own questions rather than choosing from a list of pre-written questions, and unlike the Quiz activity, you can create unscored questions. The feedback activity is ideal for course or teacher evaluations.

Feedback setting

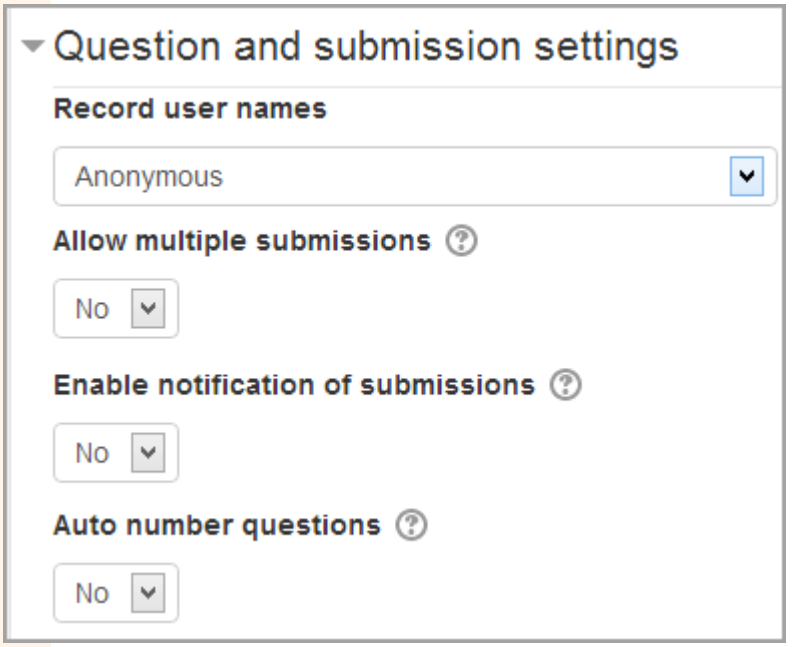
In the General section, add the name of the activity and the description.

You can enable settings for restricted access in "*Restrict access*" and settings for activity completion in "*Activity completion*".

Availability

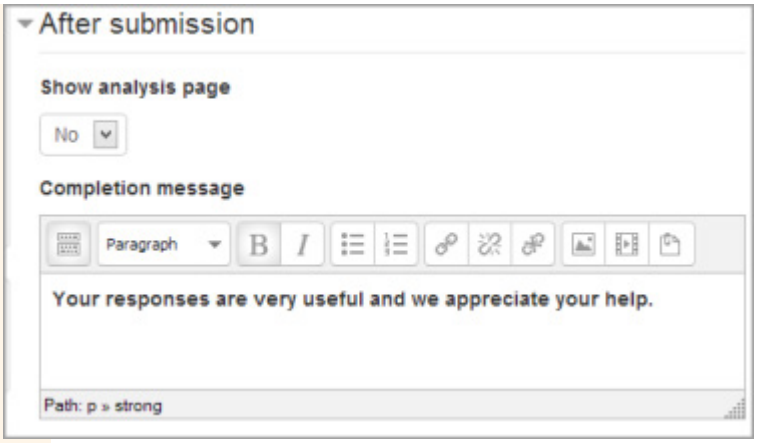
Here you can choose when users can fill out feedback.

Question and submission settings



- „*Record User Names*" - Choose here whether or not to show the names of users completing feedback.
- "*Allow multiple submissions*" - Choose here whether or not to allow users to complete feedback multiple times.
- "*Enable notification of submissions*" - If set to "Yes", teachers will receive notifications when users submit feedback.
- "*Auto-number questions*" - If set to "Yes", then the questions will be numbered automatically.

After submission

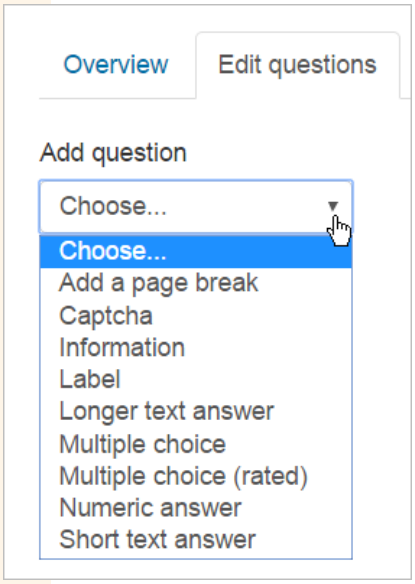


„Show analysis page” - Summary results can be displayed to respondents or shown only to teachers. *„Completion message”* - This allows you to present users with a personalized message after they answer questions.

„Link to next activity” - This allows you to add a link to another activity or website that you want them to be redirected to once they have answered the questions.

Using Feedback

After setting up a “*Feedback*” activity, add questions by clicking the “*Edit questions*” tab and selecting the question type from the drop-down menu. Add the details of the question and click on “*Save question”.*



Standard options

The following options apply to the vast majority of question types.

- “*Position*” - This number controls the order of the questions. Position 1 has the

question closest to the top of the page, so when you create or edit a question, you can choose from the drop-down list of available positions (which will vary depending on how many other questions there are). You can also arrange questions by clicking the up and down arrows on the main add questions screen.

- "*Required"* - The answer to these questions is mandatory

Captcha

A test to make sure a real person is filling out the form and not an automated spam program.

Information

This element allows you to display the course and/or category the feedback is in.

Label

Like a standard tag, this allows you to add text between questions that provides additional explanation or breaks the feedback into sections.

Longer Text Answer

This question type is for creating a text box (specify how large it will appear in rows and columns) into which users can write a longer answer.

Multiple choice

This question gives you three alternatives:

1. "*Multiple choice single answer*" - Allows setting multiple choice options, with radio buttons. The first option can be "Not selected". Only one option can be chosen.
2. "*Multiple choice, multiple answers*" - Allows the selection of several options.
3. "*Multiple choice - single answer allowed (drop-down menu)"*- WILL display a drop-down menu from which only one answer can be selected.

Numeric answer

Use this question when you need to get a number as an answer. You can specify the range between which the number should be found.

Multiple Choice (Rated)

It is similar to the other multiple choice questions, except that each option has a numerical value associated with it. You can choose to use radio buttons or a drop-down menu to display the answer options.

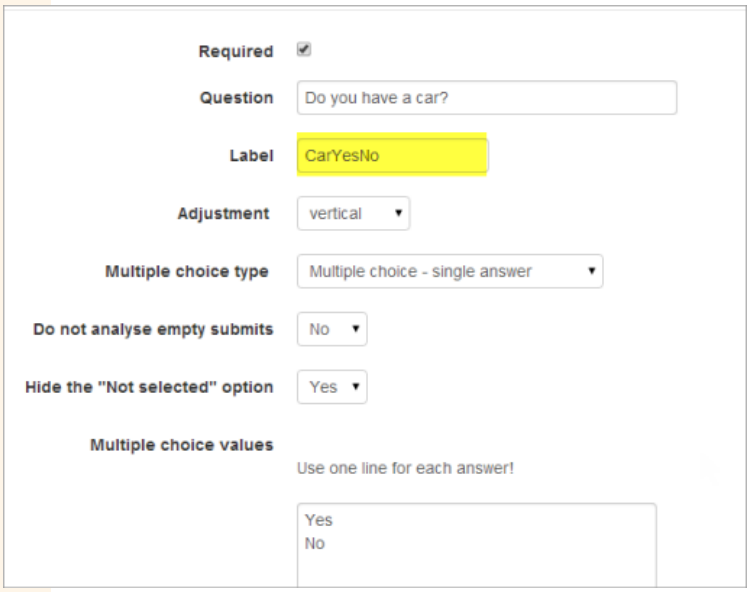
Short Text Answer

It gives you the ability to use a question type that requires a single text response, with an input box that has a set number of characters.

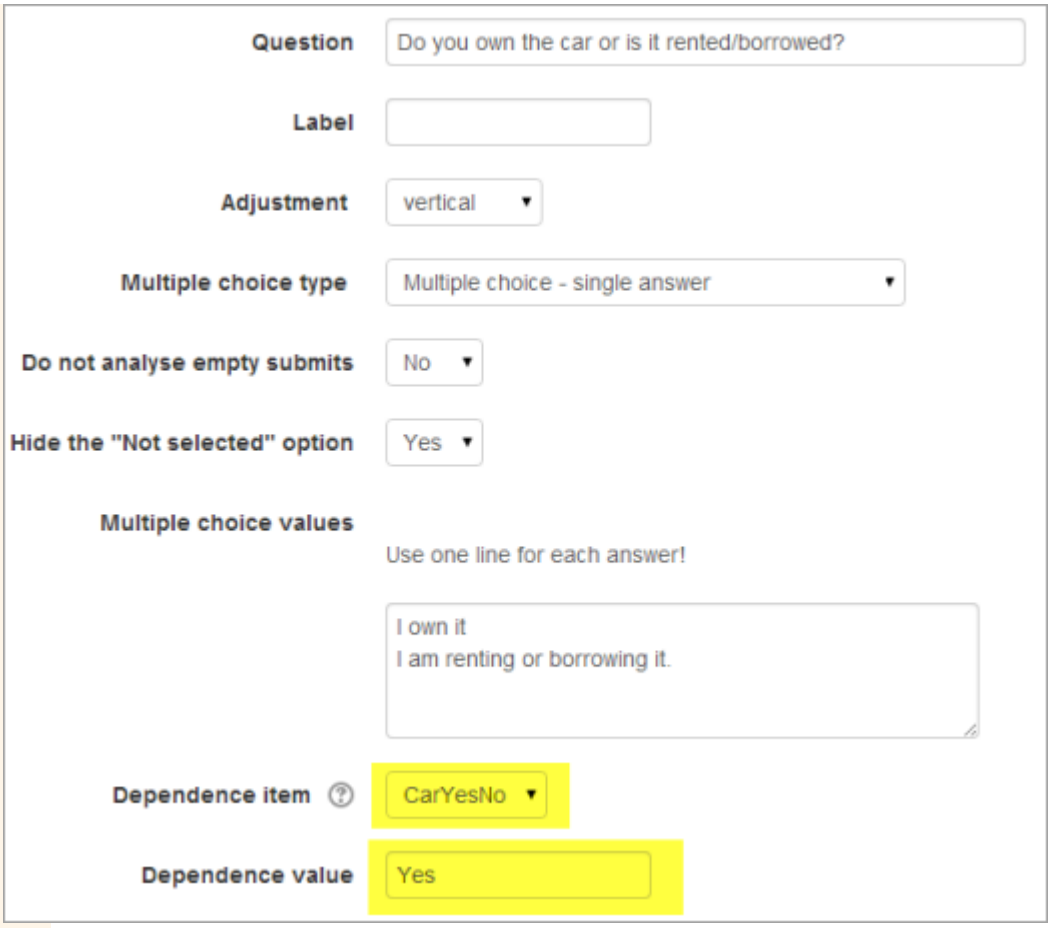
Dependence item and Dependence value

It is possible to direct the user to specific questions based on a previous answer. For example, if they answer “Yes” to the question “Do you have a car?”, they will be directed to a different question than if they answered “No”. To set dependent questions:

- Set up the initial question and give it a name in the “Label” field



- Add a “Page break”
- Add the question that will be reached if (for example) the user answers “Yes”.
- In “Dependency item”, select the label (“Label”) of the first question.
- In “Dependence value” type the dependent answer (like “Yes” in our example.)

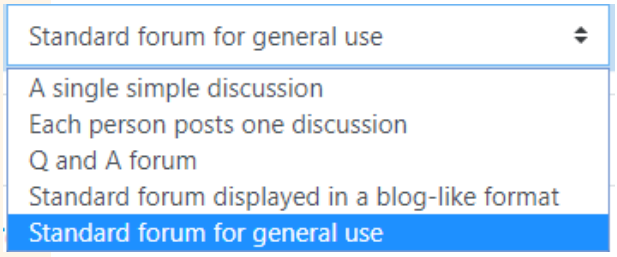


• Follow the same process for the other answer (such as “No”)

Forum

The forum is a tool for asynchronous discussions. The teacher may require all students enrolled in the course to register for a forum; thus they will receive email notifications when each new position appears and will be able to communicate with each other and with the teacher at any time.

There are five types of forums:



- *„Standard forum for general use”* – The usual type of forum, generally found where anyone can initiate a discussion at any time.

- „*Single, simple discussion*" – Allows the creation of a single discussion that anyone can reply to.
- „*Each person posts one discussion*" – It allows any learner to post a single discussion, to which anyone can reply.
- „*Q and A forum*" – Require each learner to post their own input before they can see others' contributions
- „*Standard forum displayed in a blog-like format*" – Anyone can start a discussion at any time, and the topics are displayed in the form of a blog.

Forum setting

When we start creating a forum, in the General section we have to specify its name, decide what type we want it to be and give a short description of it.

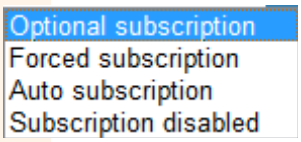
Attachments and word count

At "*Maximum attachment size*" we specify the maximum size of the file that can be attached to a post on the forum.

At "*Maximum number of attachments*" we specify the maximum number of files that can be attached to a post on the forum.

Subscription and tracking

At "*Subscription mode*" we have to choose a mode of registration to the forum.



The first mode allows participants to choose whether to join the forum. In the second mode, participants are automatically enrolled and cannot opt out. In the third mode, participants are automatically enrolled at first, but can opt out later. The last mode does not allow registration.

"*Read tracking*" - Can have two values: optional (participants can choose whether or not to subscribe when receiving messages) and disabled (subscription is disabled).

Post threshold for blocking

„Time period for blocking" - We specify a duration, from a day to a week, if we want to be able to block students, or not to block otherwise.

At "Post threshold for blocking" we specify the maximum number of posts that a learner can make in the previously specified time period.

"Post threshold for warning" is how many posts a warning is sent to learners.

Ratings

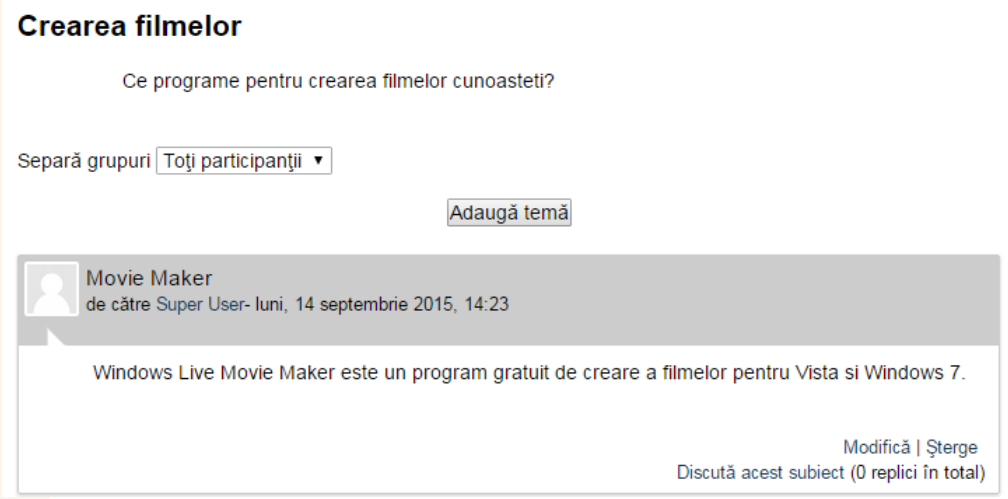
In the "*Ratings*" section we can specify which roles allow the rating operation.

"*Aggregate type*" determines how the ratings will be combined to get the final catalog grade. We choose "*No ratings*" if the activity will not appear in the catalog.

„Restrict ratings to items with dates in this range" allows us to limit the evaluation of posts only to those published in a certain period.

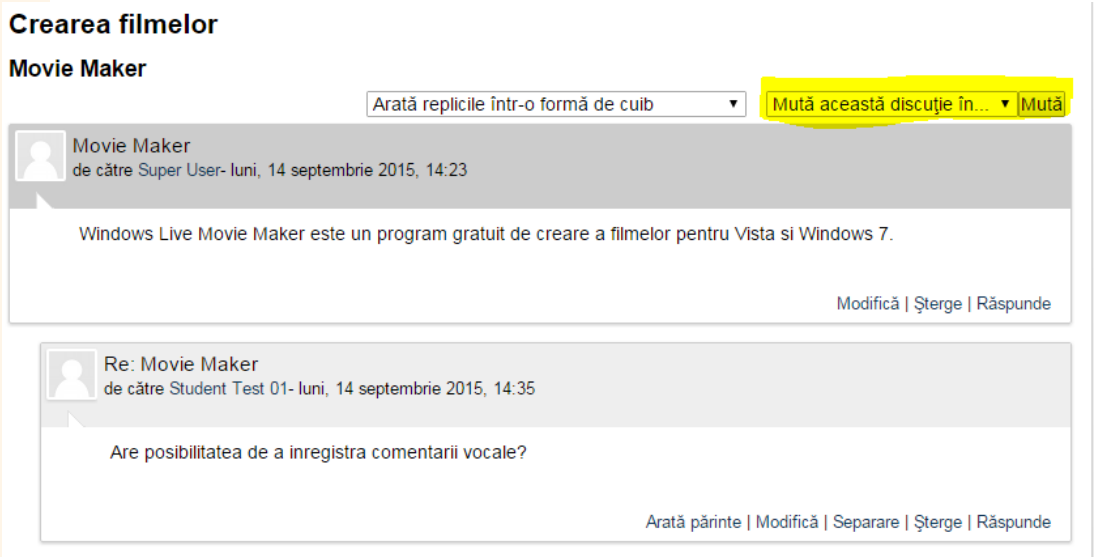
Using Forum

The teacher who created a forum must later manage it. First of all, it is good to inform the students how often (daily, weekly, etc.) he will enter the forum and answer their messages. They must also establish some rules of behavior regarding the language, the topics addressed and others. Learners need to be helped to understand the difference between a social forum and an academic forum. The quality of learners' posts can also be influenced by the grades they receive in their assessment. Finally, if the situation gets out of hand, the teacher can delete unwanted posts from the forum.



When a thread becomes very long, it can be archived and moved to a forum specifically created for this purpose, usually at the beginning or end of the course. For this, choose "Move this discussion to..." located on the top right of a discussion thread, then press the "Move" button. In place of the moved discussion, you can put a new post with a summary

of it.



Another recommended practice is to establish a small group of learner moderators for each forum or discussion. These learners need to prepare well to master the subject and answer the basic questions. They may be allowed to rate their peers' posts, archive threads, and write summaries for them.

Glossary

The glossary is like a dictionary maintained by the participants. Each discipline has its own specialized terms, new words, acronyms, abbreviations. Within any course we can develop a set of terms with their definitions, definitions that can be easily accessed through links.

The teacher usually creates a main glossary in the general section at the beginning of the course and several secondary glossaries in other sections where needed. The latter can be configured to be edited and commented on by learners. Entries from secondary glossaries can be imported into the main glossary. If this import is not needed, then we can just create secondary glossaries.

Glossary setting

On the page for creating a glossary, in the General section we specify the name and a short description.

The global glossary has terms accessible from across the site, not just from one course. Therefore only the administrator can create a global glossary.

In "*Glossary type*" we specify whether we want to create a main glossary or a secondary one.

Entries

At "*Approved by default*" we decide whether we want entries to require a teacher's approval before they become visible to all participants.

"*Always allow editing*" specifies whether students can only edit their entries during an allotted time, or whether they will be able to do so at any time.

At "*Duplicate entries allowed*" we specify whether we allow more entries with the same name.

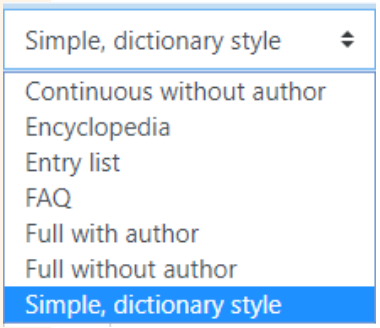
At "*Allow comments on entries*" if we want participants who have permission to post comments, to be able to comment on glossary entries.

At "*Automatically link glossary entries*" we specify whether we want any occurrence of glossary terms in the course to have the form of a link to the associated explanation.

Appearance

At "Display format" we choose one of the 7 available display formats.

- "*Full with author*" displays author data and attached files as links.
- "*Full without author*" displays attached files as links.
- "*Encyclopedia*" lists entries one by one, separated only by edit icons.
- "*Entry list*" is like "*Full with author*", having in addition the images displayed in the line.
- "*Simple, dictionary style*" does not show authors and attachments appear as links.
- "*FAQ"* has the words "QUESTION" and "ANSWER" appended to the definitions of the concepts.



„Show alphabet links" determines whether participants can browse the glossary in alphabetical order.

"Show 'ALL' link" determines whether all entries can be browsed at once.

"Show 'Special' link" specifies whether to browse the glossary for special characters such as @ and #.

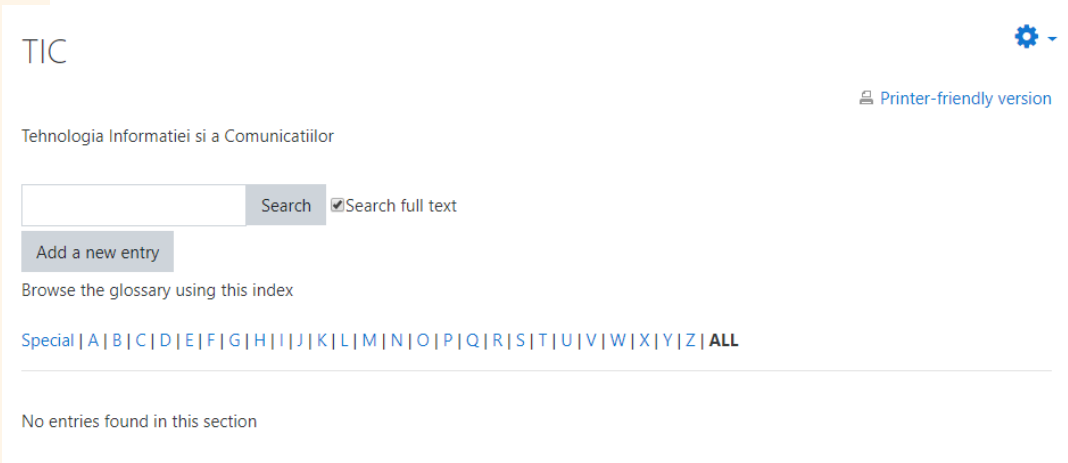
"Allow print view" determines whether learners are shown a link (always available to instructors) to a printable version of the glossary.

Ratings

In the "Ratings" section we establish, as we presented in the previous activities, which are the roles that allow the evaluation of the entries, how the grades are aggregated to obtain the final grade in the catalog and if the grading is restricted to a certain specified period of time.

Using „Glossary"

When we go to the glossary link on the course page, we are taken to the glossary page, where we can add new terms, after pressing the button *„Add a new entry"*.



On the page for adding a new entry we are asked to write the concept and its definition, the associated keywords, to specify whether we want the occurrences of this current concept to become links to its definition, if we take into account the type of letters (uppercase and small) in the word and if in the course it will signal only the occurrence of the word alone or also when it is included in other words.

Glossary entries can be viewed alphabetically, just a specific letter, or all at once.

Lesson

The lesson created by the teacher consists of a number of pages for the learner to go through. Generally, at the bottom of each page is a question. Depending on the correctness of the answer provided, the learner is led to the next page or returned to a previous page.

Lesson setting

On the page to add a lesson, in the General section we fill in the name and a short description of the lesson.

Appearance

„Display ongoing score" produces the display on each page of the total score obtained by the learner up to that point.

„Maximum numbers of answers" represents the maximum number of answer choices that can be found on the lesson pages.

Availability

By enabling "*Available from*" and "*Deadline*", we can specify the calendar dates between which the lesson is available.

If we activate "*Time limit*", then here we specify how many minutes the students must complete the lesson. The learner can exceed this time limit, but late answers are no longer taken into account when determining the grade.

Flow control

In the "Flow control" section we can specify:

- *„Allow student review*" – the "Yes" option if we want a button to be present on the last page of the course that allows the student to resume the lesson;
- *„Provide option to try a question again*" – "Yes" option for a button to appear after giving a wrong answer to a question. The learner can choose to answer again, without being scored, or to continue the lesson;
- *„Maximum number of attempts*" – which is the maximum number of attempts allowed for each question. Upon reaching this maximum, the learner will automatically be led to the next page;

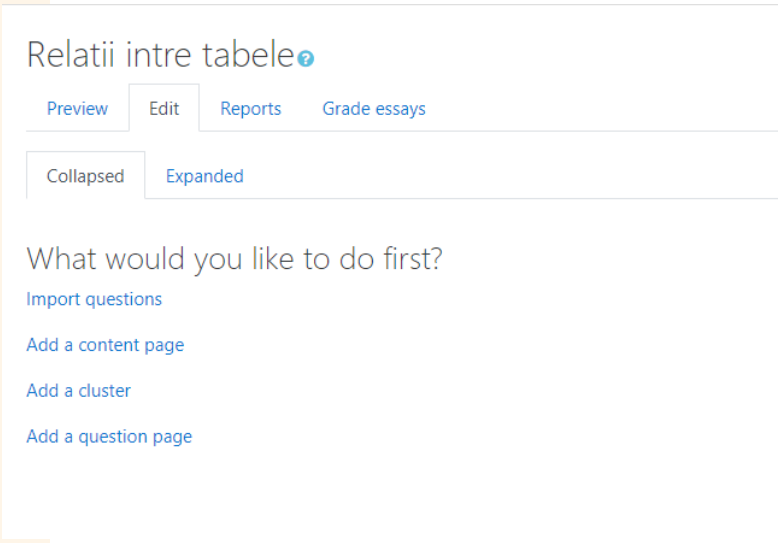
Grade

- At "*Practice lesson*" we determine if it is just a practice lesson, which is not passed into the catalog.
- *Custom scoring* allows each response to be assigned a positive or negative numerical value for evaluation purposes.
- If *Retake-allowed* is set to "Yes", learners will be able to retake the lesson.

