



EvalCOMIX¹ in Moodle

User Manual



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1

OVERVIEW OF EVALCOMIX

EvalCOMIX is a web service designed to create and implement assessment tools. With EvalCOMIX it is possible to:

- Design and manage versatile assessment tools such as checklists, rating scales and rubrics.
- Use the tools created in the competence assessment process, integrated in LMS. It allows self-assessment and peer-assessment, as well as traditional teacher assessment.

NOTE: this EvalCOMIX Moodle integration version has been developed as a single block to include EvalCOMIX in a course take the following steps:

1. Activate course edition.
2. Click on the drop-down menu "Add block" (see figure 1).
3. Select EvalCOMIX (see figure 2).

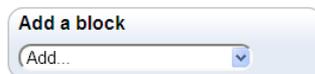


Figure 1: Drop-down menu to add a block in Moodle.

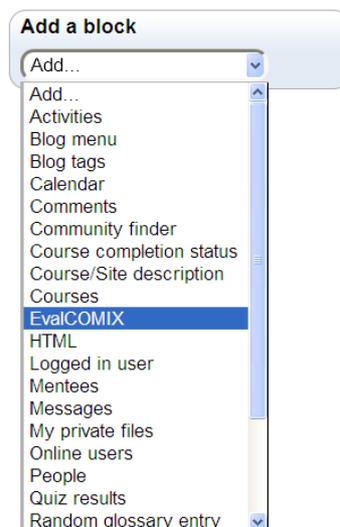


Figure 2: Option to add EvalCOMIX to a course in Moodle.

2

CREATION OF ASSESSMENT TOOLS WITH EVALCOMIX

This section describes the complete process of assessment with EvalCOMIX in Moodle, from design of assessment tools to obtainment of results in the grade report.

Using the link "Tool management" located in the EvalCOMIX block, assessment tools can be created, as shown in figures 3 and 4.

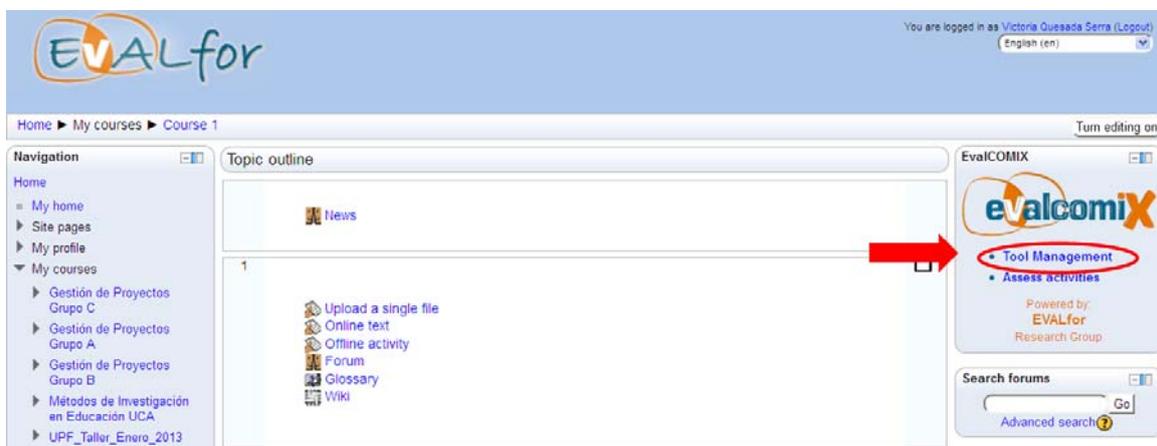


Figure 3: Link to the management of EvalCOMIX tools.



Figure 4: Management of EvalCOMIX tools.

By clicking on the button "New Tool" a new menu is shown, where the type of tool is selected, as shown in figure 5.