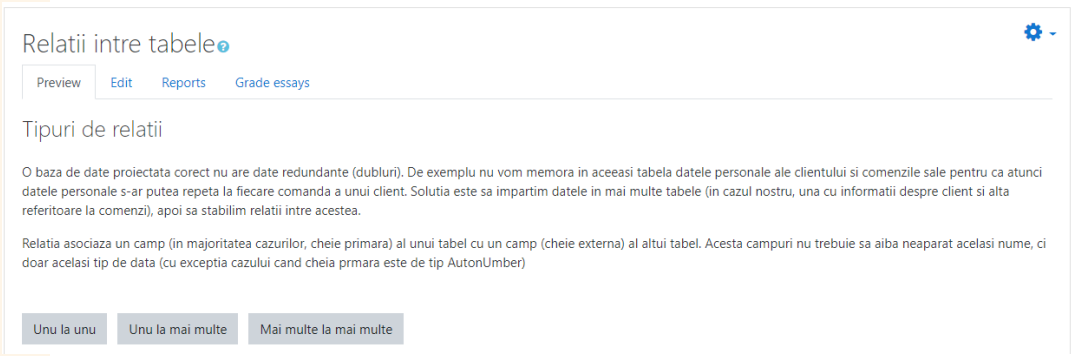
- If we allow learners to access the lesson more than once, we define in *"Handling of re-takes"* how we grade them (as an average or as a maximum of all attempts).

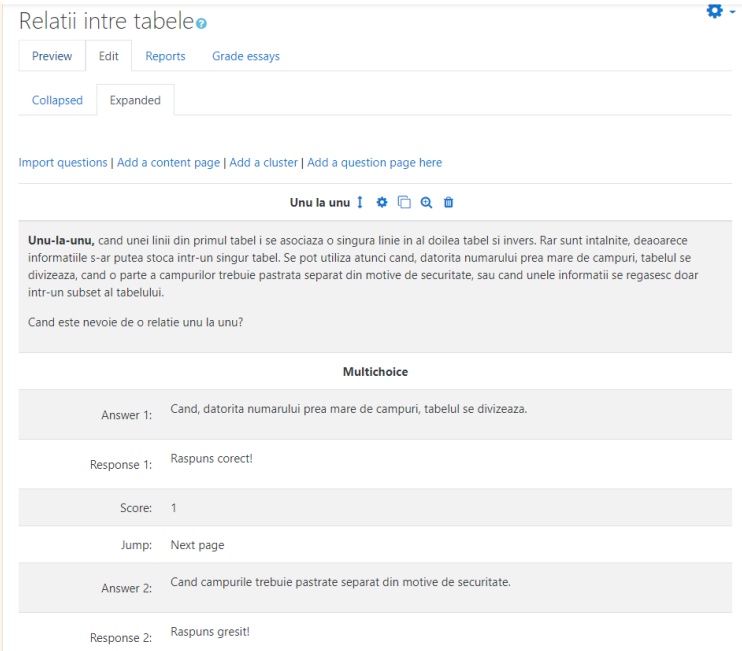
Using Lesson

After saving the lesson, it will appear as a link on the course page. Upon accessing the newly created link, we are taken to a page to start editing the lesson content. The page has 4 tabs: "*Preview", "Edit", "Reports"* and "*Grade essays*" of which the first two are the most used.



The lesson is made up of pages. The student interacts with two types of pages: "Content page" and "Question page". The first type, in addition to other content, can provide links to other pages, resembling a table of contents. It has no effect on the grade. The second type has title, content and a question at the bottom of the page. Depending on the correctness of the answer provided, the student is directed to a new page.





It is customary for the first answer to be the correct one and the following ones to be wrong. As the learner moves through the lesson, these choices appear in a random order. Many times when we create a page, we cannot correctly determine which page we want to jump to because that page has not been created and saved and thus does not appear in the drop-down list to be chosen. In this case, we make another choice, save the page and resume editing it after the desired page has been created.

Quiz

The test is a logical unit of activity on the platform, perhaps the most important unit for scoring student knowledge objectively.

The test should be seen or understood as a structured unit of items, of the same mode of presentation on the screen or of heterogeneous presentation, through which the assessment or self-assessment of a volume of knowledge or skills is aimed. From the perspective of e-learning platforms, the test is a form that allows easy management of application parameters such as the number of items, the way of extracting the items, the interactive way or not, the total working time, the frequency of questions, the right to return or not on the answers, the application of penalties or not, the amount of penalties applied, running the test several times, the minimum time interval between two runs, the time of activation, the time of shutdown, etc.

The test is created inside the course to which it belongs. “Turn editing on” is activated via, and “Quiz” is chosen from the list of activities.

Quiz Setting

As a result of this request, the system opens a new window representing the configuration form of the future test. Parameters can be set anyway because it allows to return to edit mode even after populating the quiz with questions. Restrictions can only come in after the test has been run by a group of learners.

In the General section, fill in the name and description of the respective test activity.

Timing

In the "Timing" section, the parameters related to the start date, stop date and duration of the test are set. There are also fields for setting the behavior of the test once the time limit has expired as well as the field for setting the time limit until a test can be sent. This last field is only valid if "*When time expires*" was set to "*There is a grace period*...".

Grade

When it is allowed to solve the test more than once, there are several ways to calculate the final grade. Thus, one can choose from the following options:

- *„Highest grade"* - the attempt with the best grade determines the final grade.
- *"Average grade"* - the final grade is calculated as follows: the grades from all attempts are averaged.
- *"First grade"* - the final grade is the one obtained on the first attempt to solve the test (the other attempts are ignored).
- *"Last grade"* - the final grade is the one obtained on the last attempt to solve the test (the other attempts are ignored).

Question behavior

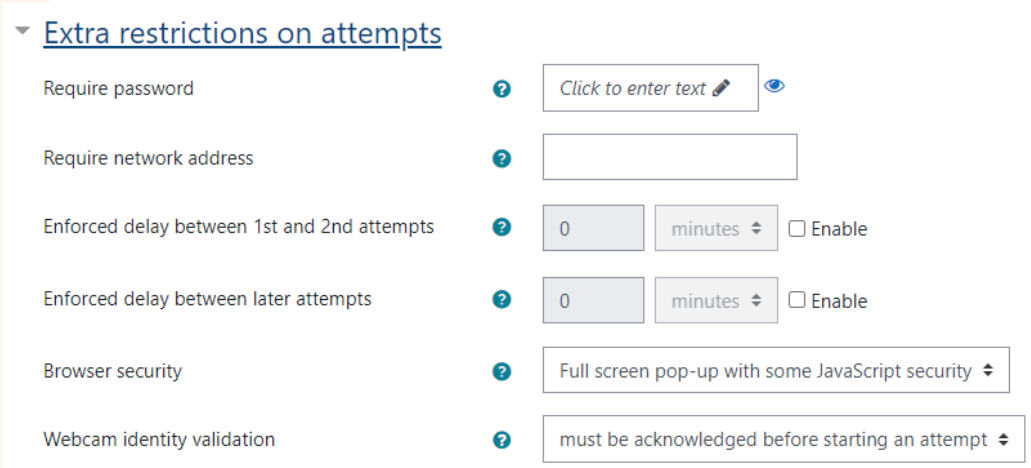
If "*Shuffle within questions*" is enabled, then each time the student accesses the multiple-choice questions and matching questions, their components will be shuffled randomly.

Review options

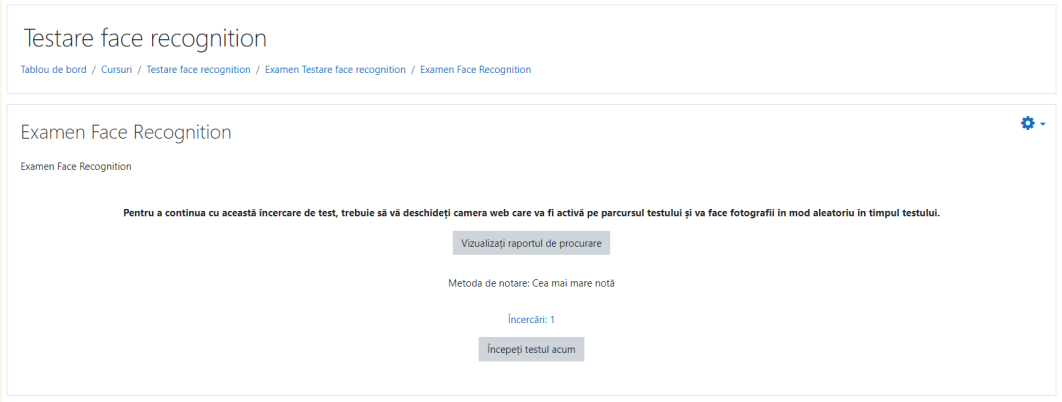
Section *„Review options"* represents a set of options for viewing results and feedback.

Extra restrictions on attempts

Section *„Extra restrictions on attempts*" contains fields to set a password to access the test, to restrict the IP address of the device from which the test can be run, fields to set the time interval between the first and second attempts, and to set the time intervals between subsequent attempts.



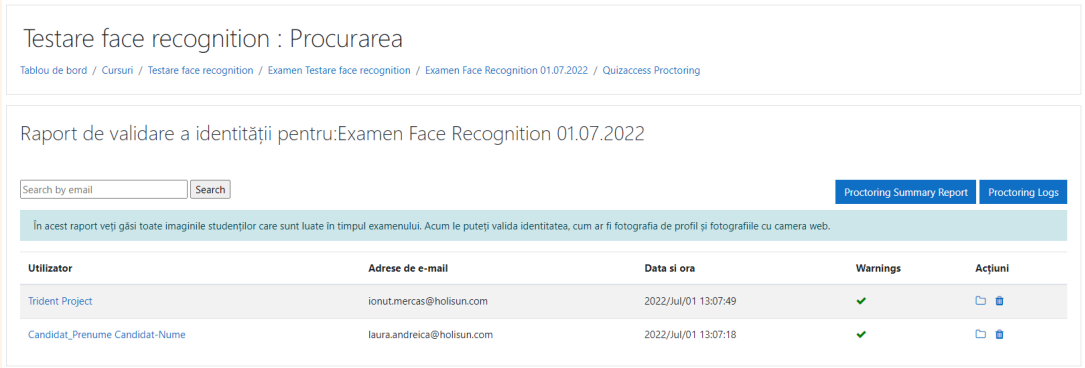
Also, in this section, the option to do recognition can be activated, by confirming the Web identity validation field. This facility requests access to capture the user's image through the web camera to identify the candidate who accessed the exam. The app will automatically capture the image every 30 seconds and store it as a PNG image. It also captures the screenshot during the test to verify that the student has not attempted unusual activities during the exam.

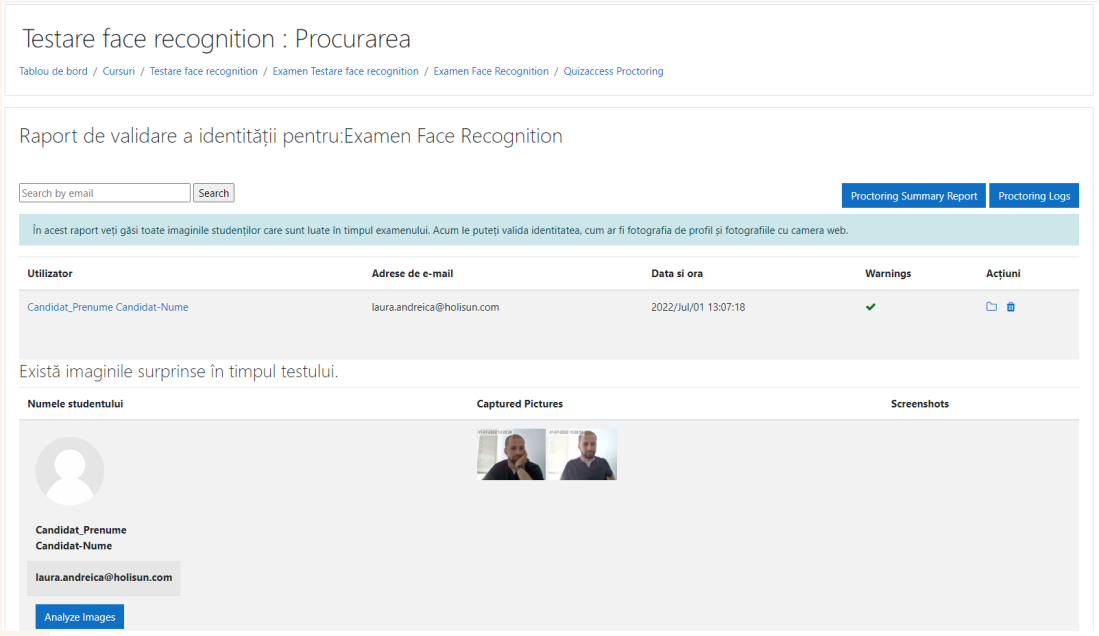


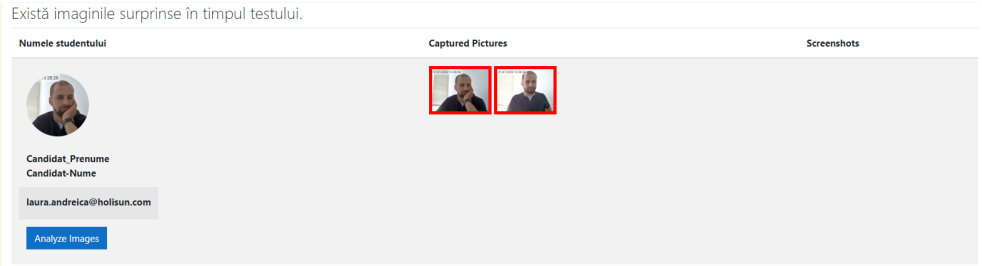
Before starting the test, the candidate will be asked for camera permission and screen sharing permission. By accepting the permission, he will be able to see the capture in real time and will be able to continue answering questions. The system works as a video recording service as if everything is captured so that the user does not try to do anything suspicious during the exam. Features offered:

- Capture user/student images via webcam
- The test cannot be accessed if the user does not allow the camera to be turned on
- Offer the ability to generate reports and check for any suspicious activity
- Will work with existing Question Bank and Quiz
- Web service API for external calls

- Images are stored in Moodle data as a small PNG image
- Image can be deleted individually or in bulk
- Surveillance log report with search facilities
- Configurable image size and capture interval
- Face Recognition Service (AWS/BS).







Overall feedback

In the "*Overall feedback*" section, you can set a text to appear after the test is completed. If Grade boundary is filled in, then feedback will be displayed based on the grade obtained.

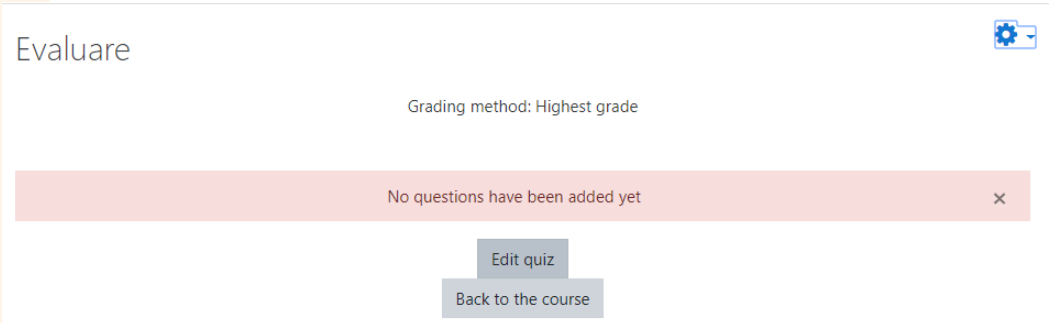
Using Quiz

Inside the tests, after creating the test by setting the parameters above, in the previous form, you can modify parameters, general information about the test, view content, student results, edit content, access question categories, access questions, export, import etc.

The varied content of the test is ensured mainly by the way the question categories are created and the way they are called.

The evaluation of the results can be done by keeping the minimum score, the maximum score or the average score.

After the test structure has been created, proceed to completing it with questions by activating the "*Edit quiz*" button.

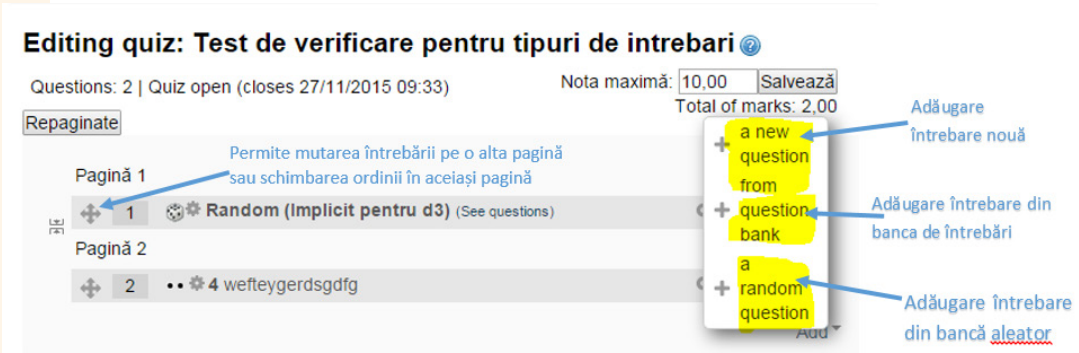


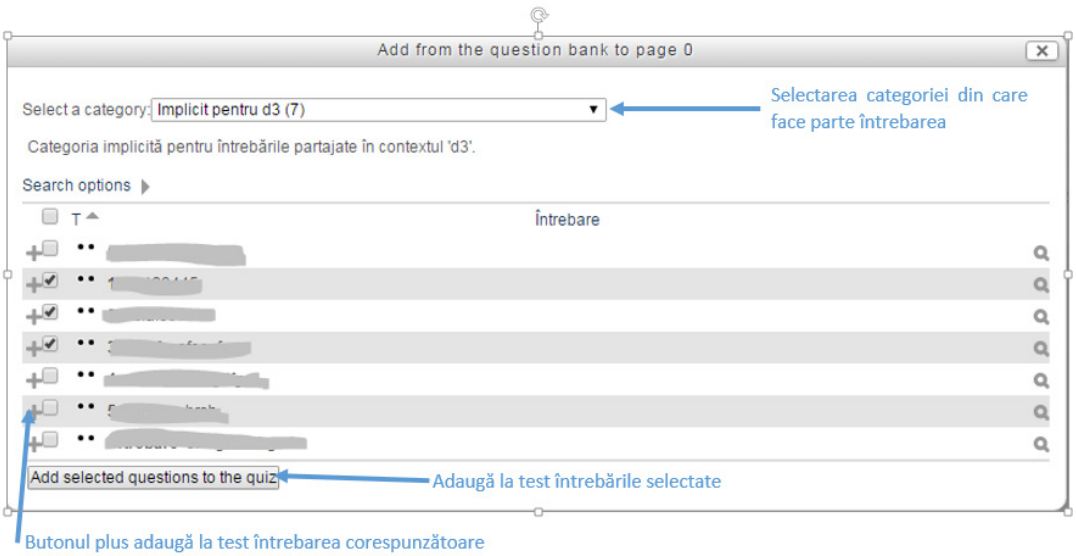
The next step is populating the test with questions. New questions can be added at that time to the test. They will be automatically saved in a category in a database of questions, so that they can be used in other tests within that course.

Already existing questions can be selected from the question database, "Question bank", and inserted into the list of questions actually used in the test. A test may include certain questions that the teacher explicitly wants to exist and others that the system draws randomly from one category or another.

The questions themselves can have the answers in the order in which they were edited or

in a random order that changes with each presentation.





In order to make good use of the flexibility of building tests, it is imperative that the questions be built by category, structured by chapter and by question type. Organizing questions by categories and subcategories is essential when working with large question packs because a top-ranking question category can call on questions from all of the subcategories it includes for a given test.

Constructing question categories

A category of questions usually belongs to a course. There is the possibility of inheritance if they have the public attribute set or if they are attached to a course that is in turn part of a Meta course. The way of structuring by categories, respectively subcategories depends exclusively on the course administrator. When there are many questions there is a risk that, if the questions are not organized very well, the same question will appear in a test several times.

First select the course to which the category will belong, then the “Course administration” page opens from the “Actions Menu” > “More...” menu. Here we will select the “Question bank” > “Categories” section.

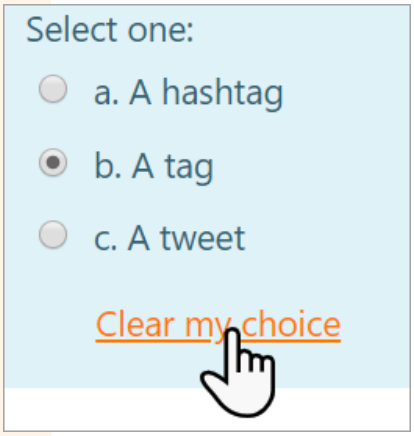
For each course there is a default course category. Beginners in the activity on the platform tend to use exclusively this category, a fact that later can have unwanted implications, especially in the situation where that block is shared between several teachers. This creates the possibility of interference for tests.

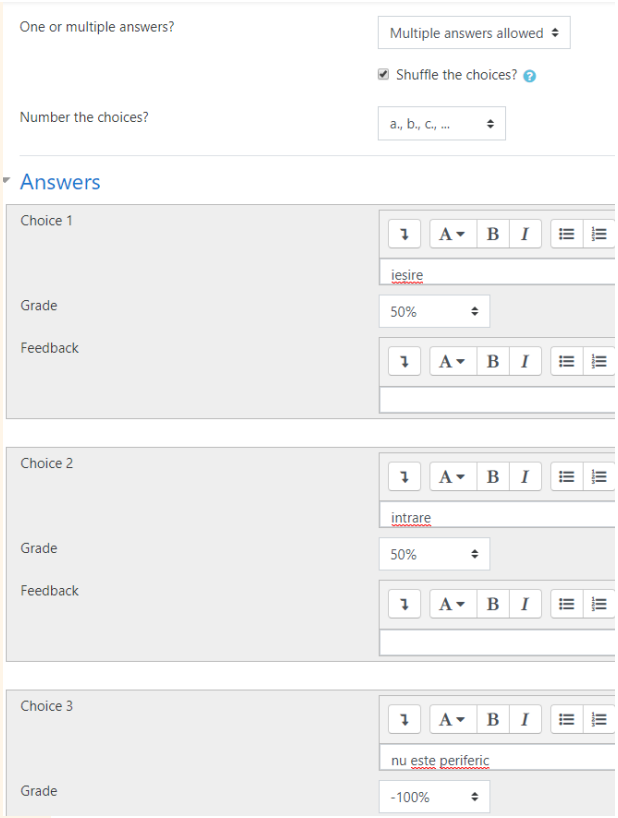
We choose the parent category for the category we want to create. If there are many categories implemented, we must scroll to the end of the list. Edit the name of the category, possibly also edit explanatory information in “*Category info*”, and then select the “*Add category*” button.

Types of questions

Multiple choice

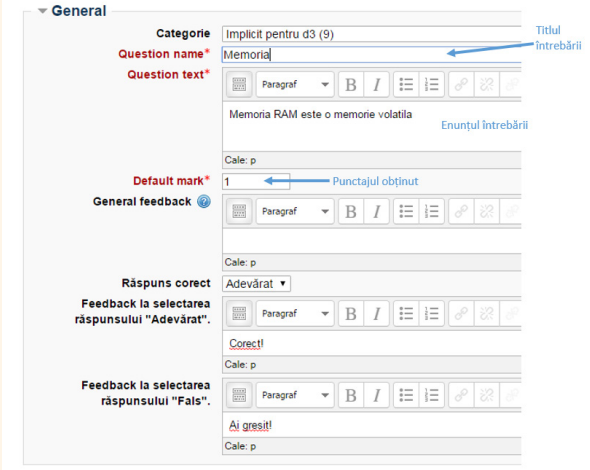
A set of answers is proposed. By selecting the validation fields one or more answers are chosen. Editing the question is similar to the others and the mark allocation for building the question is illustrated below. Do not forget that for multiple correct answers the scoring is done in such a way that the sum of the scores is the maximum score. This question can be set to have only one correct answer. In this case, the correct answer will have the maximum score, and the other answer variants 0.





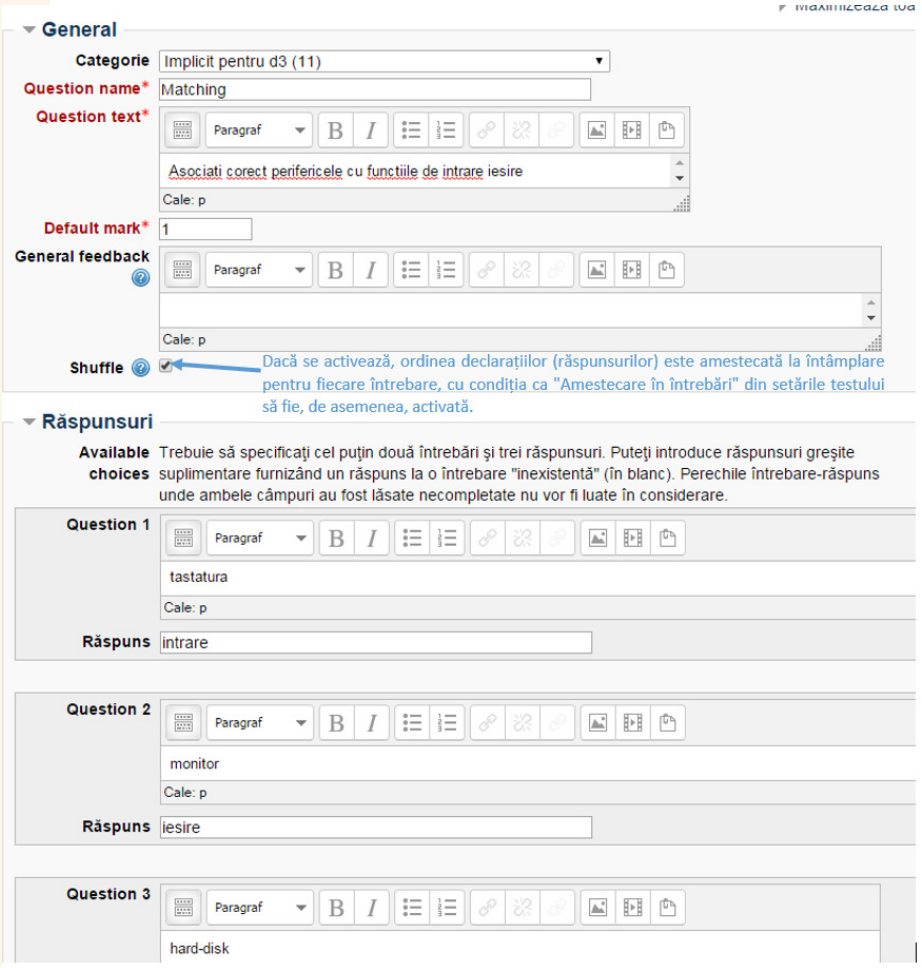
True / False

For this type of question, you choose by radio button if the statement is true or false.



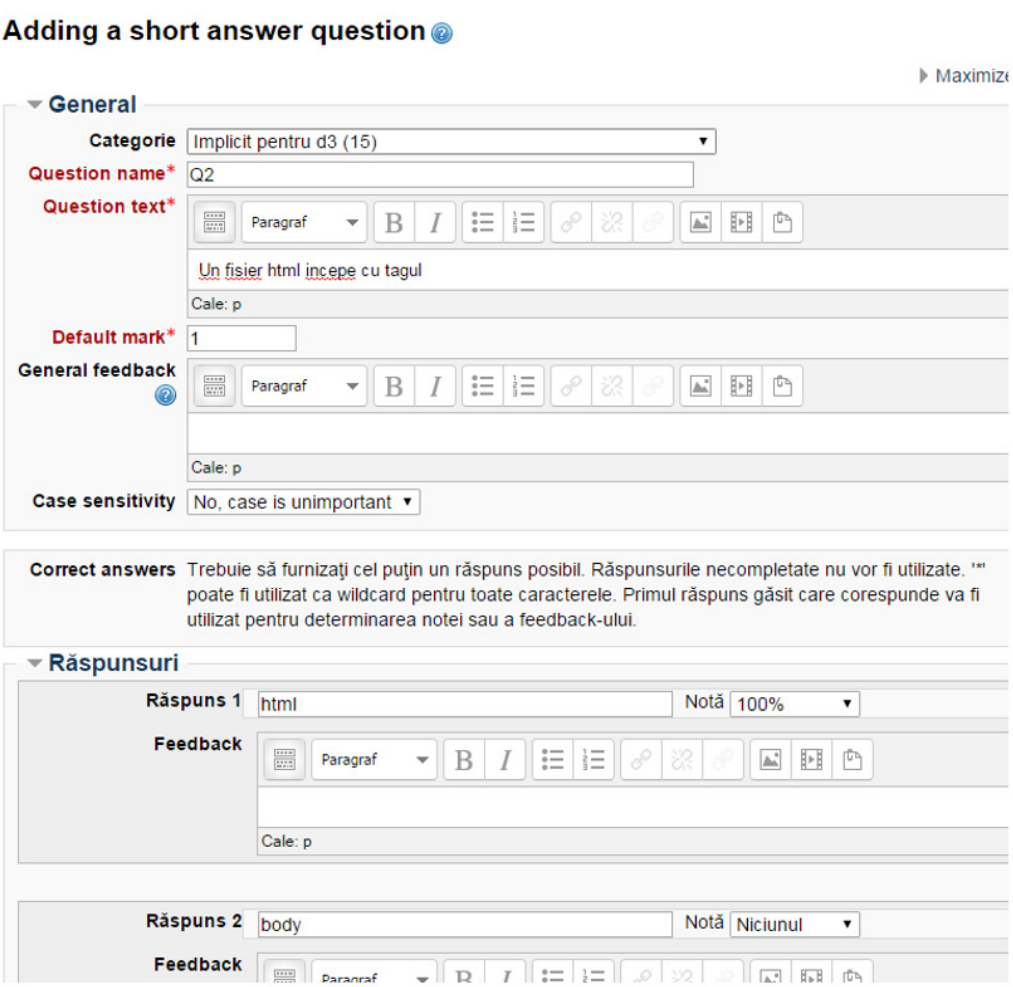
Matching

This type of question requires matching correct answers from lists of possible answers. Editing the question is as follows:



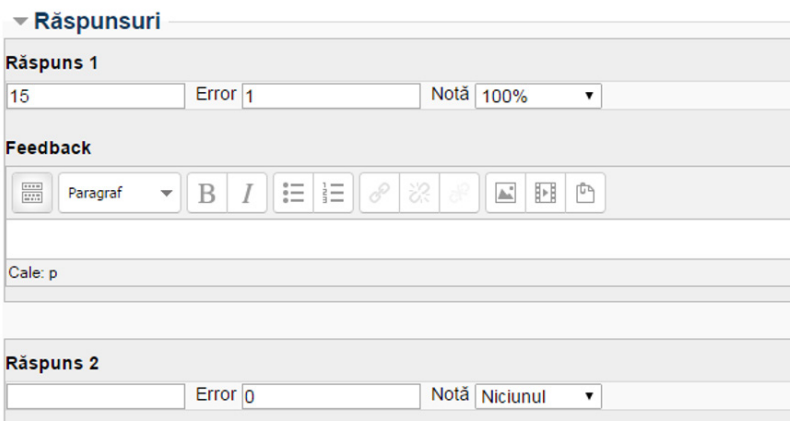
Short answer

The answer is a short text. It can be capitalized or not as the teacher sees fit, or it can be numbers.



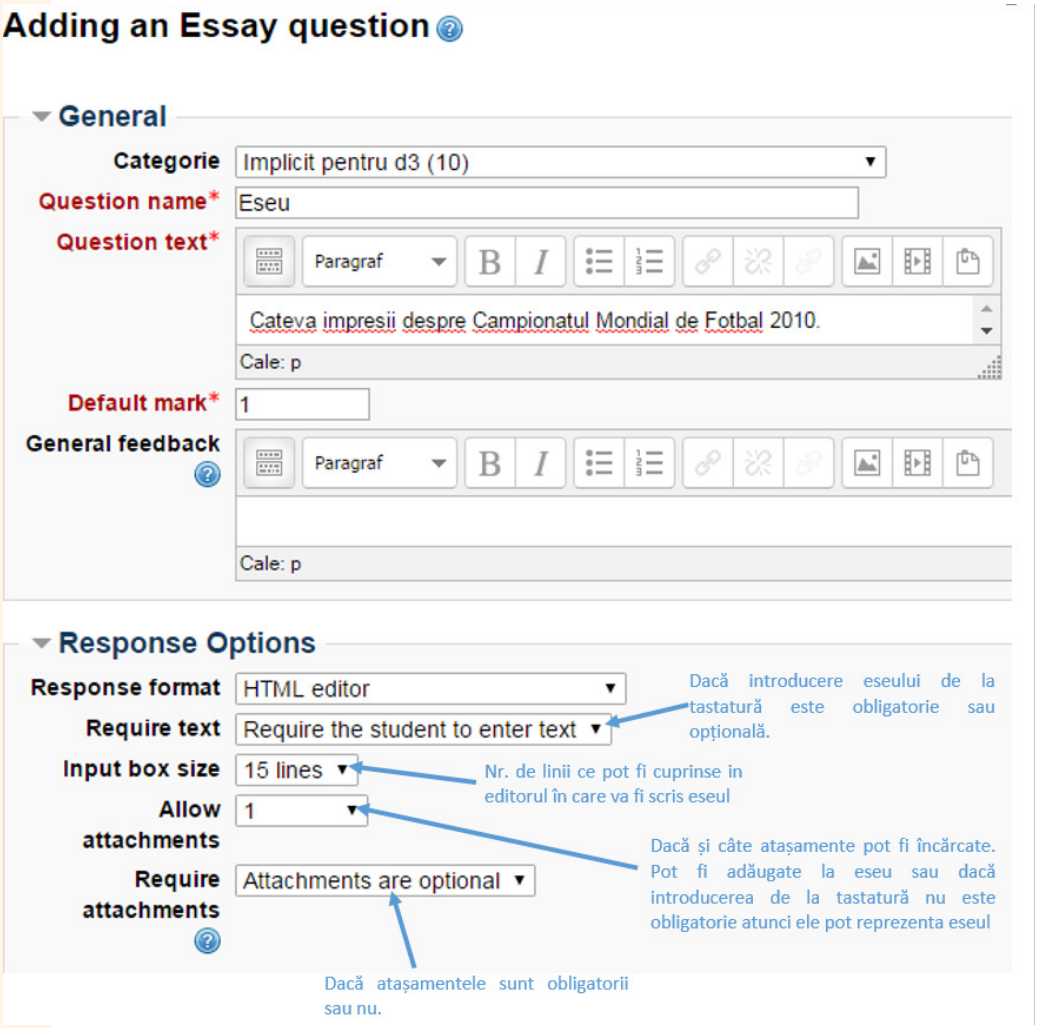
Numerical

This type of question expects a numeric value as an answer. It lends itself very well to abstract subjects for quickly checking problems that involve calculations. The correct answer can be within a deviation specified by the error entered during editing.



Essay

For this type of question, the answer is a text that the student edits and the examiner notes. The system cannot do evaluation automatically. For evaluation, the teacher must intervene to read the answer given by the student and mark it in the classic way. The question editing window is as follows:



Calculated

Calculated type questions allow checking the correctness of the calculations performed by the test takers individually for one and the same expression. They are particularly useful for mathematics, physics, and technologies of various profiles. The proposed solution expression can be edited in the question body. After editing the calculated type question, the system proposes to each tested person a set of values from the definition field of the proposed expression and waits for the tested person to enter the correct answer value.

The operators **+, -, *, /, and %** are accepted in expressions, the latter being the module operator. 24 predefined, single-argument functions are also supported, namely: **abs, acos, acosh, asin, asinh, atan, atanh, ceil, cos, cosh, deg2rad, exp, expm1, floor, log, log10,**

log1p, rad2deg , round, sin, sinh, sqrt, tan, tanh, and two two-argument functions: **atan2 and pow**. The min and max functions, of two or more arguments, can also be used.

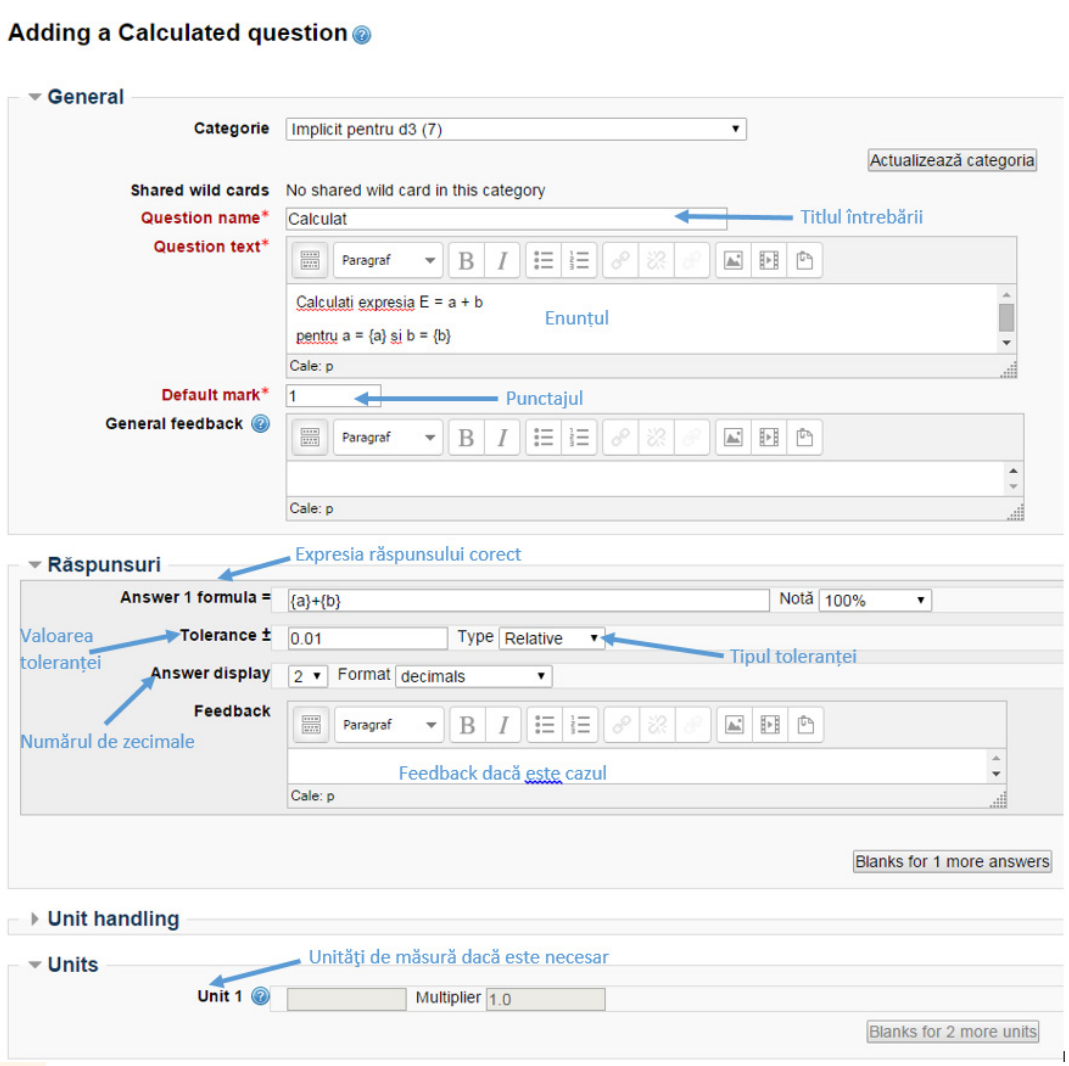
When writing an expression, the Meta characters (literal notations in the expressions) will be inserted between curly brackets {}, and for the function argument if a predefined function is used, the type of brackets () is used. The expected response value may have a deviation from the exact value. The tolerance field allows the questioner to decide the margin of error. Depending on the specific situation, the type and value of the tolerance must be chosen very carefully.

The tolerance accepted for the result can be of three types: relative, nominal and geometric:

- relative tolerance - for example 0.25, results with a value between +.- nominal value*25% are accepted
- nominal tolerance – for example if it is 10, results with a value between: nominal value -10 and nominal value +10 are accepted;
- geometric tolerance - for example, if it is 0.5, results with a value between the values are accepted: the nominal value/(1+0.5) and the nominal value*(1+05).

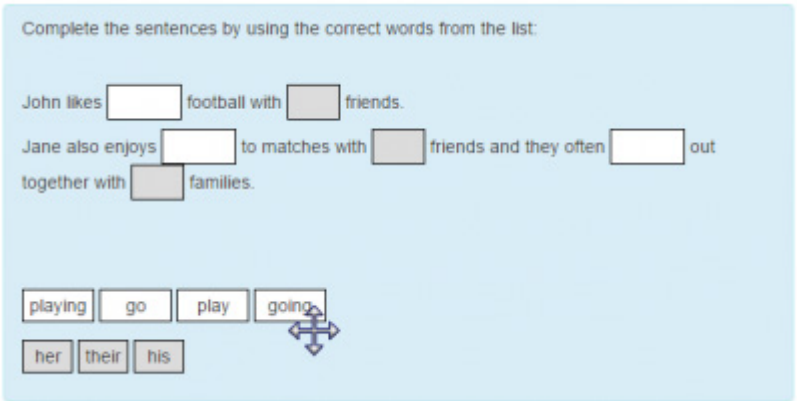
When editing the question, the system creates tables of associated values for the variables included in the edited calculation expression. These tables can be shared with other questions or they can be individual. In order not to have unwanted or so to say uncontrollable interferences of the definition domains, only the version with its own table was used for the questions, for each question and Meta character. Sharing tables of values can lead to unexpected but apparently consistent results with the mathematical expression.

If several correct answers are assigned in certain situations, then the percentage sum of the answers must be 100%.

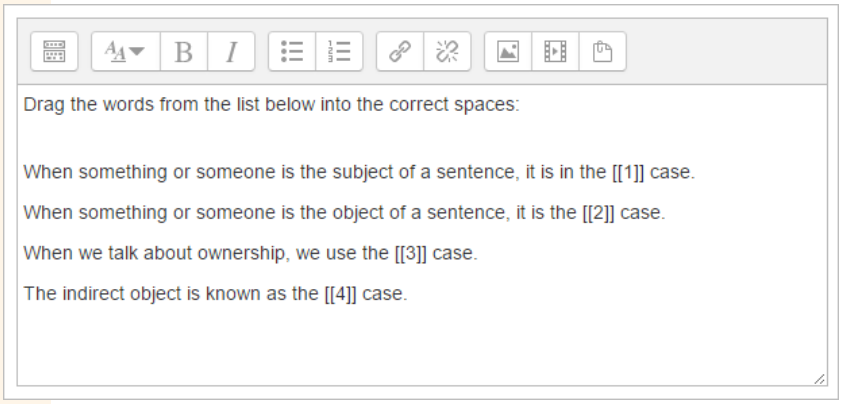


Drag and drop onto text

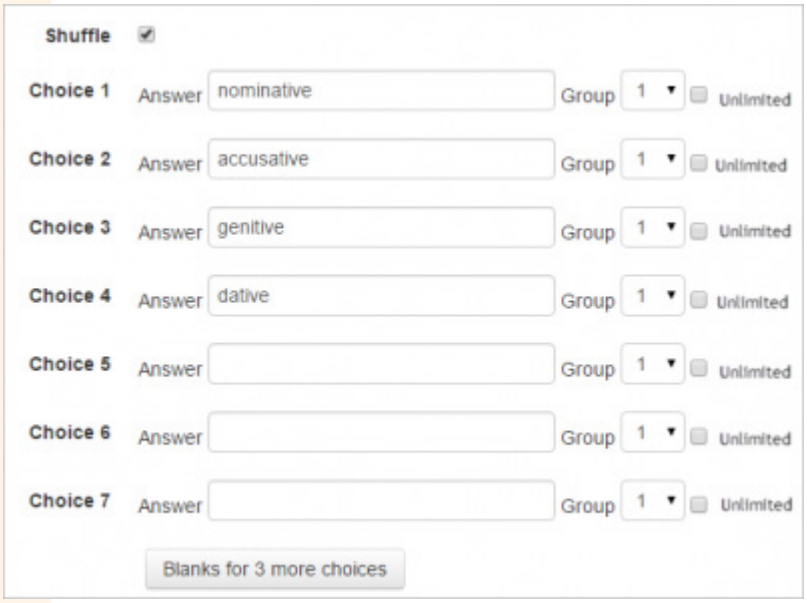
A type of question where we drag the mouse from a list, missing words from a paragraph.



Add the question in the text editor, using whatever formatting you like. Use double square brackets “[[n]]” with a number in place of the word you want students to find:

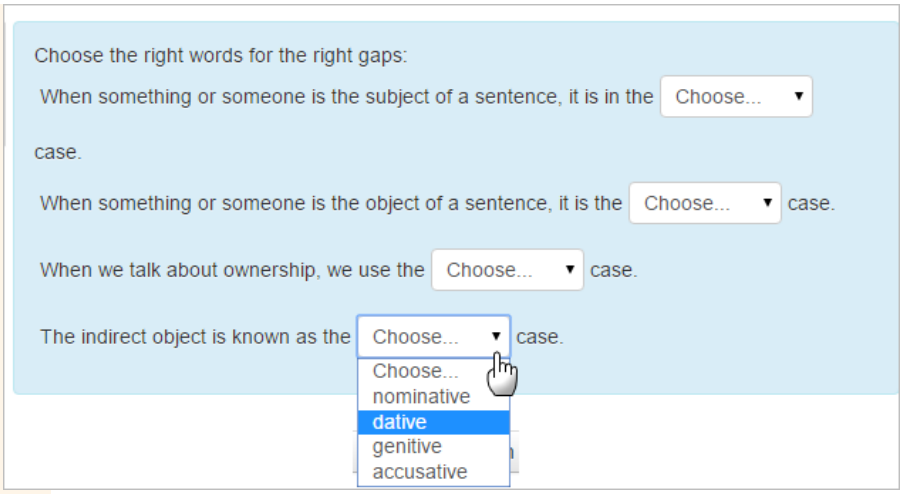


Add the missing words or phrases in the correctly numbered boxes in the ‘Choice’ section. (You can add more words to make it harder to choose the right ones.)



Select missing words

It’s very similar to the “Drag and drop onto text” question, but uses drop-down menus instead of drag-and-drop boxes.

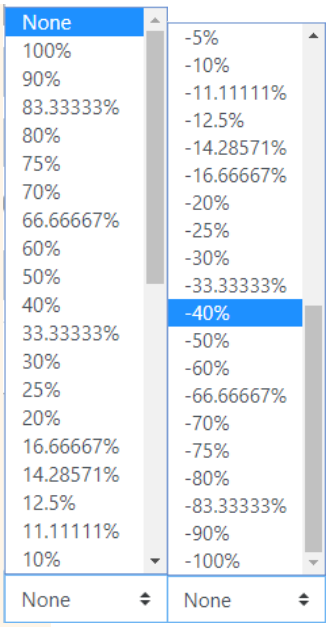


Scoring the questions and the test

By default a question is scored with a value of 1 point. Obviously the creator of the question can assign a different score.

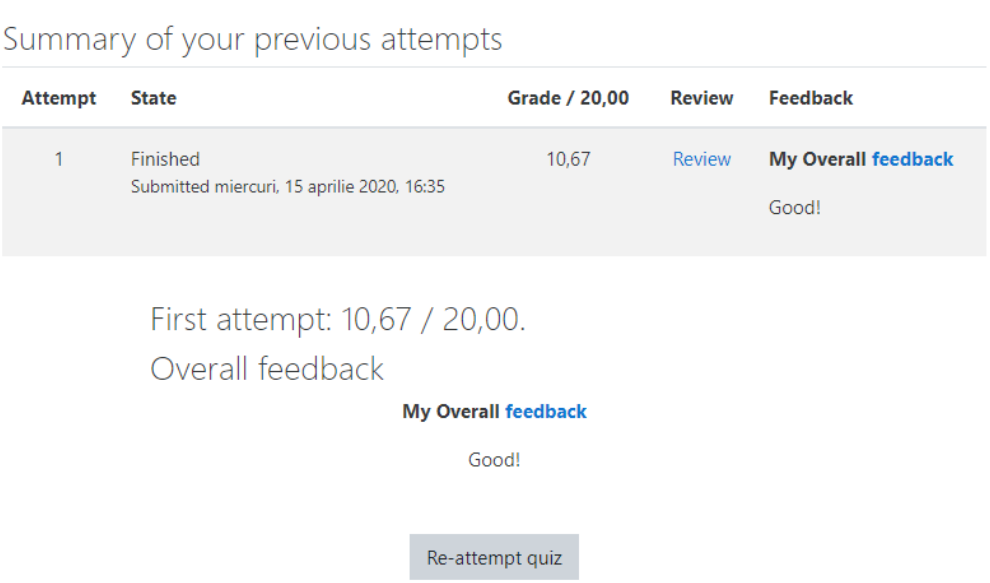
From this value, some questions allocate partial percentages depending on the answer, for example the true or false type question 100% or 0%, and others where there are several true answers to the question a proportional percentage, with how many correct answers the question has and how many answered, percentage calculated from the total value given to the question. The sum of positive percentages for each question is mandatory 100%.

Negative percentages can also be assigned for wrong answers, as this penalizes students who fill in answers carelessly and in haste. Leaving wrong answers unscored means allowing random completion, such as if I guess right, if I don't, nothing happens. In addition, completing all the validation boxes leads to a low or even zero score.



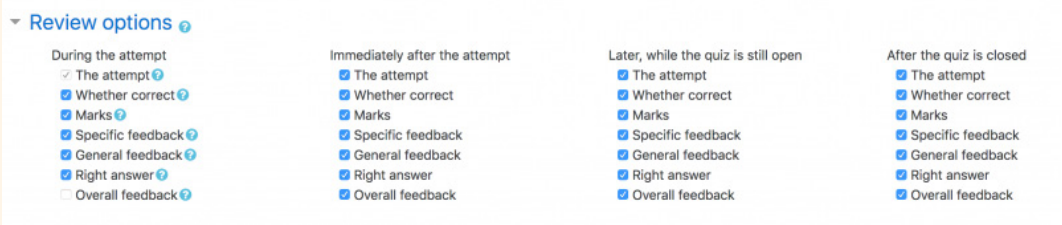
Against these points assigned to each question, the test has a default general penalty factor of 0.1, which is activated when a student goes back to one or another of the answers and makes changes. This penalty factor may discourage those who are unsure of completing the answers. This factor can be set to severe de-pointing values depending on the concrete application conditions of the test.