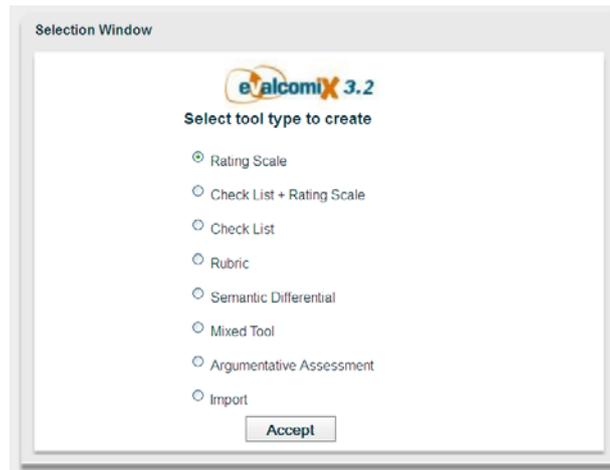


Figure 5: Types of tools.

To import a tool, select "Import" and click "Accept", then select the file path for the tool.

The following section describes the different tools that can be created:

Rating scale: a rating scale is composed of a series of attributes and a set of categories that assess the degree of fulfilment of the characteristic, trait, conduct or attribute represented by the item. A rating scale determines the degree or frequency in which a specific characteristic or attribute is presented.

Checklist: a checklist is a tool that presents a list of characteristics, abilities, traits, conducts, attributes or sequence of actions, so as to verify its presence or absence. By using a checklist the assessor merely states if the traits, characteristics or attributes listed are present or not in the object of assessment.

Checklist+Rating scale: this is a checklist that permits a value to be assigned, within a given scale, to the attribute that is assessed, provided it is present.

Rubric: a rubric or assessment matrix is a tool that, like a rating scale, enables the assessment of the degree of fulfilment for a given characteristic, conduct or attribute represented by an item. The main difference is that a rubric provides a description of the requirements for each of the steps within the rating scale, as well as a specification of the numerical value given within a range assigned for each step. Rubrics are grading guides used typically to assess the performance of students; they specify what is expected of students, value their work and facilitate feedback.

Mixed tool: a mixed tool is composed of an assessment tools and the grade is calculated as the mean of those tools.

Argumentative assessment: An "argumentative assessment" is a type of instrument that, like the other tools, defines a set of attributes classified into dimension and sub dimensions. However, unlike the other tools in which assessment is performed by assigning a numerical value, a text box is provided to the assessor to write a reasoned assessment as free-form text. The assessor can, however, also provide an overall numerical grade for the object that is under assessment.

In this case, a checklist will be created as an example.

As a reminder, a checklist is a tool in which a list of attributes is presented and its presence or absence is verified and noted. The person assessing only indicates if the attributes are present or not in the object under assessment.

To create a checklist, select the option "Check List" and click on "Accept". This way the construction interface is accessed, as shown in figure 6.

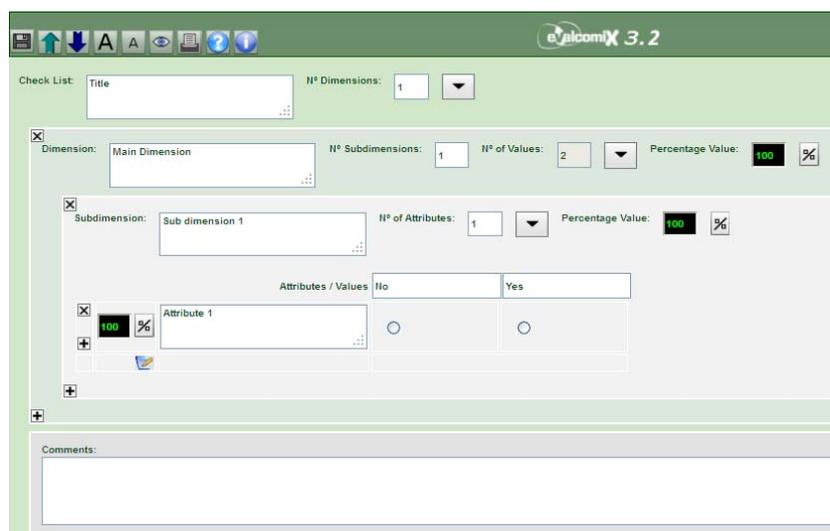


Figure 6: Newly created checklist.