At the end of the test, the learner sees what result he obtained.



Feedback

All question types accept feedback for each answer where the question allows for multiple answers or global feedback for the entire question. These will be displayed customized correlated with how each learner answered each question. In addition, the entire test can have a feedback that will be displayed to everyone who took the test. Feedback and results will be displayed at different times decided by the teacher according to the settings chosen in the figure below.



Quiz Results

To see the results or reports of a test and whether there are essays that need to be manually graded, a teacher can go to the Actions Menu > Results menu within a test.

Wiki

„*Wiki*" allows the collective creation of documents, keeping a history of all the changes made. A wiki can be worked on by the whole class or a single student, assisted by the teacher and peers. It starts with a first page, to which students can add others, creating links to new pages that do not yet exist. The home page can be designed as a table of contents, with links to other pages.

It's a very fast way to create batch documents. There is usually no one person who has editorial control.

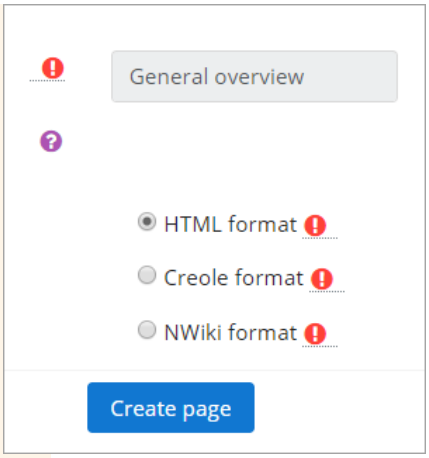
Wiki Setting

On the page of creating a "Wiki" we type the name and a short description of it.

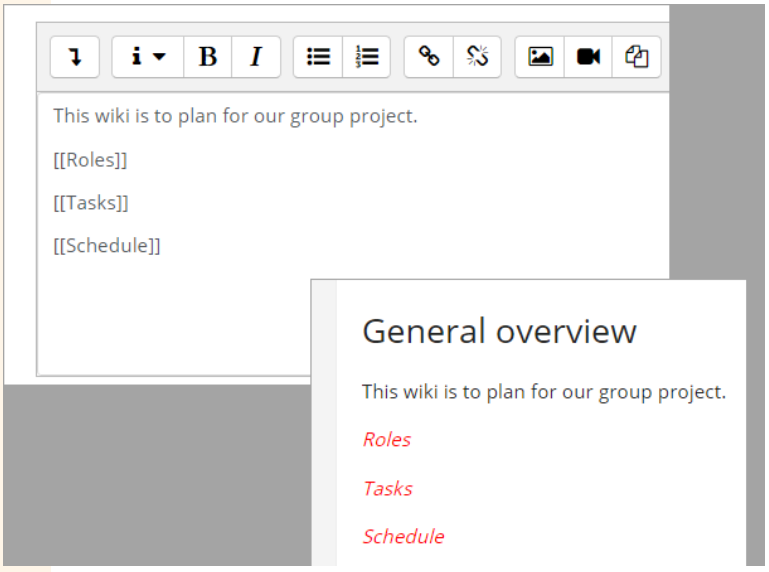
We also specify the name of the first page in "First page name", select in the "Wiki mode" field if we want this wiki to be collaborative (everyone can edit it) or individual (it can be edited by only one person), the default format (used when editing wiki pages) and if we force the format (it is no longer possible to choose the format when editing a wiki page).

Using Wiki

After the save operation, the new wiki becomes the link on the course page. When a user accesses the link, he is taken to a page where he sees the description of the wiki activity, the name of the initial page, can choose one of three formats and then, by pressing the "Create page" button, initiates its creation.



To create a page we have at our disposal the well-known HTML editor. We can add text, tables, images, we can format the text. If we want to add a new page, we first create a link to it by writing text enclosed in double square brackets. By pressing the “Save” button, we will view the page and see the links created.



If we click on one of the links that just appeared in the view mode, we will again be led to a page where the creation of a new page is initiated, which will be associated with that link. Its title is the text we enclosed in double square brackets before. We also edit this page and press the “Save” button. To return to the initial page when viewing another page, press the “Search wikis” button in the upper right corner.

Workshop

The “Workshop” activity is a complex activity, with great pedagogical potential, which involves the completion of tasks and a structured framework for evaluation or feedback. The teacher specifies several aspects of the task, which are assessed separately and then combined to obtain the final grade. Learners don’t just submit assignments, they

participate in peer-reviewed assignments, providing feedback, suggestions, and grades. This mode of assessment gives learners the opportunity to see other assignments and learn from them and feedback from others.

The basic steps in this activity are:

- the teacher establishes the work topic, its criteria and the grading strategy;
- optionally upload examples of good and bad homework, which students train by evaluating them;
- students prepare and submit their assignments. They have the option to download their theme from the platform, redo it and submit it again;
- optionally the students evaluate their topic;
- optionally, students receive a set number of randomly chosen topics to appreciate, comment on and evaluate. Their grades can be overwritten by the teacher;
- optionally the teacher evaluates the assignments and the quality of assessments made by the students;
- the final grade is determined by combining the grade for the completed topic with the grade for the evaluation.

When learners do not assess and there is only one marking strategy, the activity is similar to the one called "*Assignment*".

If the assignment is to submit an essay and there are a lot of students, the teacher can randomly check a few assessments made by them. He will be alerted to papers for which there are large differences in grading, in which case he will have to determine the grade for the author's work and the grades for the assessments made by the students himself.

When he wants to get good quality papers, the teacher can do this: in the initial period he only allows commenting on the assignments, not marking them. Based on the comments received, learners redo their assignments and resubmit them to the same assessors for grading. The process can be repeated until the desired quality of work is achieved.

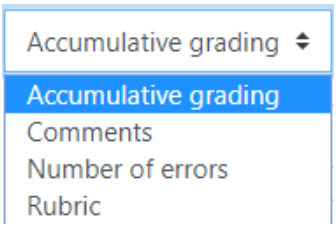
Workshop Setting

In the General section of the page to add a seminar, we must specify its name and a short introduction.

Grading settings

In the "Grading settings" section we can specify:

The evaluation strategy, by the values chosen in the drop-down list *„Grading strategy"*:



- "*Accumulative grading*": Each evaluation criterion has its own numerical score and o weighting; a final grade is calculated based on the criteria scores and respective weights;
- *"Comments"*: No numerical grade, only feedback, in the form of comments;
- "*Number of Errors*": Evaluators decide whether or not the paper ticks each criterion (eg, has original ideas; answers the question);
- "*Rubric*": Generates a numerical grade based on the level of achievement chosen by the evaluators for each criterion. The maximum grade I can get for the assessments made, in *„Grade for Assessment"*.

Submission settings

In the "Submission settings" section, you can set instructions and requirements for the works to be submitted, the maximum number of files that can be uploaded and their size limit. Checking "Late submissions" will allow learners to submit a paper after the deadline. Any late submission cannot be changed by the learner - they only have one chance to submit it.

Assessment settings

In the "*Assessment settings*" section we can specify some instructions regarding the assessment. These instructions are important for learners to better understand how to evaluate their peers' work.

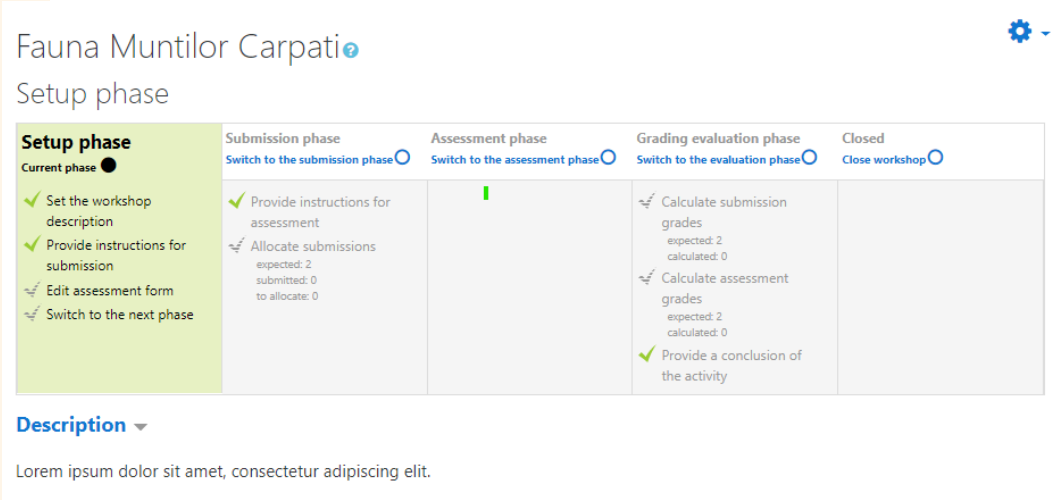
By checking "*Use self-assessment*" the learner can receive his own homework for assessment.

Example submissions

By checking “Use examples” we provide examples of assignments that will help learners better understand what they have to submit and they can practice the assessment on these examples. If you provide a paper as an example, you can choose whether learners must grade it or whether it is optional. If they are asked to rate sample papers, then you can also decide whether they rate them before they submit their own papers, or afterwards but before peer assessment.

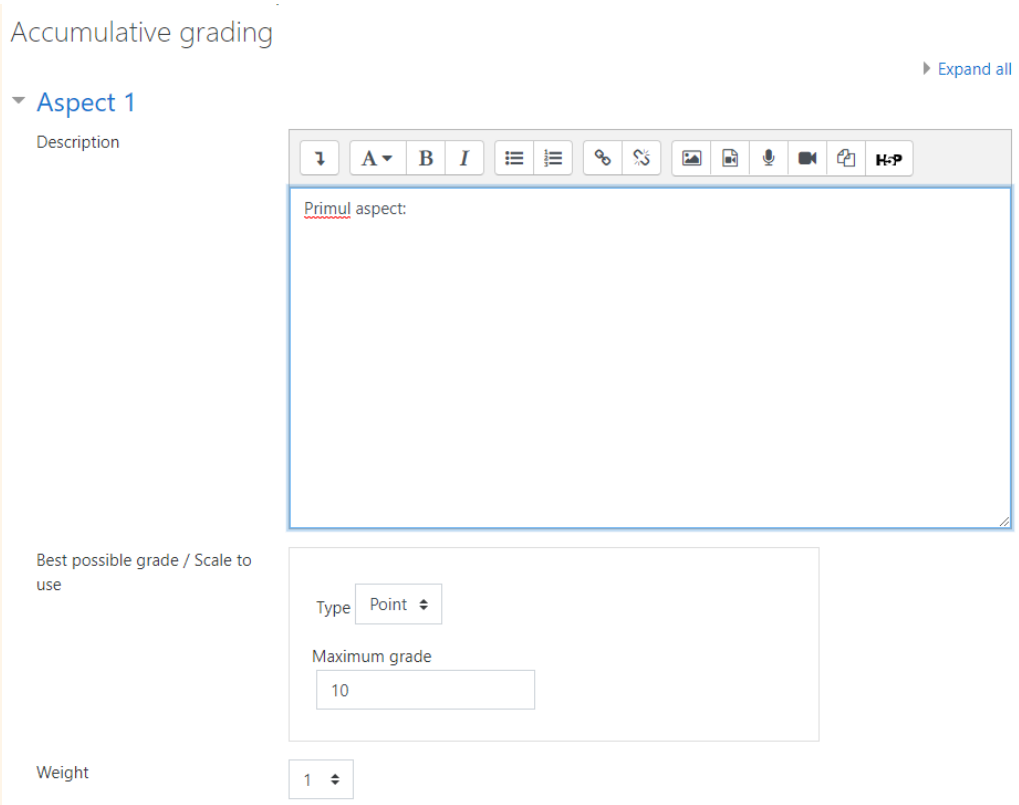
Using Workshop

After saving, the seminar can be found as a link on the course page. If we follow this link, we are led to the seminar page, where we see, apart from the requirement, the stage we are at in this activity.

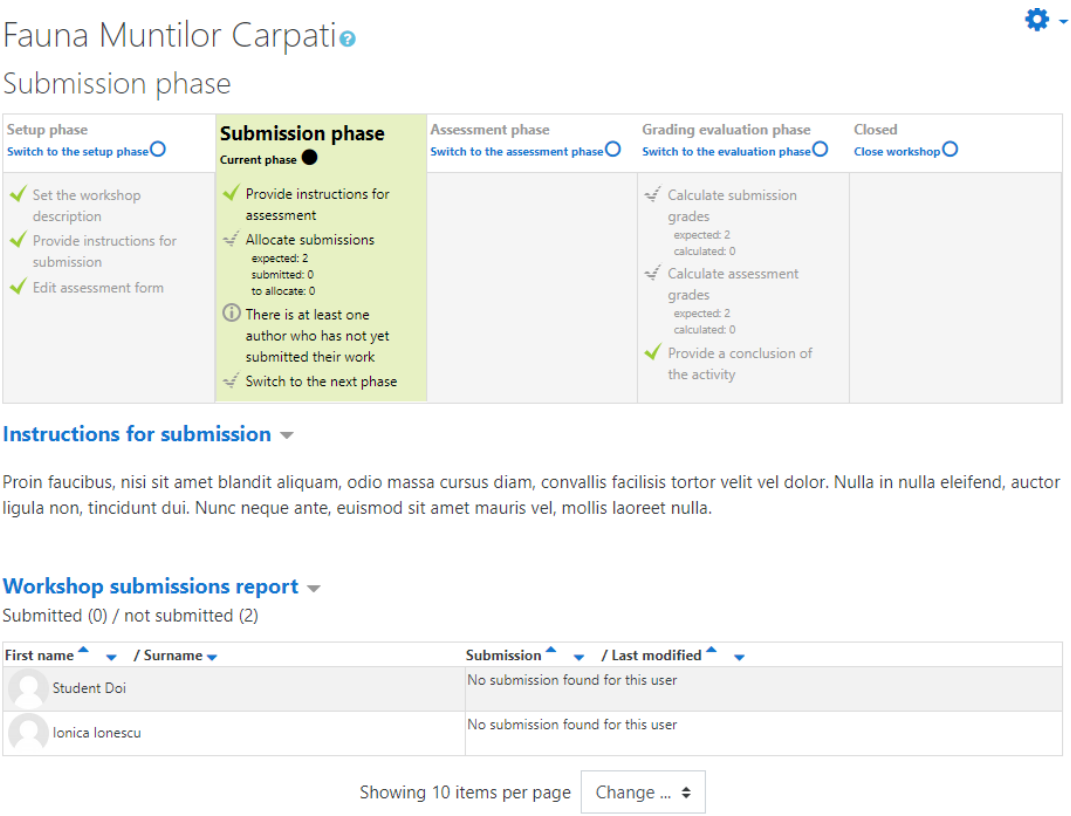


Setup phase

It can be seen that the first two stages have been completed, being ticked, and now we have to specify how we want the students to evaluate the assignments of their colleagues. For this we follow the “Edit assessment form” link, which leads us to the “*Accumulative grading*” page. Here we can fill in all the criteria that must be taken into account in the evaluation, as well as the score and weight given to each one.



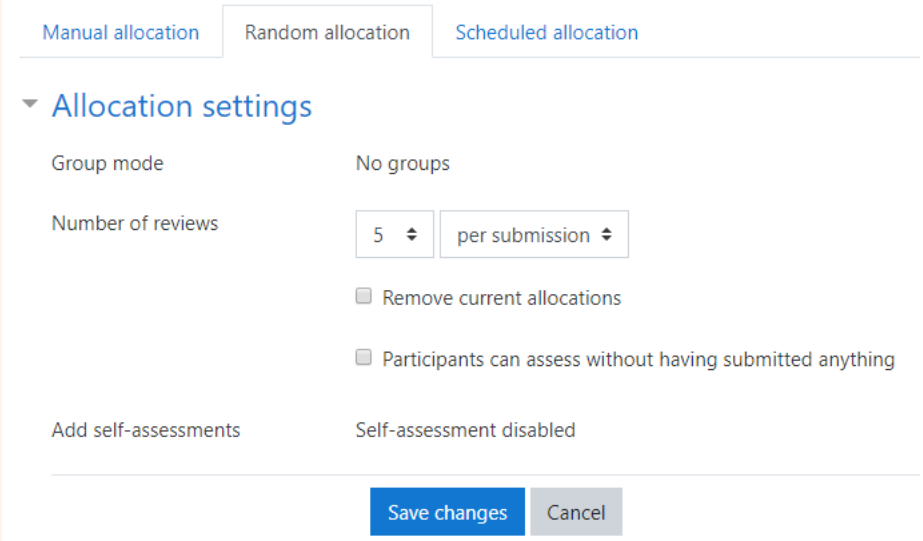
After this step, the "*Edit assessment form*" step also appears checked. The teacher will have to select the "*Switch to the next phase*" link to start the next phase: "*Submission phase*".



Submission phase

The student can now access the "*Submit your work*" link to submit the work file. It takes you to a page that displays the submission instructions, filled in by the teacher during the seminar creation stage.

Once a user has submitted a paper, the teacher can access the "*Allocate submissions*" link to determine how users will receive the work of colleges for assessment.



- *„Manual Allocation":* Here, a teacher can manually select which students will grade whose work. A learner can review work even if they haven't submitted it yet.
- *„Random Allocation"*

  o Number of reviews: Here, the teacher chooses between 0 and 30 evaluations for each paper or for each evaluator. That is, the teacher can choose to set the number of assessments that each paper must have or the number of assessments that each student must perform;

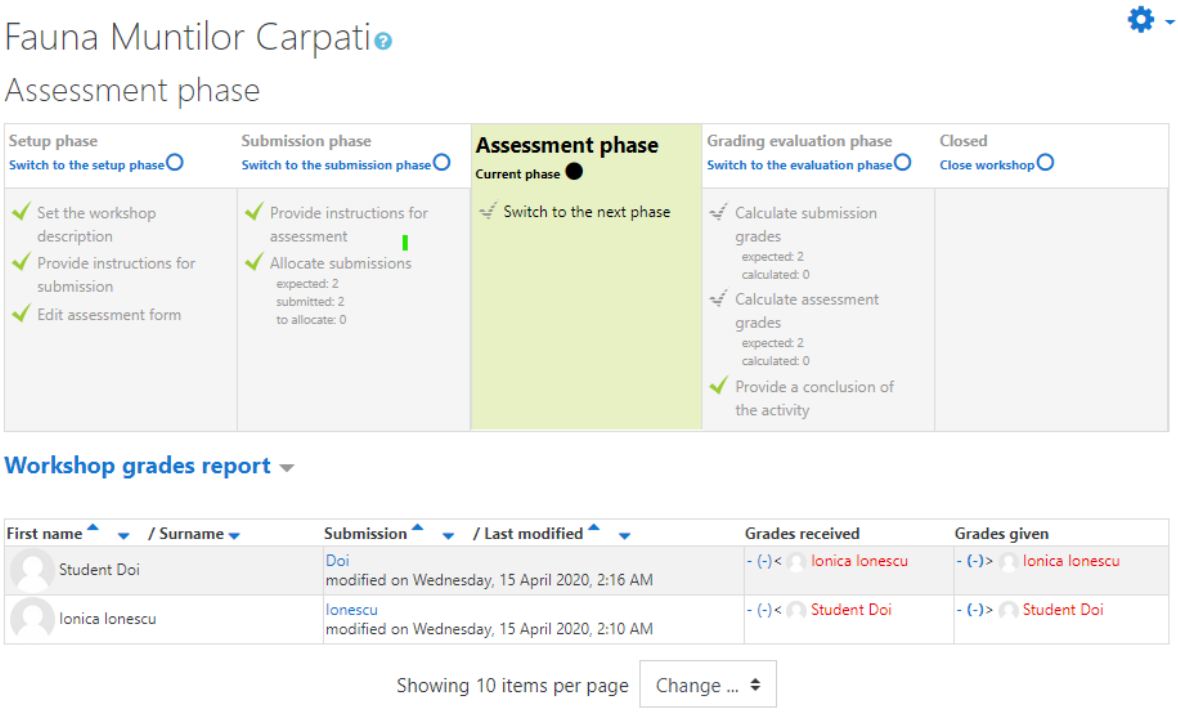
  o Prevent reviews by peers from the same group: If the teacher wants members from the same group to never review each other's work;

  o Remove current allocations: Checking this option means that all manual allocations set in the "Manual Allocation" menu will be removed;

  o Can access with no submission: Allows learners to assess the work of other learners, even if they have not submitted their own work;

  o Add self-assessments: Students must evaluate their own work alongside that of their colleagues;
- *„Scheduled Allocation":* The platform will automatically (randomly) allocate the works that will be evaluated once the deadline for sending the works has passed.

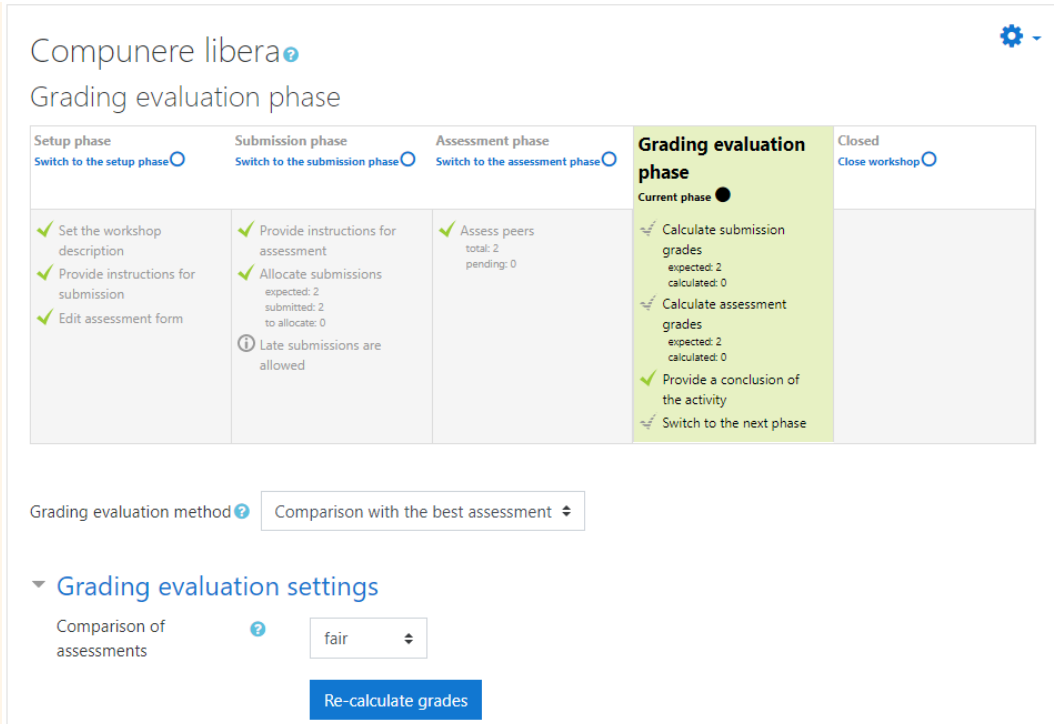
The teacher must select "*Switch to the next phase*" to proceed to the next phase: "*Assessment phase*".



Assessment phase

Learners can grade example assignments to practice their assessment, before grading their peers' work, only if this feature is enabled. They can compare their assessments with the teacher's benchmark assessments. A learner will be assigned a certain number of assignments from their peers to grade. He will receive a grade for each assessment made, which will be added to the grade for his own submitted work and his final grade for this activity will be calculated. A student may be assigned their own paper to self-assess. The grade he receives in the self-assessment will be taken into account for the final grade.

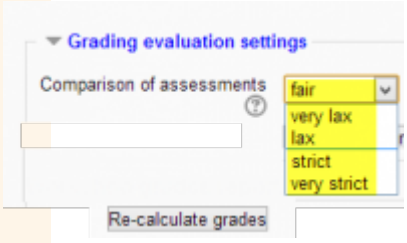
After the evaluation between students is completed, the teacher will start the new phase: "*Grading evaluation phase*".



Grading evaluation phase

The main objective in this phase is the automatic calculation by the platform of the final marks for the submitted work and for the assessment respectively. The teacher can edit these notes while in this phase. These notes will be saved in the catalog only when the activity is closed in the final phase. Note that it is possible to move between phases even after the action has been closed, notes can still be modified directly in the catalog if necessary.

Grade calculation method: determines the method of calculating grades for the evaluations made. Currently, there is only one option - "*Comparison with the best assessment*". This option tries to imagine what a hypothetical, absolutely fair valuation would look like.



„Comparison of assessments': There are 5 options *'very lax', 'lax', 'fair', 'strict' and 'very strict'.* These options express how strict the rating comparison should be. By "*Comparison with the best assessment*", all assessments will be compared with the best assessment retrieved by the platform. The closer a rating is to the best rating, the higher the rating

will be. Specifically, this setting determines how much grades are dropped when ratings differ from the best rating. If you are not sure which option to choose, leave the default value "*fair*".

"Grade for submission": The final grade for each paper submitted by the learners is calculated as the weighted average of the particular evaluation grades given by all assessors of that paper. The teacher can influence this grade in two ways: by providing his own evaluation, possibly with a higher set weight than the other evaluators; by overwriting the note to a fixed value.

"Grade for assessment": Grade for assessment attempts to estimate the quality of the assessments a learner has given to peers. It is calculated by an artificial intelligence algorithm of the platform. The platform chooses one of the ratings as the best - the one closest to the average of all ratings - and gives it a score of 100%. It then calculates the "distance" of all other ratings to this, the best, and gives them lower marks based on how different they are from the best rating (given that the best is a consensus of most raters) . If there are only two ratings on a job, the platform cannot decide which one is the "correct" one. In this case, the teacher can send his own evaluation of the work, or he can set a greater weight to the evaluation of the student in whom he has more confidence. Note that it is not the final grades of each assessment made by the learners that are compared, but rather the scores and feedback of the assessment criteria.

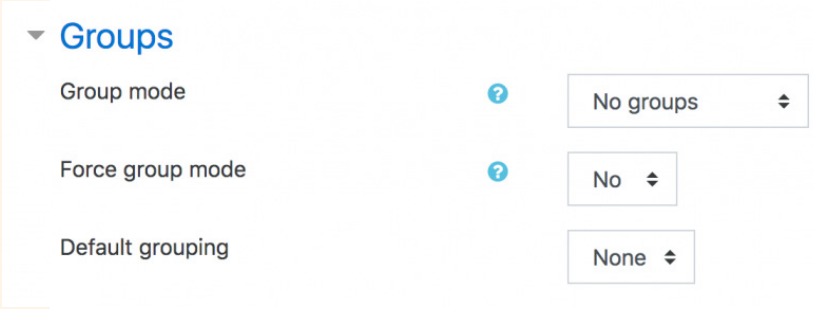
Closing the Workshop activity

When you are satisfied with the final grade, click the icon or text to close the workshop. The "*Closed*" phase will be highlighted and learners will be able to see their notes and a conclusion, if you've added one.

8. User Groups

Using Context-level Groups

A group or grouping can be used at the level of 2 contexts:



- Course level – The group mode defined at the course level is the default mode for all activities defined within that course. To be able to use a group, you must set "*Group mode*" in the course settings: *Actions Menu > Edit settings > Groups*.
- Course activity level – Each activity that supports groups can also have its own group mode defined. If the course setting "Force group mode" is set to "Yes", the option to define a different group mode for individual activities is not available. If set to "No", then the teacher can change the group mode.

Group Mode

There are 3 group modes:

- "*No groups*" - There are no groups, everyone is part of a community;
- "*Separate groups*" - Each group can see its own group, the others are invisible.
- "*Visible groups*" - Each group works in its own group, but can also see other groups. (The other groups' work is read-only.)

Creating a group

1. Within a course, go to the "*Participants*" section, from where you select Actions Menu > Groups > Create Group.
2. Give the group a name and optionally a description, registration key, and image.
3. Check "*Enable group messaging*" if you want to enable group-wide conversations.
4. Save.
5. Select the group to which you want to add participants, then click the "*Add/remove*

users" button.

6. From the "*Potential members*" list, select the users you want to add to the group.
7. Click the "*Add*" button to add users to the group.

Automatic creation of groups

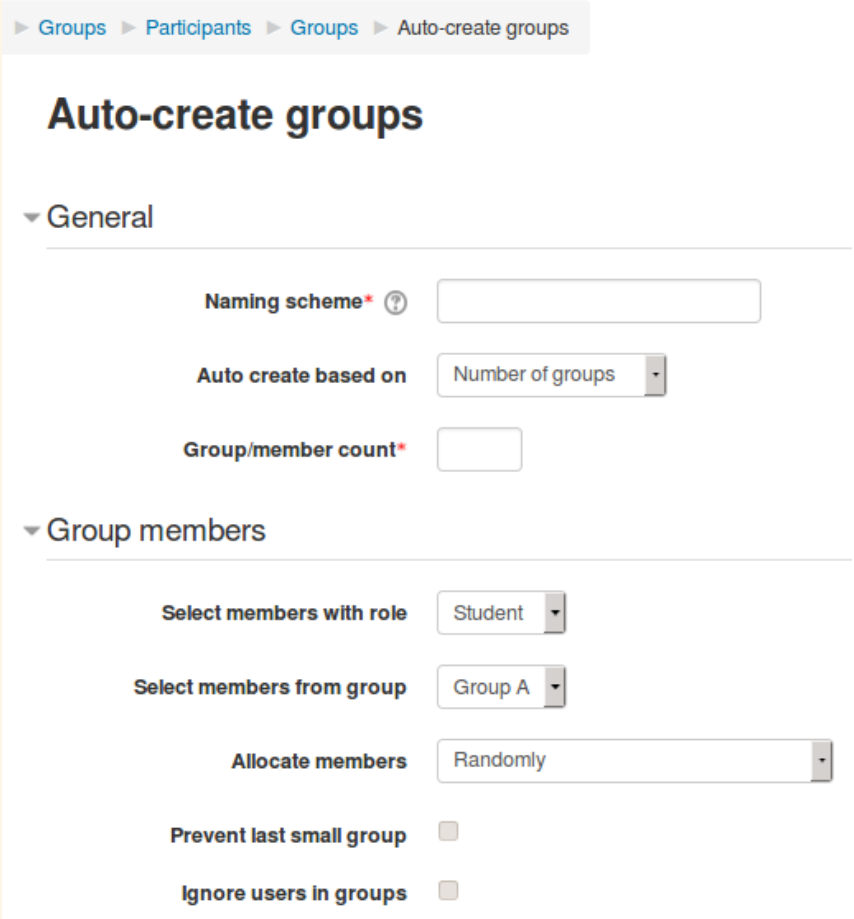
Groups can be created automatically using the button „*Auto-create groups*" from *Participants > Actions Menu > Groups*.

General

A naming scheme can be created automatically. "#" is replaced by sequential numbers and "@" by letters. For example: Group @ -> Group A, Group B... Group # -> Group 1, Group 2...

Ou can specify:

- An x number of groups
- Each group contains x number of members



Prevent last small group

When you select "*Members per group*", depending on the number of users in the course, the last group may receive many fewer members than expected. You can select "*Prevent last small group*" to avoid this situation. If the last group will be less than 70% of the expected size, then it will not be created. Members left without a group will be assigned to those already created.

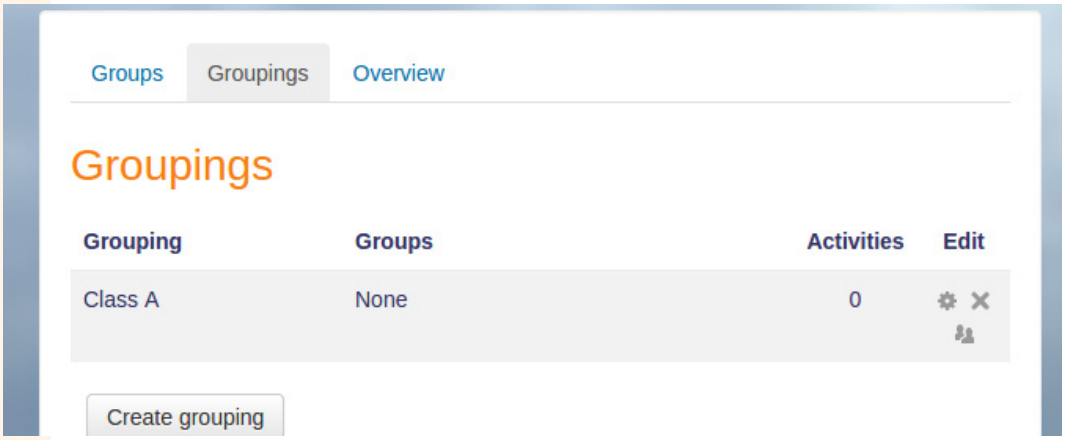
"*Ignore users in groups*" must be checked to select only members for the new group, from users who are NOT already in a current group.

"*Include only active enrollments*" gives the option to choose whether to include suspended users in groups.

Grouping

„Create in grouping' and *'Grouping name*' allows you to create a new grouping and assign the new automatically created groups to this grouping.

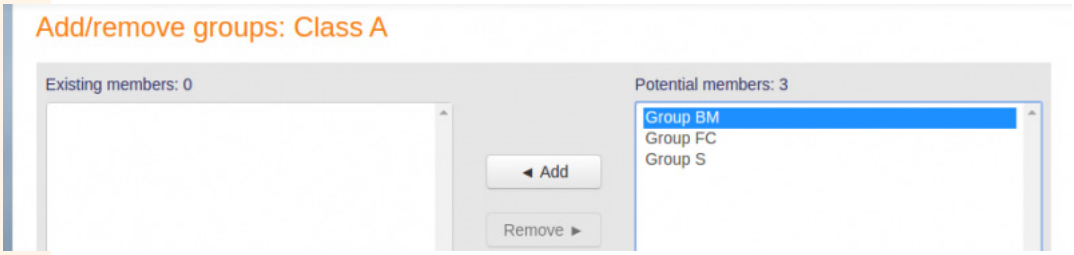
A cluster is a collection of groups within a course. Using groupings allows you to direct assignments to one or more groups in the course.



Adding groups to groups

1. Within a course, access the "*Participants*" section, from where you select Actions Menu > Groups;
2. Open the "*Groupings*" tab;
3. If necessary, create a new grouping: "*Create grouping*";
4. Click on the "*Show groups in grouping*" icon in the "*Edit*" column;
5. On the "*Add/remove groups*" page, select the group(s) from the "*Potential members*" list that you want to add to the group;
6. Select the "*Add*" button.

9. Grades

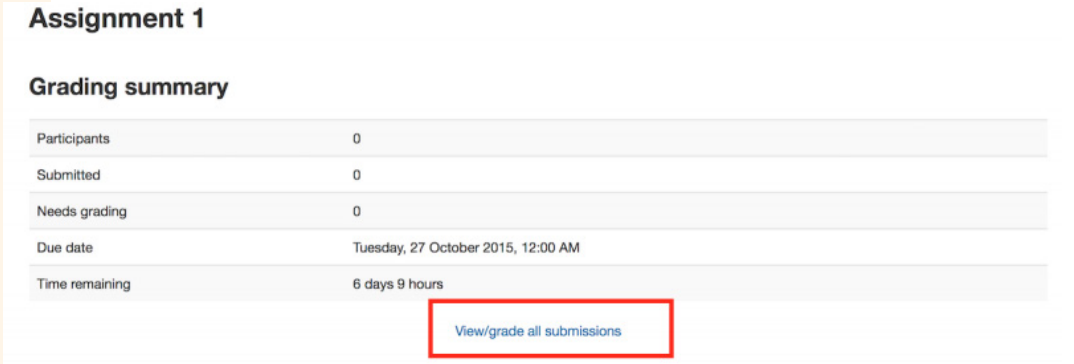


Existing groupings can be modified and/or deleted using the corresponding icons in the "*Edit*" column of the table on the groupings page.

Assigning grades from the "Assignment" activity page

If it is desired to mark some work submitted by learners in the "*Assignment*" activity (file / online text etc.), the best place to enter these notes is in the activity itself.

From the activity page select „*View All Submissions*".



On the next page, you will see where you can add notes / feedback and review student work. At the top of the page is a drop-down list. Here you have the option to download all student work.

Grader report

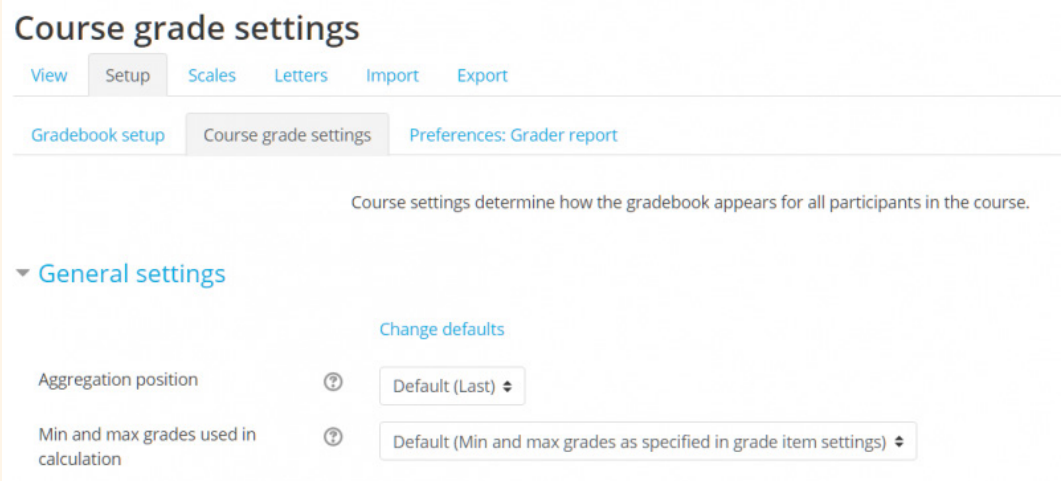
All grades of a learner, in a course, can be found in the grade catalog of the course or in the "*Grader report*". It can be accessed from the block on the left: "*Grades*".

To modify notes in the catalog select the button "*Turn editing on*", in the upper right corner.

Settings

Course grade settings determine how the grade catalog is displayed to course participants.

This section can be found in *Grades > Setup > Course grade settings.*



Grade items

A grade item is a unit (usually an activity) where course participants are graded. "*Grade item*" therefore represents a container for grades and a set of rules applied to those grades. Rules affect the calculation and display of grades in reports and catalog exports.

"*Grade items*" are represented by columns in the grade catalog.

„*Grade items*" based on activities

A number of activities such as "*Assignment", "Workshop", "Lesson", "Quiz*" communicate their grades to the catalog. The generated grade item can later be modified directly from Grades, but then it will be locked within the activity. For example, a teacher who has edited in the course catalog a grade for an "Assignment" activity will not be able to change that grade in the activity unless they unlock it from the catalog.

List of settings of an activity-based note item *„Grade to pass"* – Specify the minimum grade a learner must obtain to be considered a pass.

„Grade type":

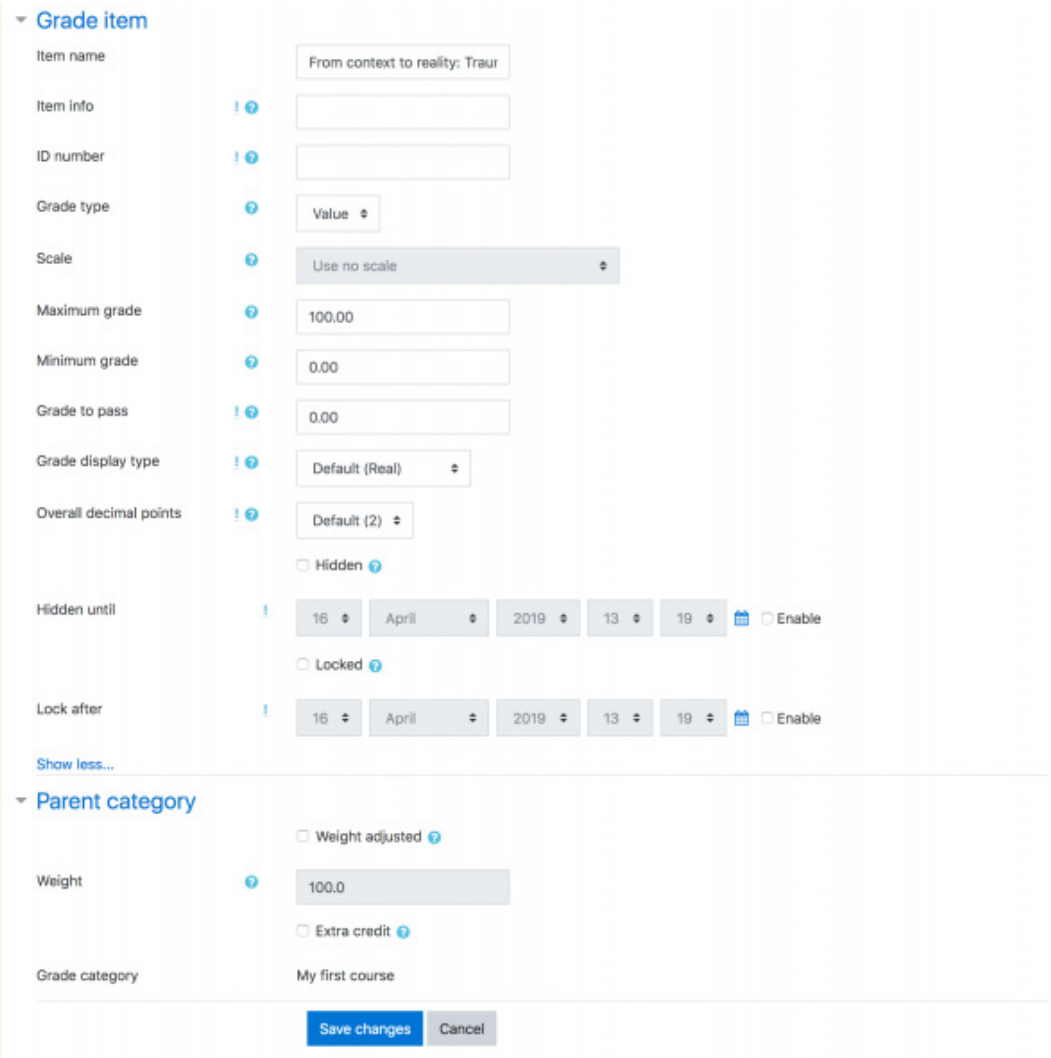
o "None" – Grading is not possible

o "Value" - A numerical value between a minimum and a maximum

o "Scales" - Qualifications

o "Text" - Feedback only „Overall decimal points" This specifies the number of decimal places displayed for each note.

- "*Hidden"* - Determines whether this grade item will not be visible to learners
- "*Hidden until*" – A time limit after which the article will no longer be hidden from learners
- "*Locked*" – Whether the note item will be locked or not. A locked item no longer receives grade and setting changes from the activity
- "*Locked after*" - A date after which the lock will take effect, usually after the date the grades are displayed.



Grade categories

Notes can be organized into note categories. In order for a grade item to be included in a category, the “Grade category” field must be set in the respective activity configurations, in the “Grade” section, with the desired category.

Adding a grade category:

1. In the “Grades” section select “Setup”
2. In the “Grade book setup” section select the “Add category” button
3. Give the category a name
4. Configure the category settings
5. Save

Editing an existing category:

1. In the “Grades” section select “Setup”
2. Select the “Edit” icon next to the category you want to edit
3. Make the necessary changes and save.

Aggregation of grades

The aggregation field drop-down menu allows you to choose the aggregation strategy used to calculate the final grade of a grade category.

Aggregation Strategy

All grades are first converted to percentage values, then aggregated using one of the strategies below, and finally converted to the range of grade item values in that category (between minimum and maximum).

Mean of grades

Calculates the sum of all grades divided by the total number of grades.

Example: A category A (with maximum mark equal to 100) has 3 articles A1, A2 and A3 (with maximum marks equal to 100, 80 and 10 respectively); if a student obtains the following grades A1=70, A2=20 and A3=10 then the total grade for A will be calculated:

A1 -->70/100=0.7, A2 --> 20/80=0.25, A3 -->10/10=1

A: (0.7 + 0.25 + 1.0)/3 = 0.65 --> 65/100 --> 65 (the maximum grade for A is 100).

Weighted mean

Each grade item can be given a weight to alter its importance in the overall average. In simple terms, the total grade of the category will be equal to the sum of the marks of each grade item, each multiplied by its weight, and that sum will be divided by the sum of all weights.

Example:

A1: 70 out of 100 weight 10, A2: 20 out of 80 weight 5, A3: 10 out of 10 weight 3, category A: maximum mark 100

A1 -->70/100=0.7, A2 --> 20/80=0.25, A3 -->10/10=1

*A: (0.7*10 + 0.25*5 + 1.0*3)/(10 + 5 + 3) = 0.625 --> 62.5/100 --> 62.5 (din 100)*

Simple weighted mean

The difference with the weighted average is that the weight of each item is the maximum grade.

Example:

A1 --> 70/100, A2 --> 20/80, A3 --> 10/10, max category 100:

*A: (0.7*100 + 0.20*80 + 1.0*10)/(100 + 80 + 10) = 0.505 --> 50.5/100 --> 50.5 (from 100)*

„*Natural*”

This is the sum of all grades, proportioned by their relative weights. The maximum grade of the category is the sum of the maximums of all items aggregated.

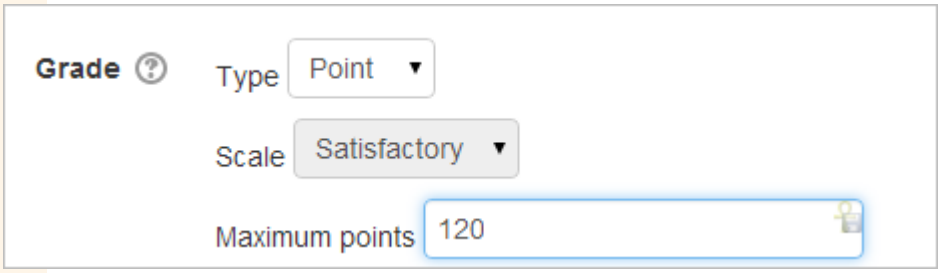
A1 70/100, A2 20/80, A3 10/10, without forcing the weights:

A: (70 + 20 + 10)/ (100 + 80 + 10) --> 100/190

Scores

When grading an activity, it is possible to use a grading scale (grades), a score (numerical scale), or neither.

A teacher can select a numerical score for grading by going to the “*Edit settings*” section of an activity, for example “*Assignment*”, navigating to the “*Grade*” section and then selecting “*Point*” from the drop-down menu:



This action will open the “*Maximum points*” field and the teacher can enter the maximum score for that activity.

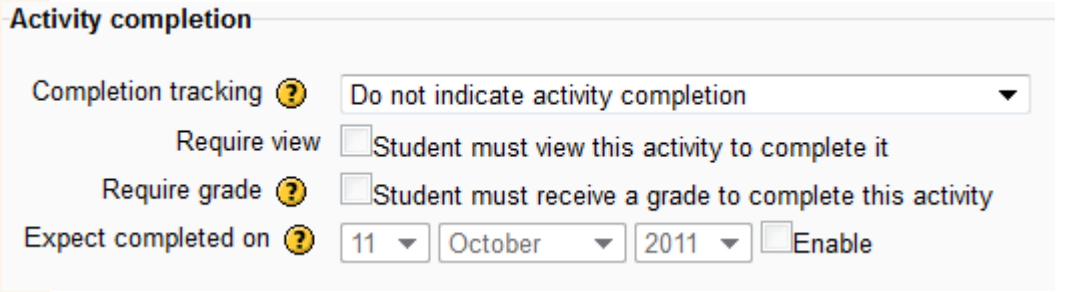
The default number of points a teacher sees when they choose “*Point*” from the “*Type*” menu, is set by the administrator in *Site administration > Grades > General settings.*

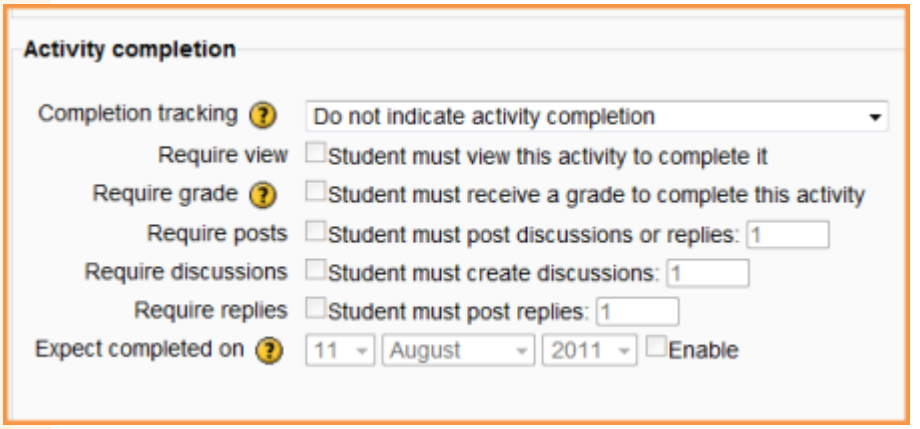
10. Tracking progress

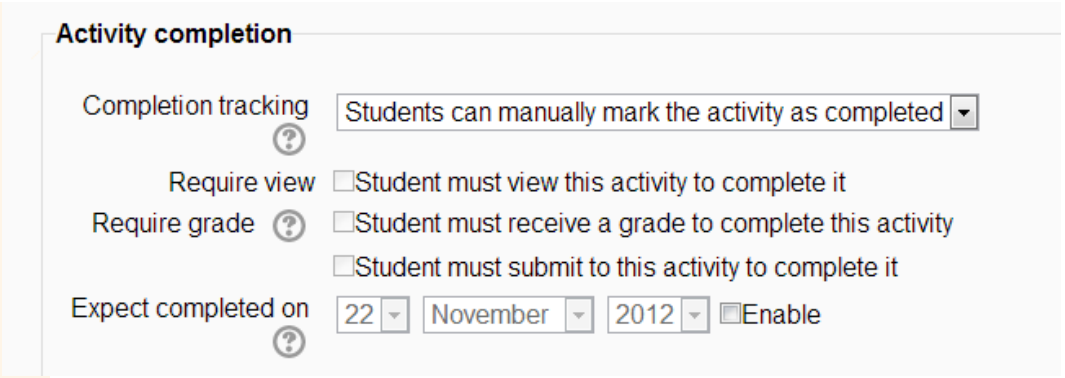
„*Activity completion*"

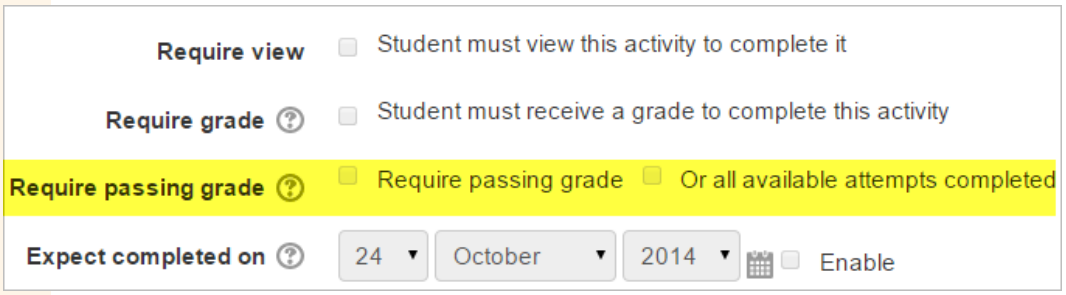
Activity completion allows the teacher to set completion criteria in the settings of a particular activity. A check box appears next to the activity when the learner meets the completion criterion. The criteria could be viewing, receiving a certain score, or a learner manually marking it as completed.