For each tool created, there are some common elements. To better understand the configuration of tools, we will now define each of the common elements:

- **Dimensions:** the various aspects or features that make up an assessment object.
- **Sub dimensions:** the various aspects or features that make up a dimension.
- **Attributes:** each of the specific aspects/items that are assessed. They match the evaluation criteria.

- **Scale:** grading used to measure/value each of the dimensions and/or attributes, as well as the level of performance of students.
- **Values:** each of the grades or estimates given for each of the attributes.
- **Percentage values:** percentage value of total value, assigned to each of the previous elements.
- **Final grade:** transformation of all values (together with percentage values) into one single final grade.

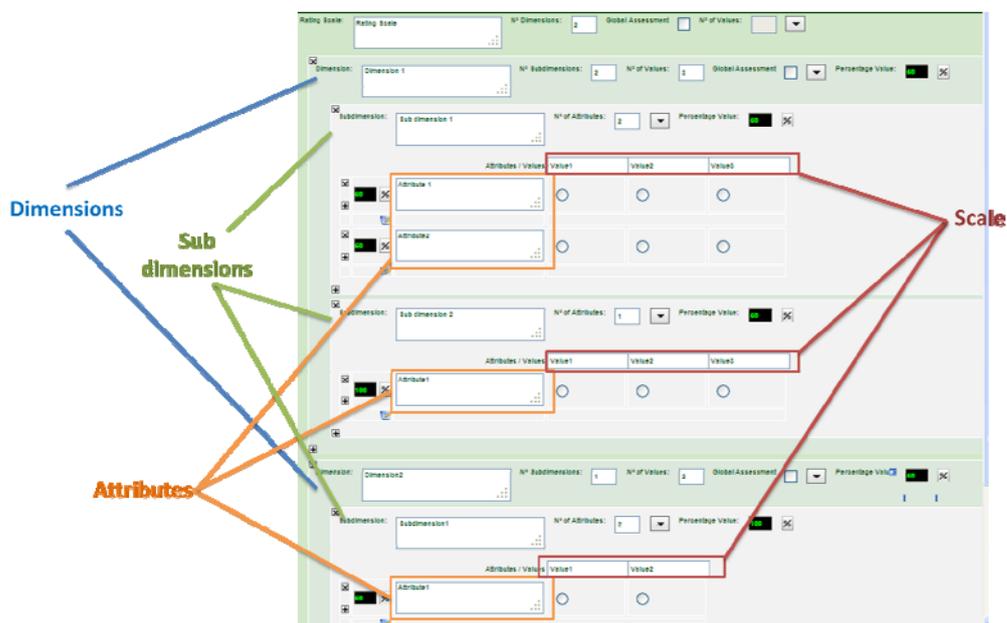


Figure 7: Description of the elements for an assessment tool.

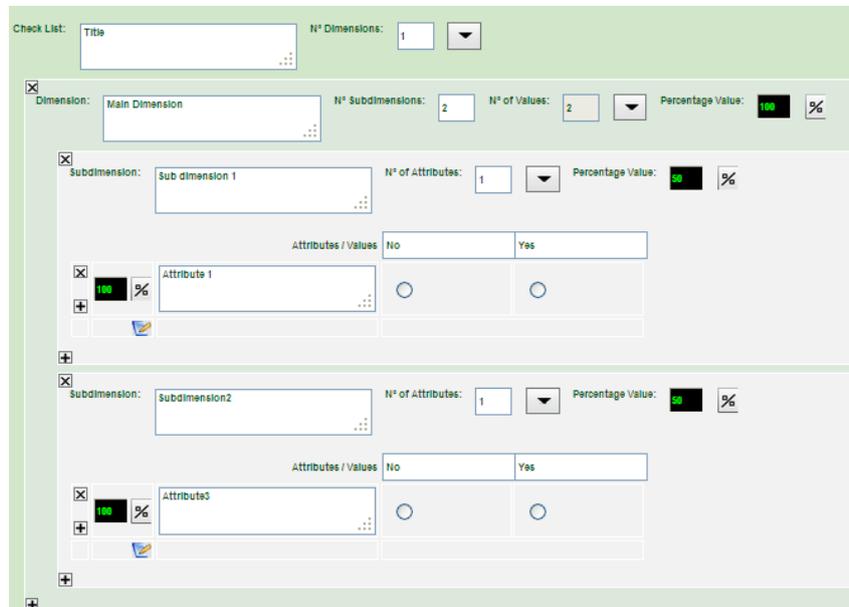
The tool includes a default title, as well as one dimension with one sub dimension and one attribute. To insert new elements or modify the number of elements, click on the button 

An element can also be added by clicking on the button  located in the lower right corner of each element. Similarly, an element can be deleted by clicking on the button  located in the top right corner of each element.

A dimension offers three options:

- Provide a name other than the default (Dimension1 in figure 4).
- Number of sub dimensions: indicates the number of sub dimensions into which the dimension will be divided.
- Number of values: number of values that can be assigned. For this example, a checklist, there are only two possible values, Yes and No.

Based on the checklist just created (see figure 6), we will add a new sub dimension and change the name to "Main Dimension" (click on  so that changes are updated on screen):



The screenshot shows a software interface for configuring a dimension. At the top, there is a 'Check List' section with a text input field containing 'Title' and a dropdown menu for 'N° Dimensions' set to '1'. Below this, the main configuration area is titled 'Dimension: Main Dimension'. It includes fields for 'N° Subdimensions' (set to 2), 'N° of Values' (set to 2), and 'Percentage Value' (set to 100%). Underneath, there are two sub-dimension sections. The first is 'Subdimension: sub dimension 1', which has 'N° of Attributes' set to 1 and 'Percentage Value' set to 50%. Below this sub-dimension, there is a table for 'Attributes / Values' with columns 'No' and 'Yes'. The first row is for 'Attribute 1', with radio buttons in both columns. The second sub-dimension is 'Subdimension2', with 'N° of Attributes' set to 1 and 'Percentage Value' set to 50%. It also has an 'Attributes / Values' table with one row for 'Attribute3' and radio buttons in both columns. The interface includes various icons for adding, deleting, and saving elements.

Figure 8: Dimension with two sub dimensions.

The sub dimension is the last nested element. The attributes according to which the assessment is made are added within the sub dimension. To do this, introduce a number in the box N° of attributes and click on .

In this case, we introduce 3 attributes in Subdimension1:

Check List: Title N° Dimensions: 1

Dimension: Main Dimension N° Subdimensions: 2 N° of Values: 2 Percentage Value: 100 %

Subdimension: Sub dimension 1 N° of Attributes: 3 Percentage Value: 50 %

Attributes / Values	No	Yes
Attribute 1	<input type="radio"/>	<input type="radio"/>
Attribute3	<input type="radio"/>	<input type="radio"/>
Attribute2	<input type="radio"/>	<input type="radio"/>

Subdimension: Subdimension2 N° of Attributes: 1 Percentage Value: 50 %

Attributes / Values	No	Yes
Attribute3	<input type="radio"/>	<input type="radio"/>

Figure 9: Creation of attributes.