Depending on the type of activity, there are different completion criteria. For example, a page may have the requirement to view; a quiz might have the criterion of receiving a grade, while a forum might have the criterion of soliciting posts/discussions/answers.









„Completion tracking"

- Do not indicate activity completion
- Students can manually mark the activity as completed
- Show activity as complete when conditions are met.

Require view

When this criterion is activated, students must view the activity, i.e. click on its link to be considered completed. You should not enable the "*Require view*" condition if you have other criteria - this clutters the server and it is unlikely that a learner will be able to meet any other conditions without viewing the activity.

Require grade

When this criterion is enabled, learners must achieve a grade on the activity to complete it. For example, a quiz will be marked complete as soon as the user submits the answers (as long as it does not contain essay questions).

It doesn't matter how well he did with the learner. Achieving any grade will mark the activity completed.

Require passing grade

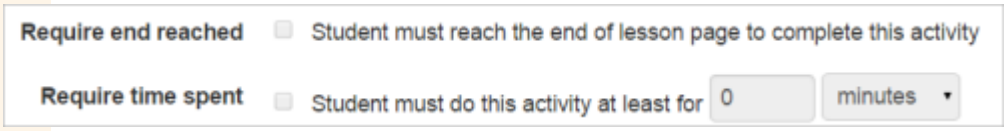
If a passing grade is set for the test, then the test can be set to be considered complete once the learner achieves a passing grade.

If a certain number of attempts are allowed, the test can be completed once the learner has taken them all (even if, for example, they did not achieve a passing grade).

Note that "*Require grade*" must be set as well as "*Require passing grade*".

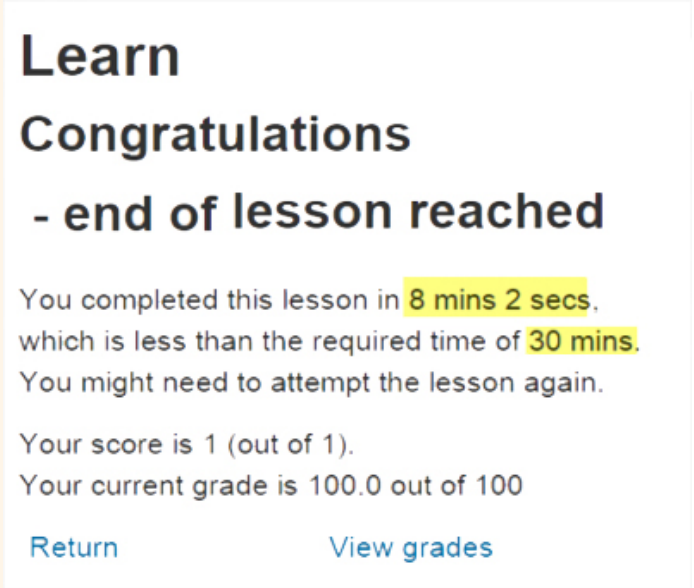
Lesson Completion Settings

The following conditions are specific to the "Lesson" activity (in addition to the standard ones):



„Require end reached": For the lesson to be marked complete, the learner must reach the last page of the lesson.

„Require time spent": For the lesson to be completed, the learner must spend a teacher-specified amount of time on the lesson pages under this condition. If they finish the lesson early, they will receive an alert saying that they have not reached the minimum acceptable time and should repeat the lesson.



Assignment Completion Settings

„Student must submit to this activity to complete it”

This condition means that an “Assignment” activity can be considered complete once the learner has submitted it.

“Forum” activity completion settings

„Require posts”

In order for the forum to be marked as “completed”, the learner must start a discussion or reply to a discussion. In the box can be specified the total number of posts they have to make.

„Require discussions”

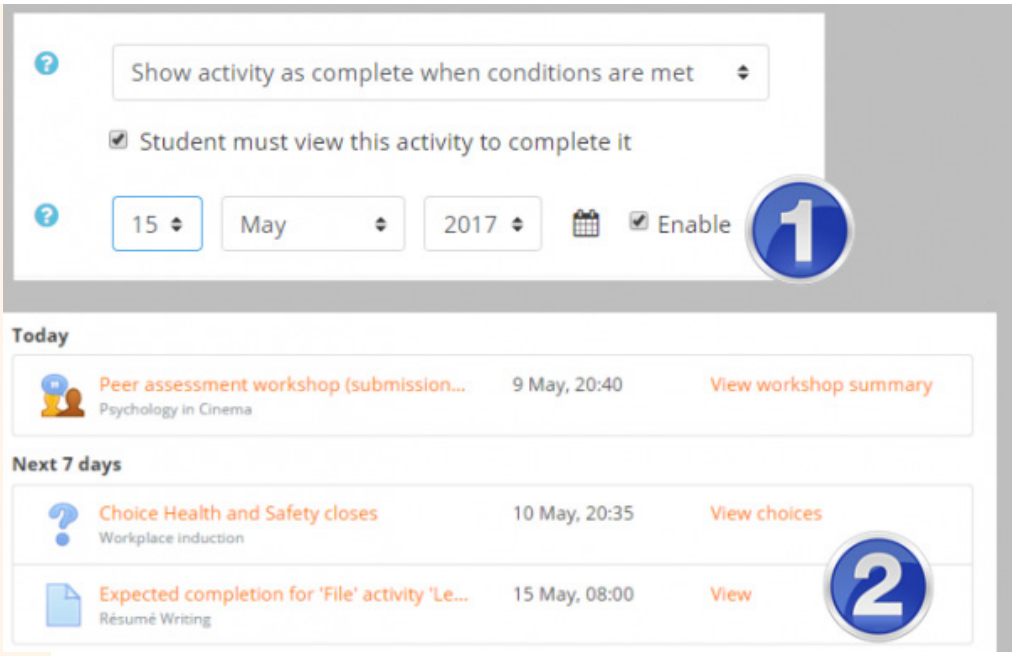
The learner must start a discussion topic. In the box you can specify the number of posts to make. *Note: This condition cannot be met using Single simple discussion or Q and A forums, as learners cannot create discussions in either type.*

„Require replies”

The learner must respond to a discussion. In the box you can specify the number of posts to make.

„Expect completed on”

When a date is entered here for a Forum activity or resource, Page or Folder, the expected completion date will be displayed on the new course presentation block.



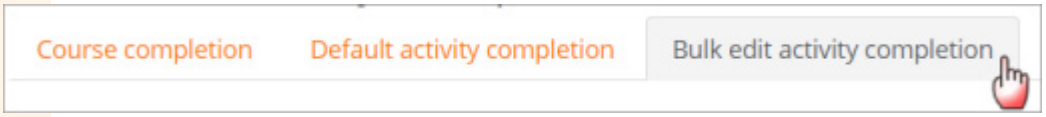
„*Course completion*”

„**Enabling** *Course completion*”

An administrator can enable “Course completion” on the platform by selecting “*Enable completion tracking” from Site administration > Advanced features.*

A teacher can then enable “*Course completion*” for their course by setting “*Enable completion tracking*” to “*Yes*” in the course settings edit page. (*Actions Menu > Edit settings > Completion tracking > [expand the category] > Yes > Save and display*)

A course completion link will appear in the “*Actions Menu*” at the top right. Clicking on it will bring up three tabs:



Course completion settings

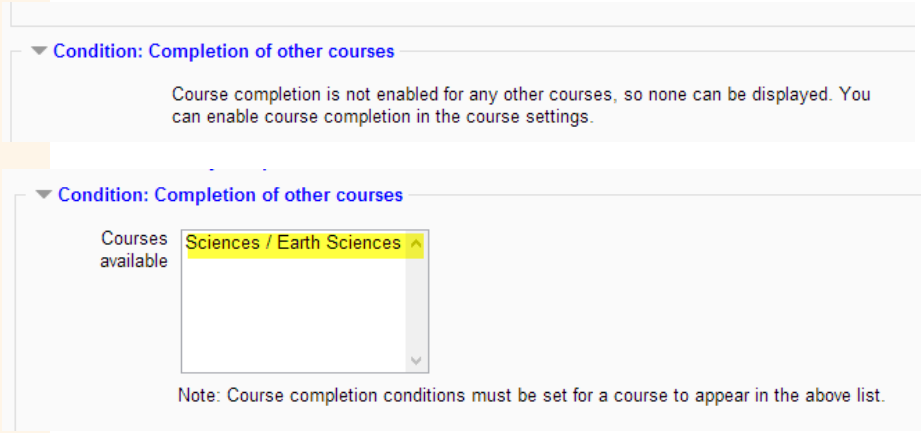
General

Choose how you want to mark course completion – whether you want some “Any” or all “All” conditions to count towards course completion.

Condition: Activity completion

Check the boxes of the activities you want to count towards course completion.

Condition: Completion of other courses



This setting allows you to make the completion of another course a condition for the completion of the course you are currently working on. This does not block the learner from the current course; it simply means that the current course will not be fully marked until the first course has been fully marked. Thus, completion of the current course is dependent on completion of a previous course. Select one or more courses in the field „*Courses available box*".

Note: To remove a course from the list if it is no longer needed, press CTRL+click on the highlighted course and it will be disabled.

Condition: Date

You can set a date after which the course will be completed.

Condition: Enrolment duration

You can choose a number of days after registration in which the course will be completed.

Condition: Un-enrollment

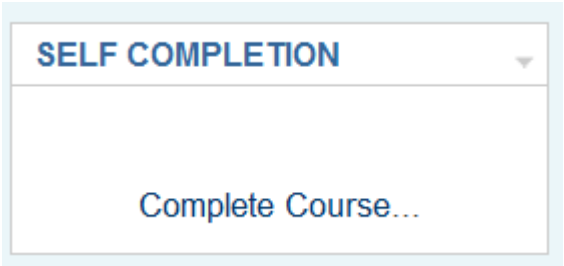
The course will be marked complete after the learner is deactivated from the course.

Condition: Course grade

You can set a passing grade for the course.

Condition: Manual self-completion

If this criterion is enabled, a learner can self-mark the completed course from the "*Self completion*" block.



Condition: Manual completion by others

Users with certain roles can mark the course as completed if their role is checked here. “ALL” means that each role must mark the completed course; “ANY” means it will be marked complete after one of the roles checked here has marked it.

II. OFFLINE ASSESSMENT PLATFORM - BBS EXAMINER USER GUIDE

1. Introduction

What is BBS

BBS is an application that allows the automatic examination of pupils / students, using grid type tests with only one possible correct answer. The application allows the creation of possible variants (maximum 9) of topics, in which the same set of questions and answers is used, but in random order.

What is NOT BBS?

BBS is not a candidate registration management application, or an electronic catalog. Although the history of examinations can be kept, the purpose of the BBS is not to replace the method of recording and archiving candidates' grades. Therefore, it is not recommended to keep the marks / scores / status of the candidates within the platform.

Abbreviations

Abr.	Term	Abr.	Term
-	-	-	-

Known issues and limitations

There are currently no known issues or limitations within the platform. The section will be updated over time.

2. Types of Users

Currently, the platform defines three types of users: Administrator, Examiner and Candidate, each with well-established roles, mapping as closely as possible the physical roles of people in the real environment.

Role mapping in real environment can be understood as:

The role in the platform	The real role	
	Pre-university education	**University education**
Administrator	IT Technician, IT Infrastructure Manager, Institution Manager	IT Technician, IT Infrastructure Manager, IT Department Manager
Examiner	Professor	Assisi. Univ., Conf. Univ., Prof. Univ.
Candidate	Student, Admission Candidate	Student, Admission Candidate

Administrator user type

The administrators of the platform are the staff of the IT department of the school unit (in case of installation in the premises of the unit), in charge of proper installation, verification of functionality and definition of users within the platform (other administrators and examiners). Administrators have the same rights as Examiners, plus the ability to define / add users.

Examiner user type

The examiner is the person, employed in the school, with the necessary skills to define questions and the rights to give grades to candidates. Examiners have access to the application administration interface, with the following rights:

1. Defining and modifying the categories of questions that will be used to generate exams;

2. Defining and modifying the questions that will be used to generate exams;

3. Uploading, adding, modifying and deleting candidates in the platform database;

4. Creation, modification, administration of examinations;

5. Marking, eliminating wrong questions in an examination;

6. Introducing candidates to the platform.

User type Candidate

The candidate is the user who benefits from the educational process and who has the obligation to take the exams required by the examiner. Candidates do not have the opportunity to enter / modify any information within the platform, but they can view their exam results as well as the exam history.

Platform authentication of the candidate to verify the score obtained

Candidates can authenticate on the platform using the address / portal / login (the address is relative to the application installation location).

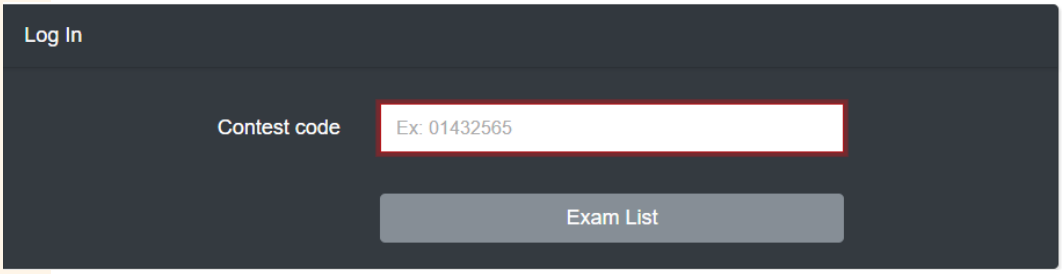
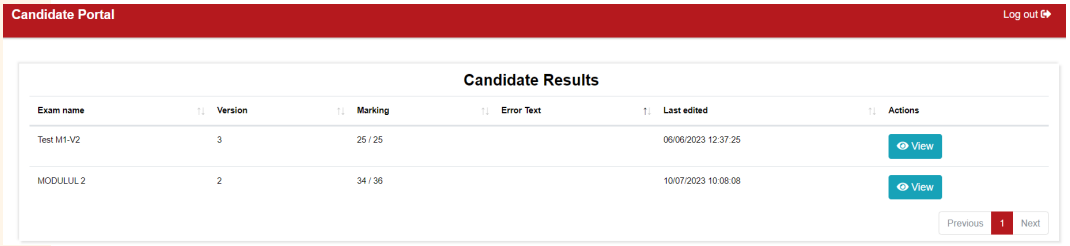


Figure 1 Candidate authentication window (to see the scores obtained)

Entering the contest code is done using the numeric keys.

After logging in, the candidate will be able to see all their exams:



Attention! For security reasons, the paper will not be displayed to the candidate if competition codes are incorrect.

Adding / modifying a candidate

In the Candidates section, you can enter a candidate manually by using the **Add** button.

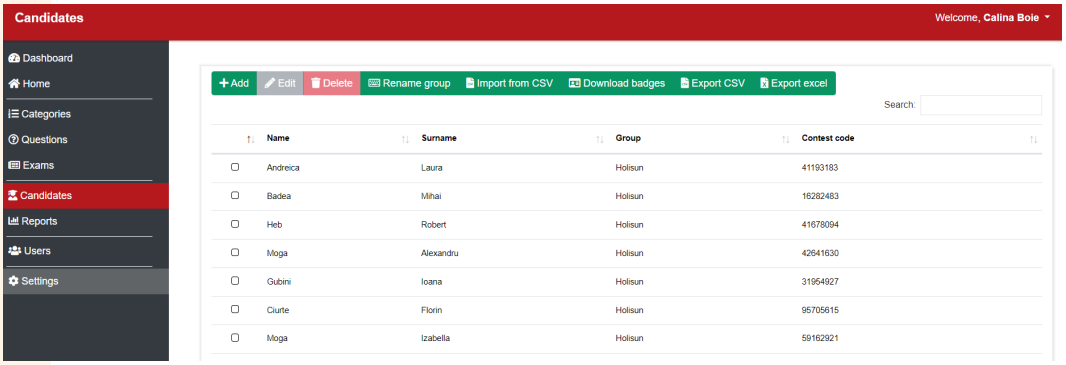


Figure 2 Candidate add button and other operations available to candidates

After pressing this button, the candidate add window opens:

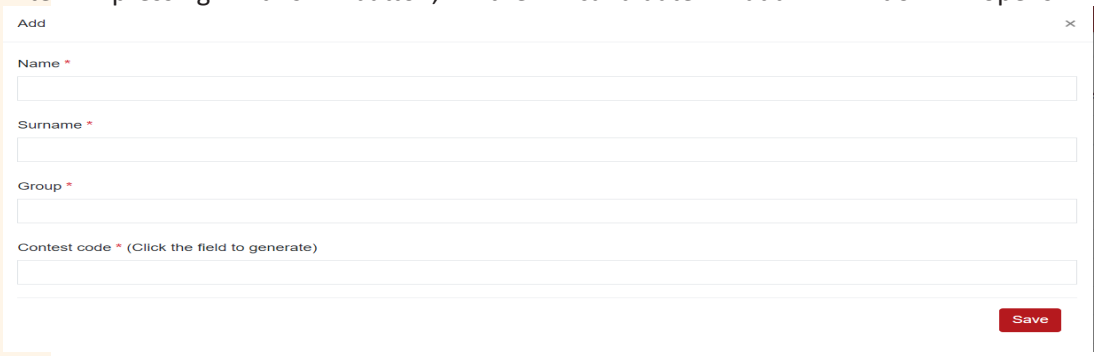


Figure 3 Add / edit window of a candidate in the platform

Field explanation:

- Name and surname: refers to the full name and surname of the candidate;
- Grouping: The right grouping criterion (eg school year);
- Competition code: the internal competition code used in the school. If this code does not exist, a unique random code can be generated by clicking on that field. **The code must be a fixed 8 numeric characters.**

The **Save** button will validate and save the candidate.

Grouping of candidates

The platform offers the possibility to group candidates according to different criteria (eg year of study). The implementation of the functionality is a flexible one, any text can be used as a grouping criterion. The condition of the grouping is that all candidates have the exact same text defined in the grouping.

For ease of manual entry of candidates, it is possible to choose a previously used grouping criterion. The application will suggest grouping criteria as characters are entered in that field.

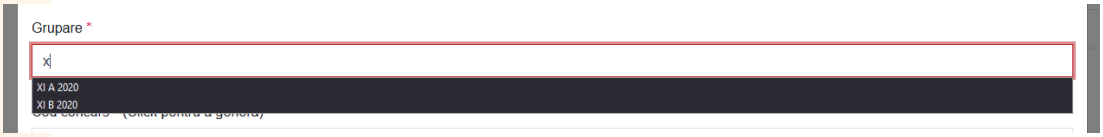


Figure 4 Selecting a pre-existing category for a particular group of candidates

Clicking on the desired value will replace the existing text in this field.

3. Examination

Whether we are talking about a semester test, a thesis, or an exam (completion or admission), all these forms of examination are found in the form of examinations within the platform. All of these forms involve offering a grid-type test with a number of questions (from one or more categories, as appropriate). The examination flow is designed to be flexible, being able to adapt to a large extent (though probably not 100% to any situation) to as many internally defined examination processes (methodologies).

Examination flow

The examination flow is divided into three major components:

1. Defining and introducing categories of questions and questions;
2. Introduction of candidates (students working inside the school), grouped according to certain criteria;
3. Defining and sustaining examinations.

These components can all be followed, but also in turn, the only requirement being that when defining / creating an examination, the necessary candidates and questions be introduced and validated.

Figure 5 visually defines the normal input / validation / generation sequence required to successfully complete a platform scan.

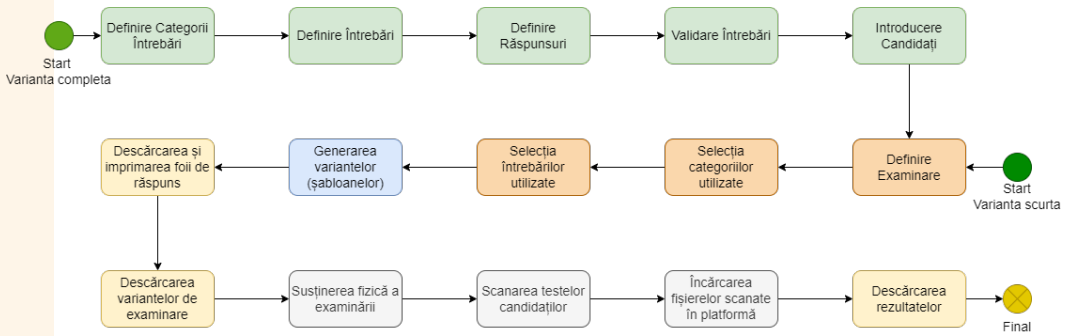


Figure 5 Complete examination flow of candidates

As you can see, there are several ways to use the platform, from which we propose:

- The complete mode, in which the database is completely empty and the steps must be taken from the beginning to the end. In this way, categories of questions, related questions and answers, as well as the list / lists of candidates must be added, all these steps being mandatory before starting the definition and taking of the examination;

- The short variant of the flow presupposes the existence of the candidates in the database, as well as the questions / categories of questions. The work therefore begins with the definition and support of the examination;

- The hybrid variant involves the addition / modification (as appropriate) of some questions and / or candidates, continuing with the definition and support of the examination.

4. Defining questions, types of questions and answers

For easier administration, the questions are grouped into categories (for example, a subject can be a category, or each school / student year can be a category for a particular subject, such as “Mathematics XI”). Each category can contain several questions, but one question can have only one category (relation 1 - N).

Defining a category of questions

Defining a category is done in the Question Categories section by clicking the **Add** button at the top of the page.

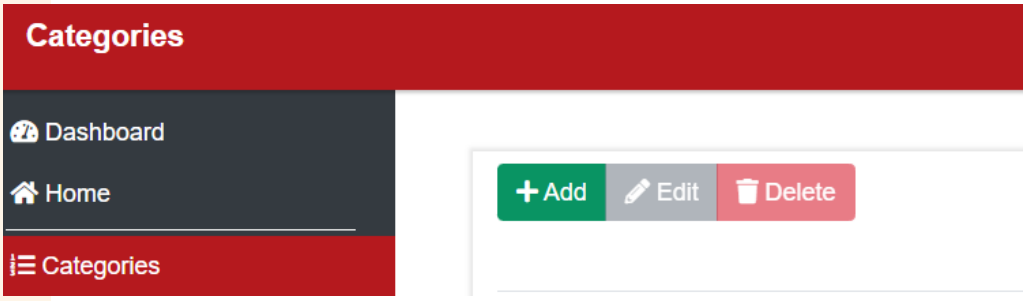


Figure 6 Available operations for question categories

Fill in the category name and click the **Save** button:

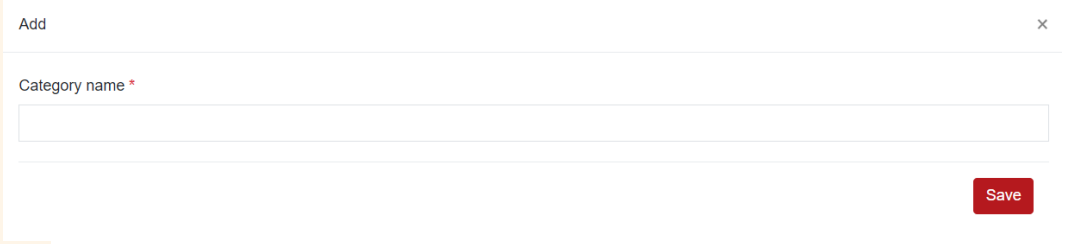


Figure 7 Add a category of questions window

If you want to change the category name, select it with the selection box to the left of the desired category and press the **Edit** button:

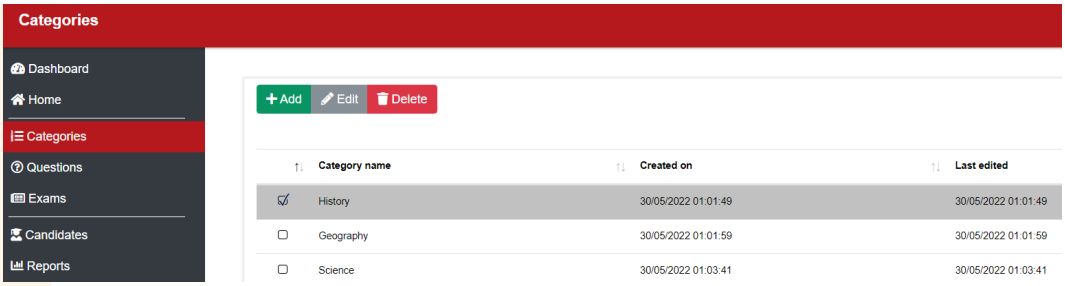


Figure 8 How to edit a platform entry

Change the name to the one you want and press the **Save** button.