To assign adequate names to the added attributes, the sub dimension and the checklist, it is sufficient to modify them in each text box (as done previously for the dimension):

Check List: Final Checklist N° Dimensions: 1

Dimension: Main Dimension N° Subdimensions: 2 N° of Values: 2 Percentage Value: 100 %

Subdimension: Assistance and tasks' submission N° of Attributes: 3 Percentage Value: 50 %

Attributes / Values	No	Yes
Assistance	<input type="radio"/>	<input type="radio"/>
Submission of the project	<input type="radio"/>	<input type="radio"/>
Submission of the activities	<input type="radio"/>	<input type="radio"/>

Subdimension: Participation N° of Attributes: 1 Percentage Value: 50 %

Attributes / Values	No	Yes
	<input type="radio"/>	<input type="radio"/>

Figure 10: Modified text boxes.

Last we will enable the option to introduce a written commentary on the first attribute (Assistance, see figure below). To do so click on the button , located in the lower right corner of the attribute. The attribute configuration is set as follows:



Figure 11: Option to enable written commentary for the attribute

The tool is saved by clicking on the icon "Save" , so that changes made are stored.

3

EvalCOMIX IN MOODLE

3.1. Introduction

Moodle is a virtual learning environment structured in modules. In each module, various activities can be undertaken that are assessed exclusively by faculty. With the integration of EvalCOMIX 3.2 in Moodle, the assessment system of the platform is improved by enabling not only design and management of assessment tools, but also active role of students in their assessment process by means of self-assessment and peer-assessment for any activity.

Monitoring of students' grades is easy, as the teacher can control, for each activity, the grades students give each other and the completed assessment tools that result in those grades. On the other hand, students can check the assessment tools with which teacher and peers have graded them, as well as the criteria used for the assessment.

Moodle records the assessments made with EvalCOMIX and can show them in the grade reporter (provided the teacher wishes to do so), combining the grades for all activities performed.

3.2. Configuration of EvalCOMIX for Moodle activities

Once the desired activities for the module are created from Moodle, access to the EvalCOMIX grader report (from where any activity can be configured and graded) is through the link "Assessment of activities" on the EvalCOMIX block (figure 12). Access through the tool management window is done by clicking the button 'Assess activities'.



Figure 12: Access to the assessment of activities in EvalCOMIX, from the module.

The link mentioned above directs us to a window where all students enrolled in the module and all Moodle activities created for the module are shown in a table format. An example is shown below:

Surname ↑ First name		Upload a single file	Online text	Offline activity	Forum	Glossary	Wiki	
student01	student01	No configuration	No configuration	No configuration	No configuration	No configuration	No configuration	0
student02	student02	No configuration	No configuration	No configuration	No configuration	No configuration	No configuration	0
student03	student03	No configuration	No configuration	No configuration	No configuration	No configuration	No configuration	0
student04	student04	No configuration	No configuration	No configuration	No configuration	No configuration	No configuration	0

Figure 13: activity assessment window.

To configure the assessment modes for the desired activities, click on the icon  located in the header section of the table, next to the activity name to be configured. This way the configuration window for the activity is accessed. Figure 14 shows an example:

Online text

Selection of Assessment Tool ⓘ

Teacher Assessment - TA ⓘ (Selection of Assessment Tool) [v]

Weighting - TA ⓘ (70) [v]

Self Assessment - SA ⓘ (Selection of Assessment Tool) [v]

Weighting - SA ⓘ (10) [v]

SA - available from: ⓘ (17) [v] ("April") [v] (2013) [v] (13) [v] (35) [v]

SA - deadline ⓘ (24) [v] ("April") [v] (2013) [v] (13) [v] (35) [v]

Peer Assessment - PA ⓘ (Selection of Assessment Tool) [v]

Weighting - PA ⓘ (20) [v]

Anonymous - PA ⓘ

PA - available from: ⓘ (17) [v] ("April") [v] (2013) [v] (13) [v] (35) [v]

PA - deadline ⓘ (24) [v] ("April") [v] (2013) [v] (13) [v] (35) [v]

[Save] [Cancel]

Figure 14: EvalCOMIX configuration for an activity.