Defining a question

Similar to the categories, the questions are added to the **Questions** section of the platform by choosing the **Add** button:

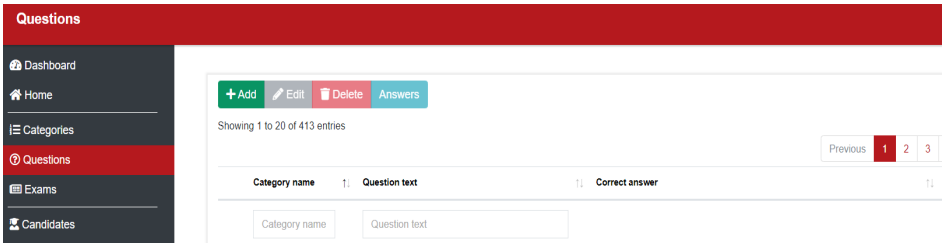


Figure 9 Operations available for questions

The questions have two required fields, namely the statement of the question and the category to which it belongs:

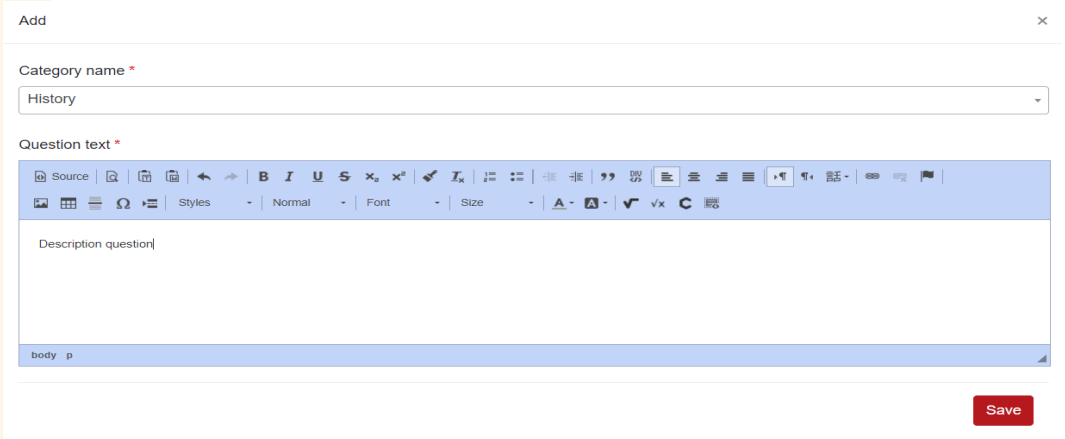


Figure 10 Question window

The statement of the question can be customized according to needs, by using formatting functions (Bold, Italic, and Underline). Special characters can be entered using the Ω button at the top right of the editor. You can also enter complex mathematical

formulas, either using the LaTex language (see Figure 11) or with the help of the internal editor (see Figure 12).

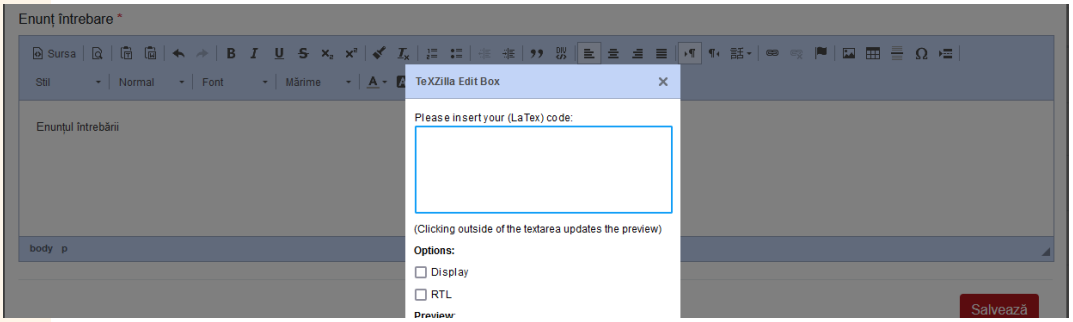


Figura 1 On this page you can enter LaTeX code for formulas

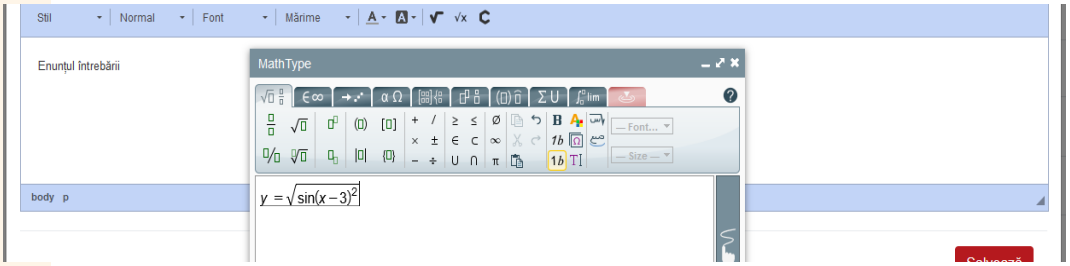


Figure 12 Internal (visual) formula editor

Also the formulas can also be included in the question statement.

After defining the statement, click the **Save** button to save the question to the database.

Attention! The question is saved only after pressing the button! Closing this window will undo any changes made to this window!

Defining the answers to a question

Once you have defined the question, you can define answers to it. Select the question you want and choose the **Answers** button at the top of the page:

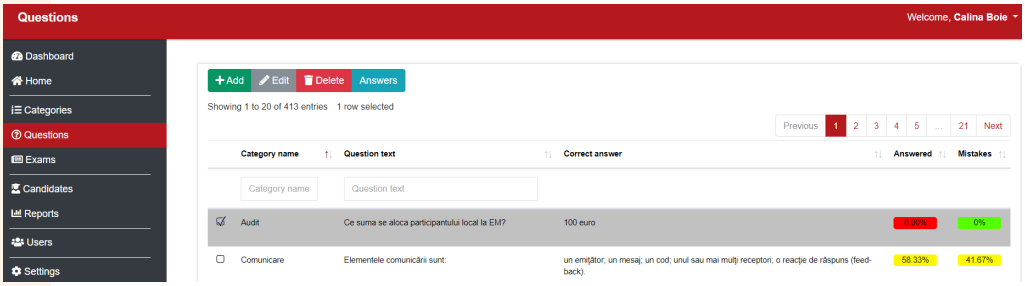


Figure 13 How to edit a question

The answer management window will open:

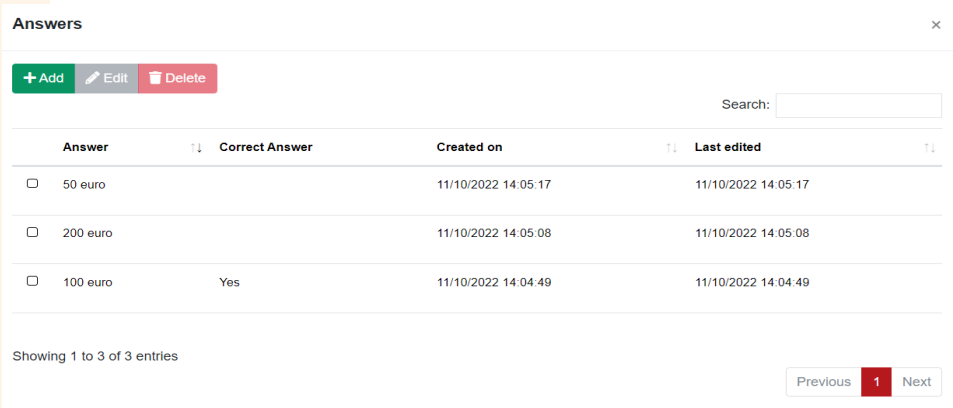


Figure 14 Answer management window for a selected question

Here you can add new answers, using the **Add** option, you can edit the entered answers, using the **Edit** button (after selecting an answer, **the buttons are activated automatically**).

Attention! In order for an exam to be generated, there must be at least the number of answers to each defined question as in the definition of the exam (If we define a 4-answer exam for each question and the question has only 3 answers defined, the application will give an error).

Each question can have only one correct answer.

Similar to questions, mathematical and / or chemical formulas can be used in the answers, the editor being similar. At the bottom of the window (see Figure 15), check **Is the correct answer** will check if the current answer is correct. *Marking an answer as correct will remove the previous correct answer.*

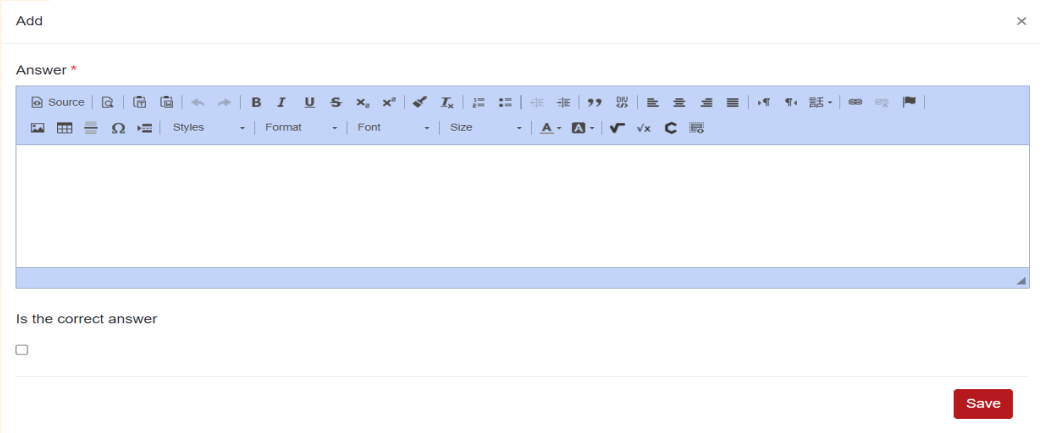


Figure 15 Window for defining an answer to a question

If the question does not have a correctly defined answer, the application will give an error when generating an examination.

The verification of the questions can also be done through the Validate the questions

button (functionality in progress), which will check the existence of answers to each question, as well as the correctly defined answer to each one.

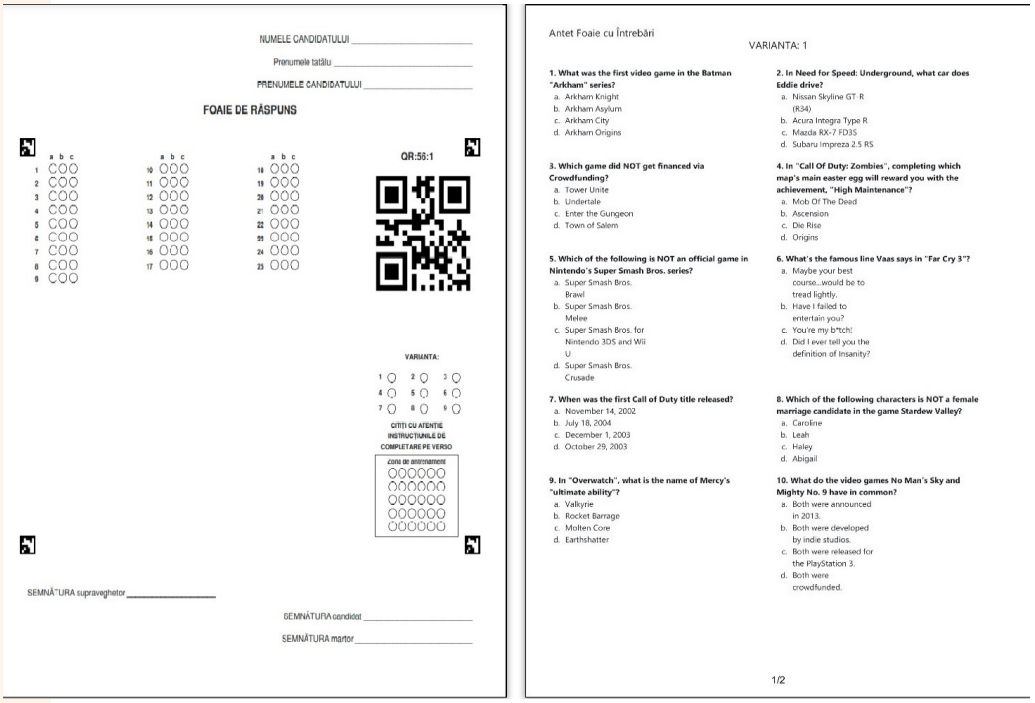
5. Defining an examination

Each examination consists of two documents (two sheets), namely:

- **The sheet containing the questions and answer options (topic)**. This sheet is not written and remains with the candidate or is handed in at the end of the examination (as the case may be, according to the rules established internally by each educational unit);

- **The sheet that will contain the candidate's answers**. This sheet will be dated and will contain the candidate's name, signature and other required fields, along with his answers to the examination questions.

Examples of the two sheets can be seen in Figure 16.



NUMELE CANDIDATULUI _____

Prenumele tatălui _____

PRENUMELE CANDIDATULUI _____

FOAIE DE RĂSPUNS

QR:56:1

VARIANTA:

CITIȚI CU ATENȚIE INSTRUCȚIUNILE DE COMPLETARE PE VERSO

zona de antrenament

SEMNĂTURA supraveghetor _____

SEMNĂTURA candidat _____

SEMNĂTURA martor _____

Antet Foaie cu Întrebări

VARIANTA: 1

1. What was the first video game in the Batman "Arkham" series?
a. Arkham Knight
b. Arkham Asylum
c. Arkham City
d. Arkham Origins

2. In Need for Speed: Underground, what car does Eddie drive?
a. Nissan Skyline GT-R (R34)
b. Acura Integra Type R
c. Mazda RX-7 FD3S
d. Subaru Impreza 2.5 RS

3. Which game did NOT get financed via Crowdfunding?
a. Tower Unite
b. Undertale
c. Enter the Gungeon
d. Town of Salem

4. In "Call Of Duty: Zombies", completing which map's main easter egg will reward you with the achievement, "High Maintenance"?
a. Mob Of The Dead
b. Ascension
c. Die Rise
d. Origins

5. Which of the following is NOT an official game in Nintendo's Super Smash Bros. series?
a. Super Smash Bros. Brawl
b. Super Smash Bros. Melee
c. Super Smash Bros. for Nintendo 3DS and Wii U
d. Super Smash Bros. Crusade

6. What's the famous line Vaas says in "Far Cry 3"?
a. Maybe your best course...would be to tread lightly.
b. Have I failed to entertain you?
c. You're my b*tch!
d. Did I ever tell you the definition of Insanity?

7. When was the first Call of Duty title released?
a. November 14, 2002
b. July 18, 2004
c. December 1, 2003
d. October 29, 2003

8. Which of the following characters is NOT a female marriage candidate in the game Stardew Valley?
a. Caroline
b. Leah
c. Haley
d. Abigail

9. In "Overwatch", what is the name of Mercy's "ultimate ability"?
a. Valkyrie
b. Rocket Barrage
c. Molten Core
d. Earthshatter

10. What do the video games No Man's Sky and Mighty No. 9 have in common?
a. Both were announced in 2013.
b. Both were developed by indie studios.
c. Both were released for the PlayStation 3.
d. Both were crowdfunded.

1/2

Figure 16 Template for the answer sheet and the question sheet (topic) coming to the candidates

Each exam has the following required fields, which are entered in the form to add a new exam:

- General settings for review:

    o Exam name: how you want this exam to be called. This field will also be visible to candidates;

    o Number of questions: how many questions will the exam have in total;

    o Number of answers: how many possible answers will each question have;

    o Number of variants: several variants will have the examination;

    o Evaluation test generated by the platform:

        - will allow the automatic generation of variants with questions from the database;
        - It will NOT allow only the generation of an examination sheet, without entering the questions in the database;

- Exam sheet settings (candidate answer sheet):

    o Number of columns: how many columns the questions will be divided into (set in the general settings);

    o Answer sheet header: The content (information and fields) required for the answer sheet header (such as examination date, year, group, etc.);

    o Answer sheet footer: The content (information and fields) required for the answer sheet footer (such as signatures)

- Question sheet settings (student question sheet):

    o Number of test display columns: how many columns the questions will be displayed on the sheet received by the candidates. If the questions are short, they can be displayed in two columns for space saving;

    o Align test answers:

        - Horizontal alignment: answer options will be displayed on a single line (if possible). This option is suitable for short / simple answers.
        - Vertical alignment: the answer options will be displayed vertically, one below the other. This variant is suitable for long / complex answers, or containing mathematical / chemical formulas;

Creating the exam

Creating an exam is done by clicking on the **Add** button, which can be found in the **Exams** category:

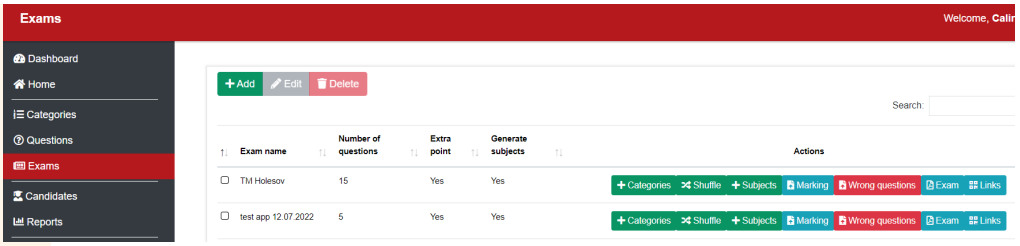


Figure 17 Locating the exam creation button

In the creation window, enter the data of this examination, as they are presented in the previous section. After completing the data, click the **Save** button.

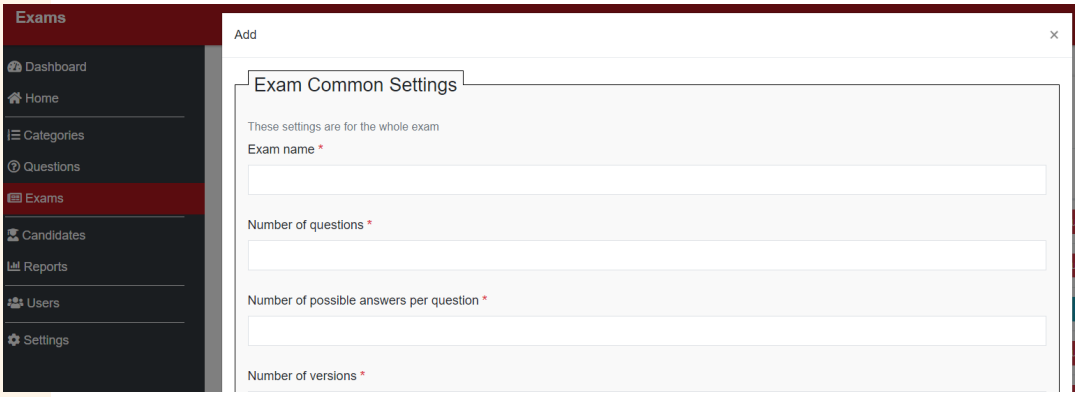


Figure 18 Examination Addition Window

The options / actions available for review are displayed as the review progresses (see Figure 19). Thus, for newly created exams, the available options are:

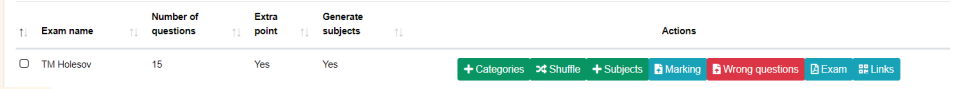


Figure 19 Options available for new exams

Defining the categories of questions and the questions that will exist on the exam is done by choosing the **Question Categories** option. Clicking on this button opens the following page:

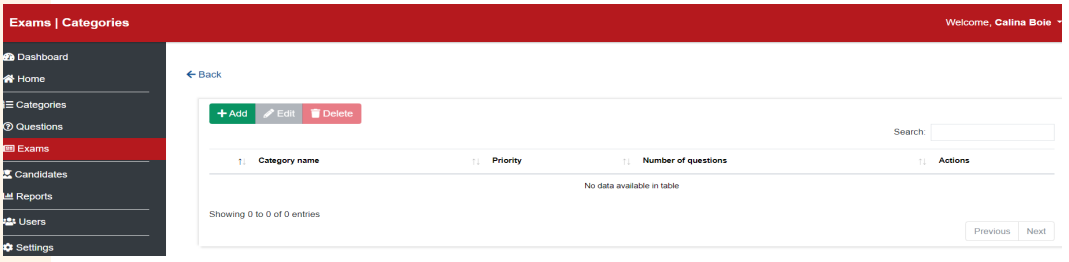


Figure 20 Configuration page (addition, modification) of the categories of questions and questions on the exam

Add question categories and questions

The order of the categories on an examination can be determined by adding in the correct order the categories. On each variant generated, the categories will have the same order, but the questions will be mixed within a category.

For each category added on the exam, we need 3 parameters:

- The chosen category;
- Test order number;
- The number of questions that will be included in the exam in the current category.

Figure 21 Window for adding a category to the current preview

At the end, we will have the categories defined on the exam:

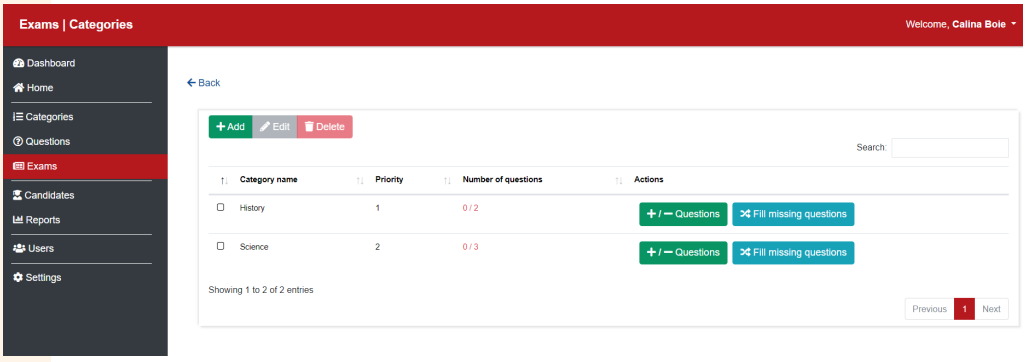


Figure 22 Categories selected from an examination, with actions available to them

Adding exam questions

Adding exam questions can be done in two ways: **automatically** and **manually. The automatic variant** will choose completely randomly the set number of questions from each category added on the exam. This option can also be chosen **if we only want to**

complete the questions (ie we have chosen a few manually and we want the automatic completion up to the set number).

If you choose **the manual option** (click on the **+/- Questions** button), the examiner will choose one by one the questions that he wants to be added on the exam:

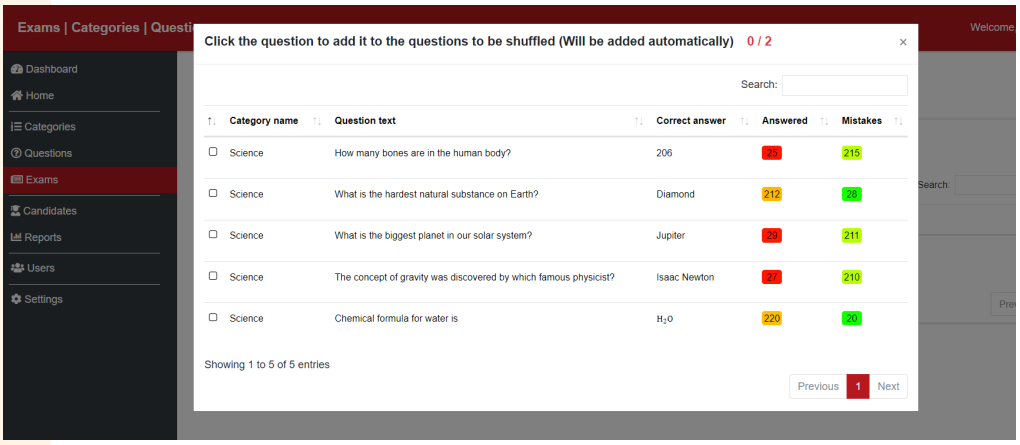


Figure 23 Questions Add Window

Selecting a question will automatically add it to the list of selected questions. At the top there is a total of the number of selected questions as well as the necessary ones, as defined in the previous step, to know how many more questions need to be selected from the current category:

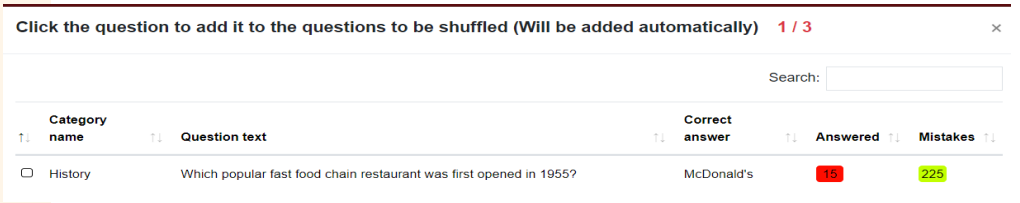


Figure 24 Summarize the number of questions selected and the number of questions required on the current examination

Once the questions have been completed, the auto-fill option from the categories will disappear, and the exam can be generated:

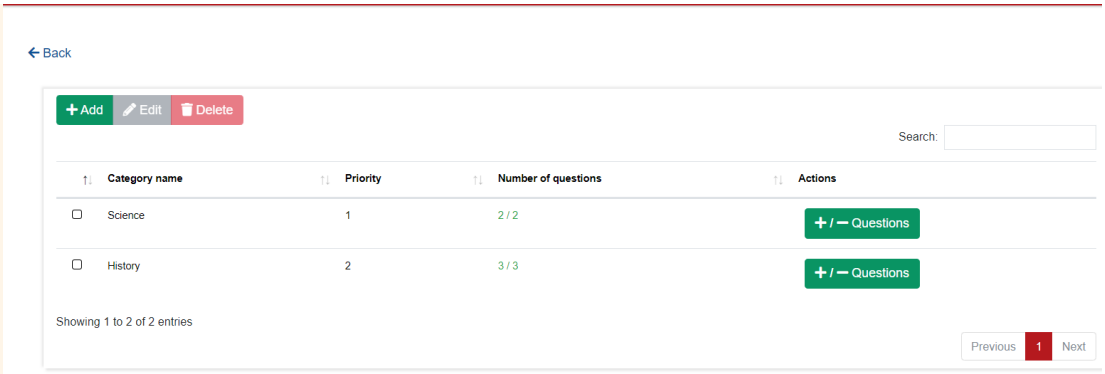


Figure 25 Display of related categories and options once the questions have been completely added

Generation of examination variants

Once the questions have been completed, the examination options can be generated. They will have the same set of questions, but in a different order. The answer options will also be in a different order. To do this, use the **Shuffle** button:

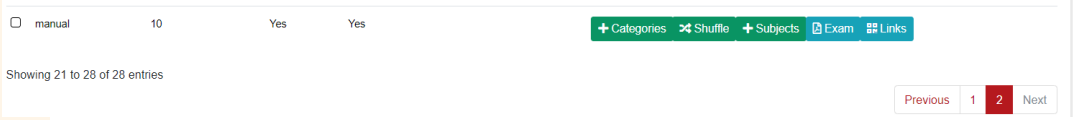


Figure 26 Positioning the examination variant generation button

After clicking this button, the confirmation window will appear. It is worth noting that once these tests are generated, they can be regenerated.