The EvalCOMIX configuration options for a Moodle activity are the following:

- Teacher assessment - TA: this is the assessment tool used by the teacher to grade the activity for the students.
- Weighting - TA: percentage of the final grade carried by the assessment tool used by the teacher.
- Student self-assessment - SA: self-assessment tool used by the students to grade their work in this activity.
- Weighting - SA: percentage of the final grade carried by the student self-assessment tool.
- SA - available from: start date for student self-assessment.
- SA – deadline: end date for student self-assessment.
- Peer-assessment - PA: assessment tool used by students to grade the activity of their peers.
- Weighting - PA: percentage of the final grade carried by the peer-assessment tool.
- Anonymous - PA: indicates whether students will know which peers have graded them.
- PA - available from: start date for student peer-assessment.
- PA – deadline: end date for student peer-assessment.

It is important to highlight that all this information is available to the user from the application, clicking on the help icons in each option.

Weighting for teacher assessment, self-assessment and peer-assessment is set to 70%, 10% and 20%, respectively, by default. As a percentage, weightings must add up to 100.

Once the appropriate assessment tools are selected, with their respective weighting and desired options, click on the button "Save" to complete the configuration process.

NOTE: To configure an activity with EvalCOMIX, there must previously exist one assessment tool at least (see section 2).

3.3. Assessment of Moodle activities with EvalCOMIX

Once the tasks are configured, both faculty and students will be able to assess a student, according the assessment modes configured (see previous section), by clicking on the icon . Doing so will show a new window with the corresponding assessment tool (self-assessment for a student, peer-assessment for a peer or teacher assessment for a teacher). The following figures depict the change to the column "Online text" after configuration is performed, and an assessment tool as an example.

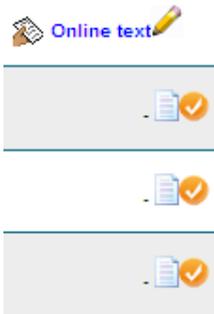


Figure 15: Moodle task.

"RATING SCALE"			
DIMENSION 1	VALUE1	VALUE2	VALUE3
Sub dimension 1			
Attribute 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attribute2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sub dimension 2			
Attribute1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attribute2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure 16: Rating scale.

After completing the assessment tool (the grade given in this example is 100), the cell corresponding to the student assessed changes and the assessment icon becomes green (✔) and the present grade is shown (70 in this example, since the weighting was set to 70%). It is worth noting that a grade (along with its breakdown) will only be visible to the teacher or the student in question, and it will be completely invisible to the other students.

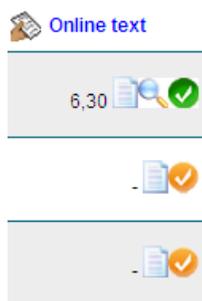


Figure 17: Colour change after assessment.

3.4. Breakdown of grades in EvalCOMIX

As students self-assess and assess their peers, the teacher and the student can access the breakdown of grades in EvalCOMIX, through the icon . This breakdown includes the grades for each student from self-assessment, peer-assessment and teacher assessment.

An important detail is that a student will not see the grades assigned by peers until the peer-assessment period is over. These grades will not be added to the final grade until such period is over.

Figure 18 shows an example of a grade breakdown:

Ratings: Online text

student01 student01

Modality	Grade	Weighing on final grade
Teacher Assessment - TA	88/100 	70%
Self Assessment - SA	63 / 100  	10%
Peer Assessment - PA	75/100  	20%

 EvalCOMIX grade: 82.90 / 100

Figure 18: Grade breakdown for student01 in activity Online text.

The options for this window are the following:

- Clicking on an icon  shows the assessment tool used with the grades given for a specific assessment (teacher and student in question can view this).
- Clicking on a grade, the teacher and the student in question (if configuration is not set to anonymous assessment) can see a new window with the profile of the user that has given that grade.
- Clicking on an icon , the teacher can delete the grade next to the icon (only grades given by students can be deleted, not those given by other teachers). Students can always delete their assessments by resetting the assessment tool.