Careful! However, if the examination has been performed and tests have been uploaded for grading, the regeneration will remove these grades from the database, as in this case the examinations are no longer relevant!

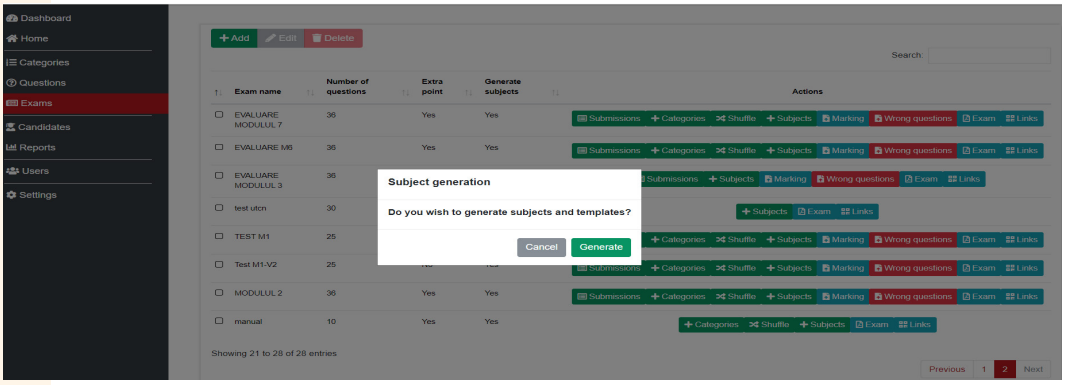


Figure 27 Confirmation window for generating variants

After generating variants, new options appear on the review:

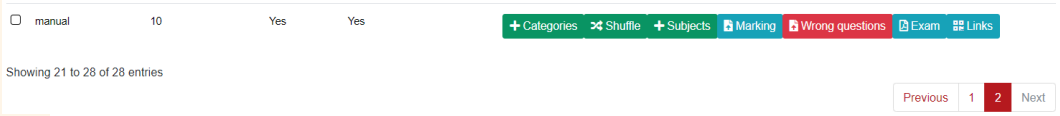


Figure 28 New options after generating variants

Thus, we can download the PDF files related to the answer sheet but also the variants of topics.

Download PDF files, their location

The answer sheet is downloaded via the **Exam** button, available for review:

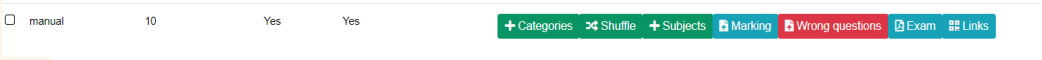


Figure 29 Locating the answer sheet download option and the Template button

Topics can be downloaded by clicking on the + **Subject**s. The exam options page (templates) will open:

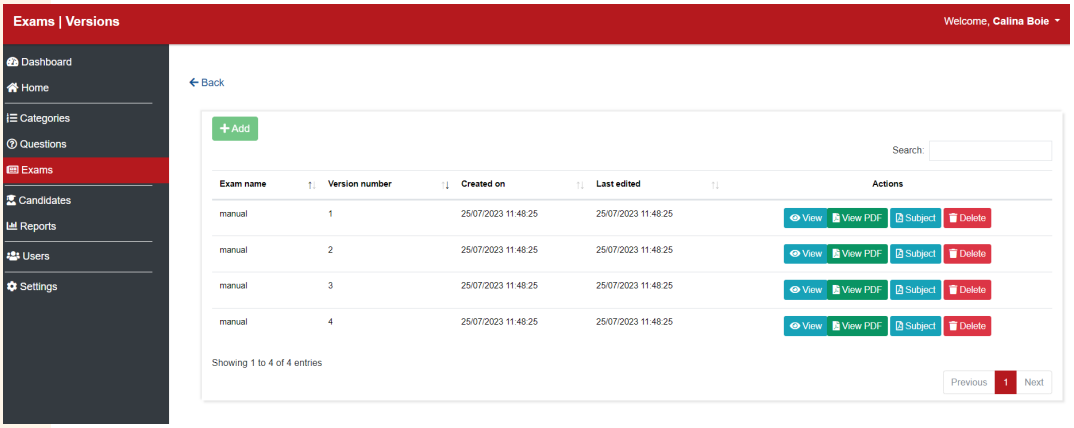


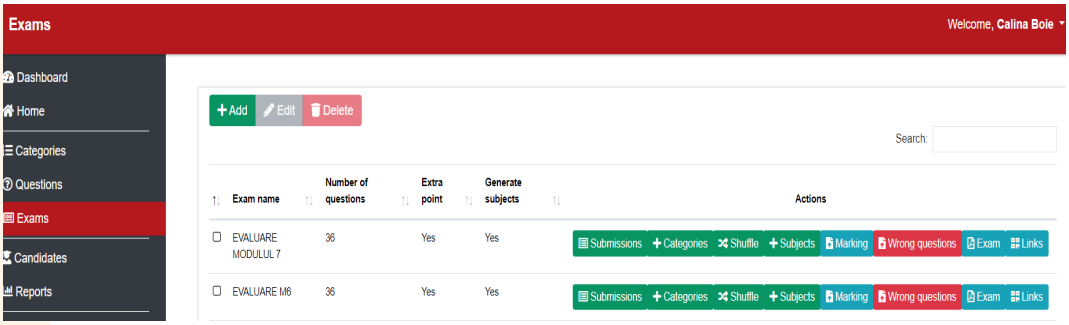
Figure 30 Examination page (templates)

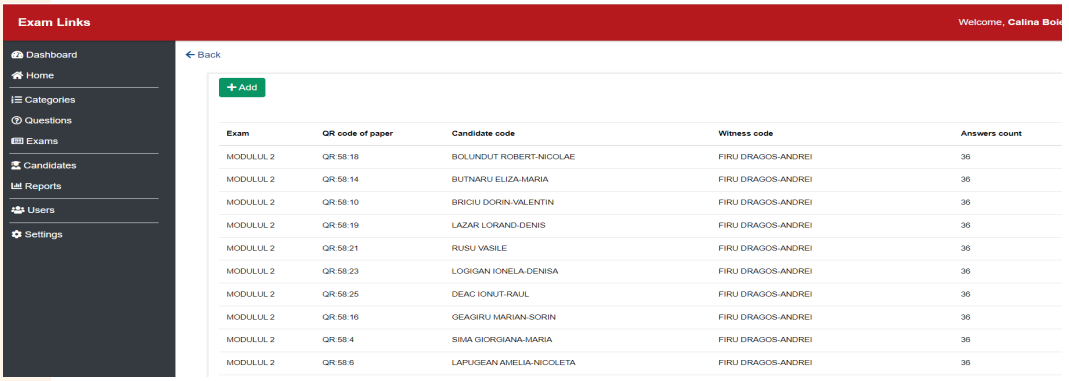
Physical examination

Physical examination involves printing previously printed PDF files. Each candidate must receive an answer sheet (examination sheet with the candidate's answers) and one of the options. These variants are established by the internal methodology of the educational unit.

Upon completion of the examination, the answer sheets should be centralized, scanned and uploaded to the platform.

Before uploading the PDF files to the platform, the link must be made between the answer sheet (QR code of the answer sheet), the candidate's competition ID (QR code of the candidate's competition ID) and the witness's competition code (QR code of the witness's competition ID) by using a QR code reader, using the **Links** button -> **Add** button.





Scan and upload files to the scoring platform

The answer sheets are scanned after they are centralized. The scanner used must be of a good quality, with no optical line defects, as they may lead to false lines on the scan, areas of no contrast, or other problems that interfere with the detection process.

The scan can be done in either color or black and white. Instead, the scan resolution should be **between 200 and 300 dpi**. Resolutions lower than 200 will make it impossible to detect, and higher than 300 will slow down the process, generating files that are too large. **The scan format must be PDF.**

Scanning can also be done on **sets of works** (so it is not necessary that they are all in the same scanned file). The resulting files are uploaded to the platform using the **Marking** button.

After loading, the platform will start the detection process, which, depending on

the number of tests and their complexity, may take several tens of seconds. At the end of the process, the **Submissions** button will appear on the interface:

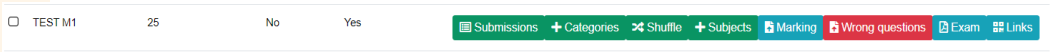


Figure 31 Locating the Corrected button to view a preview

View results for a review after correction

After correcting the works, the **Submissions** button is activated. By clicking on this button, you can see the window

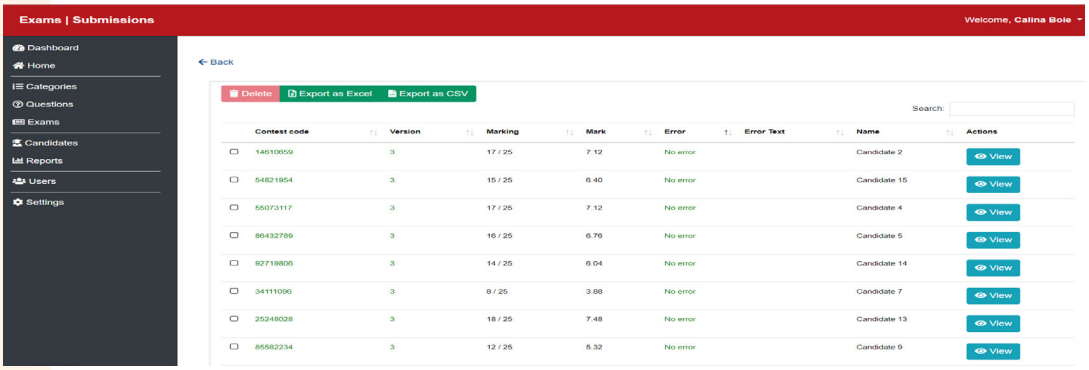


Figure 32 Corrected jobs window

From this window you can see the works of this examination, the score obtained by each and the marks calculated for these scores (with or without a point ex officio). If the test encountered an error, the error text will be displayed in the corresponding field.

The job list can be downloaded in Excel or CSV format. You can also see the papers by clicking on the **View** button, where the candidate's answers will be marked and whether they were correct or not:

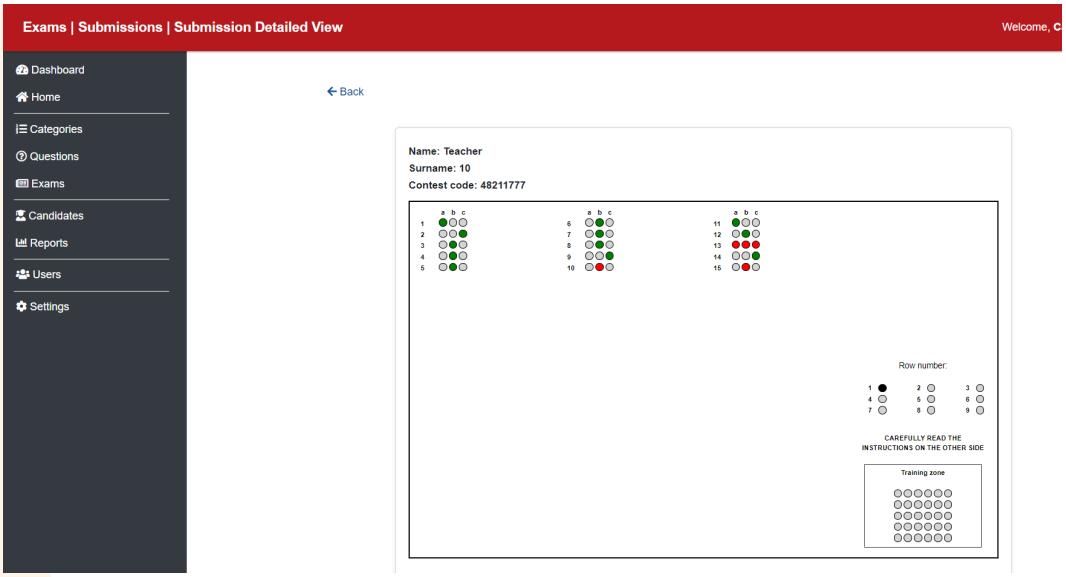


Figure 33 A job view window

At the bottom of this window, you can also see the actual scans of the paper, along with the detected answers, so that you can visually estimate the correctness of the scan.

Wrong questions, giving maximum score for these questions

In some situations (due to external factors / human error), some questions may be wrongly defined. In this situation, most methodologies involve giving the score for that question to all candidates. This functionality is accessible via the **Wrong Questions** button, a button available on each configured exam (see Figure 34).

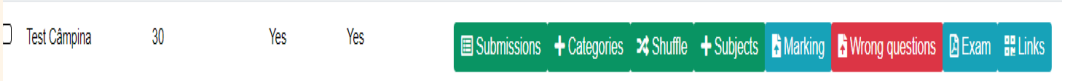


Figure 34 Positioning the Wrong Questions button

Pressing this button will open the interface for defining the wrong questions:

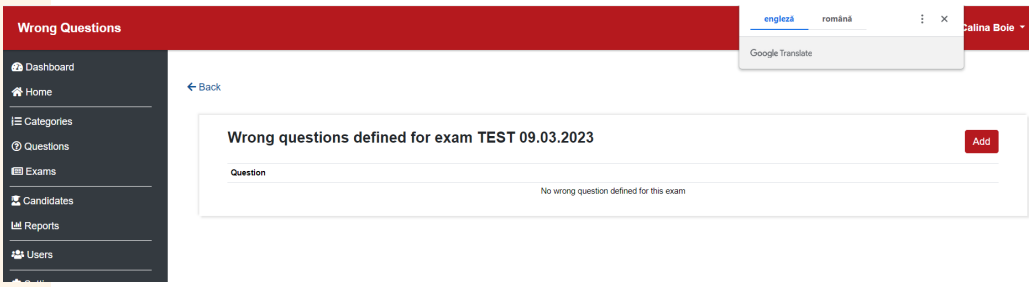


Figure 35 Wrong question page

Any number of questions can be defined for a particular exam.

Attention! Marking a question as wrong is done on each exam! Marking on a certain exam will not recalculate the grades on other exams!

Defining a question as wrong (or marking) is done using the Add button. Pressing it will open the question selection window:

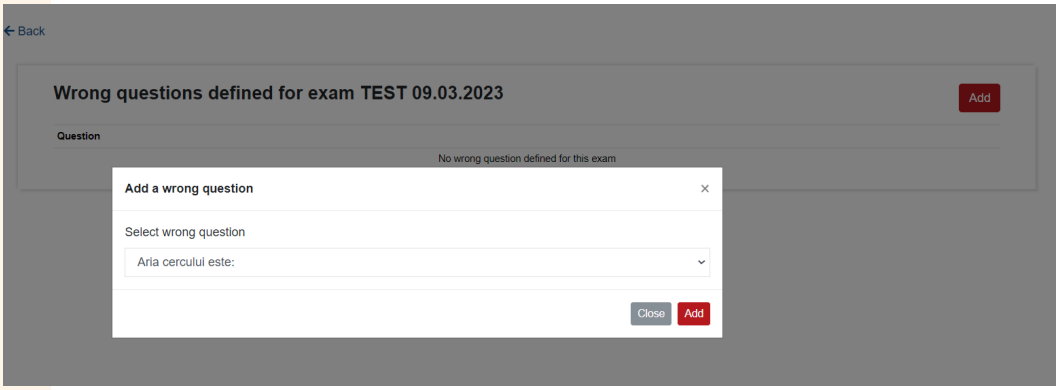


Figure 36 Wrong question setup window (for which candidates receive maximum score)

Only the questions on the current test (with all the generated variants of it) are displayed in this window. After choosing the question, press the **Add** button, at which point the platform will make the following changes:

1. All loaded tests shall be checked and if the candidate did not choose the correct answer, he / she will be given a score for this question;

2. If the candidate has chosen the correct answer, the candidate already has the respective score, so the platform will not make changes;

3. This operation is saved in the database so that it can be canceled and viewed later.

If the question proves to be correct, the wrong question mark, as well as the points awarded for this question to the candidates, can be withdrawn by choosing the Remove button for that question.

6. Reports

Examiners can generate reports for completed exams on the home page. From the top of the page, three parameters are chosen:

- Desired examination;
- The variant for which you want statistics;
- Desired chart type.

The platform will upload data to the page:

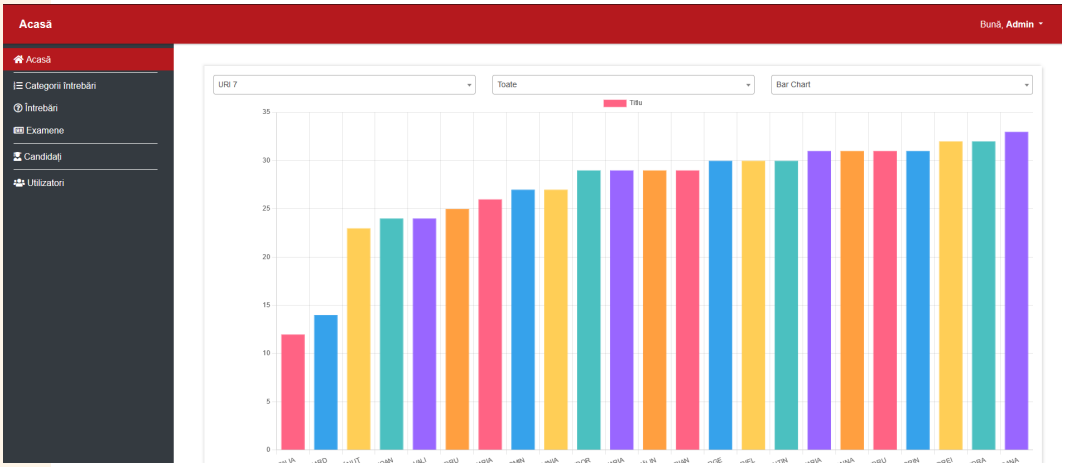


Figure 37 Bar Chart generated for an exam

The resulting graphic can be saved by right-clicking on the image and Saving the Image.

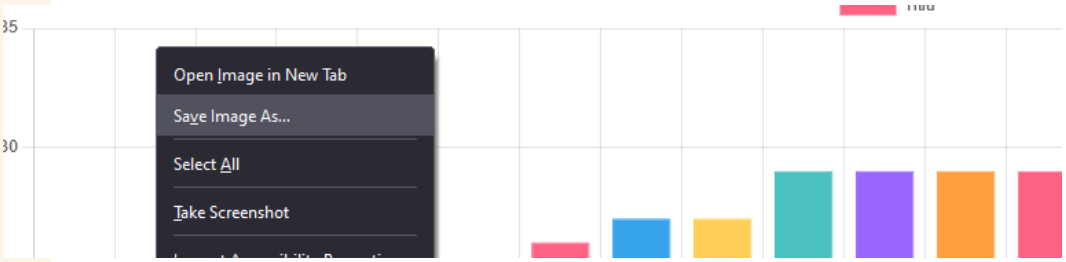


Figure 38 Right-click menu to save an image (Firefox browser on Windows)

The resulting image can be used in any activity report, by inserting it in the document, in the desired place.

7. Good practices for taking a physical exam

It is very important to know and follow these good practices, so as to ensure that the platform has all the necessary conditions for proper operation.

Define questions correctly and retrieve them from Word files

- Avoid retrieving text from questions in Word files, as they define text dimensions as well as other settings that the platform tries to keep. If you still need to enter text from other sources, use the **Paste Special** feature (available on any operating system), with the shortcut ***Ctrl*** + ***Shift*** + ***V,*** or, depending on the browser used, the **Paste Special** button:

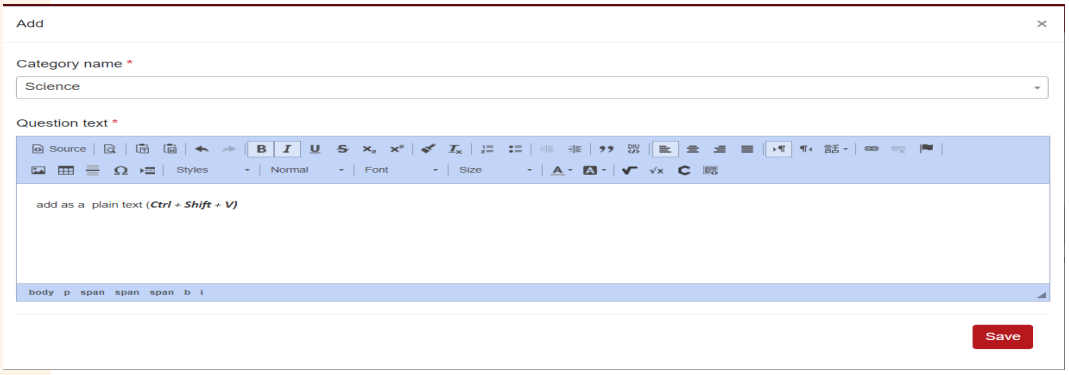


Figure 39 Locating the Paste Special button within the interface

- Avoid complex formatting with different text sizes and / or changing the fonts used. The complexity of the formatting will make the text difficult to follow and the tests will not have unity.

Correct definition of header and footer for examination sheets

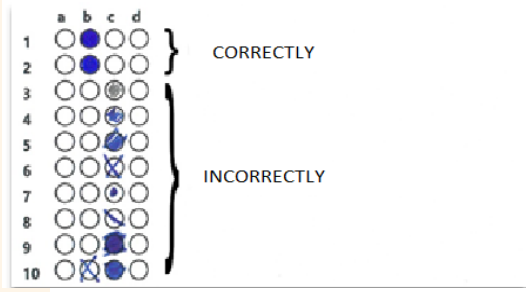
- Avoid header and footer tables. The lines (borders) of the tables can interfere with the detection process, leading to errors;
- For signature areas, leave enough space for signatures not to overlap with the detection area.

Printing examination sheets

- It is important that the exam papers are printed on A4 paper at 100% size (without scaling). Scaling changes the size of the detection area and can lead to problems in recognizing and validating them;
- It is also important to insert the correct paper into the printer as well as centre the paper correctly so that the printed text is framed correctly (not tilted on the page).

Correct completion of examination sheets by candidates

- The correct filling of the circles (their correct filling) supposes the filling of the desired circles as close as possible to 100%, without exceeding the limits of the circle and without leaving empty spaces. The ink / ink used must be dark in color (black, blue) and the use of pencils is not ecommended, as the contrast provided by the pencil lead is not sufficient.



40 Types of correct and incorrect completion of tests

Correct scanning of examination sheets completed by candidates

- Scan resolution of at least 200dpi
- Use quality scanners without scratches and streaks or dust on the glass

- Correct positioning of the sheets in the scanner to ensure a straight, straight edge (undistorted) scan.

8. Potential problems, avoiding and / or solving them

Problem	Potential cause	Solution
Detection does not work properly	Poor scan quality	- Use a quality scanner, make sure the scanning surface is clean, and the scanner is free of defects. - Make sure the scanner picks up the sheets correctly (guides guide the sheets to be scanned correctly); - Make sure you scan at 200dpi and enough contrast;
	Poor print quality	- Make sure the printer has enough toner / ink for quality, uninterrupted printing. - Make sure you have printed the sheets at 100% scaling factor; - The printout should not contain improperly printed dots, lines, or areas (for example, when the laser printer drum needs to be changed).
Questions do not look good, text sizes / colors / fonts are different	Using text copied directly from Word (or other formatted files), lacking a standard or unit-approved format	- Do not use Copy / Paste directly. Use the **Paste Special** feature to remove formatting; - Use the same formatting style for all texts. The formatting style should be established from the beginning of the use of the software and closely followed by all those who introduce / define questions and answers;

The candidate cannot see his work, even if it has been uploaded	The contest code is incorrect on the work	The works are displayed ONLY if the competition code is correct on the work; - Make sure these two codes are correct (the examiner can see all the papers); - If all is correct and the candidate still does not have access, contact the application administrator.