3.5. EvalCOMIX in the grade report in Moodle

Once teachers and students have completed their assessments, the teacher can combine the resulting grades in the grade report.

An ARITHMETIC MEAN is performed, by default, with the grades obtained by EvalCOMIX and Moodle. If there are no grades in Moodle, the grade report will display only EvalCOMIX grades.

To do so, click on the button "Send EvalCOMIX Grades" located above the grade report table in the "Assessment of Activities" window



Figure 19: Send grades to the grade report.

To restore the original grades to the grade report, so that the EvalCOMIX grades are not computed, it is sufficient to return to the "Assessment of Activities" window in EvalCOMIX and note the change from the previous window to the one shown in figure 20:



Figure 20: Send grades to the grade report.

To cancel the EvalCOMIX grades, click on button "Delete EvalCOMIX Grades from the grade book".

If new assessments are made after clicking on the button "Send EvalCOMIX Grades ", these will not be included in the grade report automatically. It is necessary to click on the button "Send EvalCOMIX latest Grades" to include them in the grade report.

4

ANNEX: EVALCOMIX FOR STUDENTS

4.1. Introduction

This annex is a quick guide of EvalCOMIX for students. Students, unlike teachers, cannot create or configure activities. The only functions students can perform in EvalCOMIX are self-assessment and peer-assessment (provided the teacher has configured an activity in which to do so). Additionally, students can consult their own grades only.

4.2. Access to and assessment with EvalCOMIX

Once the teacher has configured EvalCOMIX for an activity in Moodle, access to the EvalCOMIX assessment table (from where any activity can be graded) is done through the link "Assessment of activities" in the EvalCOMIX block (figure 21).

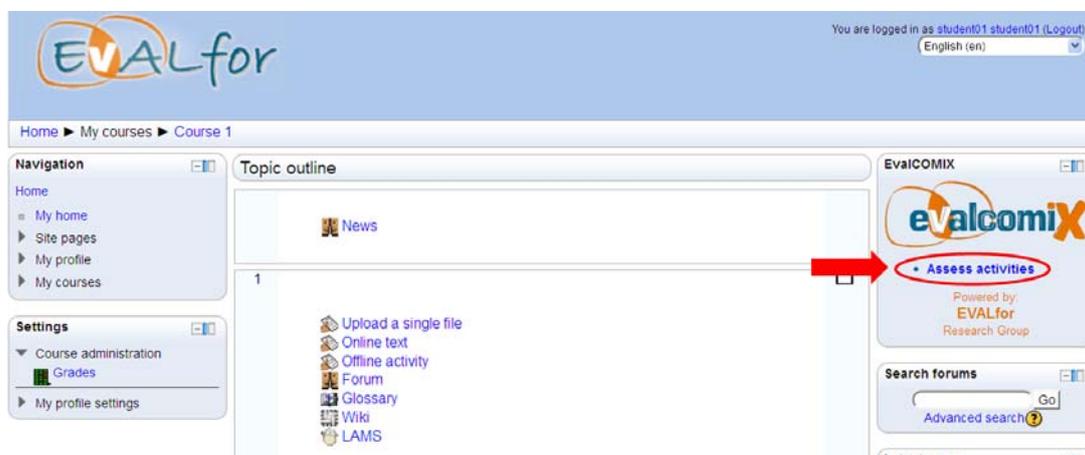


Figure 21: Access from the module to activity assessment in EvalCOMIX.

The link mentioned above opens a window with all the students enrolled and all Moodle activities created for the module, in a table format. An example is shown below for an activity previously configured:

Surname ↑ First name		Upload a single file	Online text	Offline activity	Forum	Glossary	Wiki	
	student01 student01	No conguration	No conguration	No conguration	No conguration	No conguration	No conguration	0
	student02 student02	No conguration	No conguration	No conguration	No conguration	No conguration	No conguration	0
	student03 student03	No conguration	No conguration	No conguration	No conguration	No conguration	No conguration	0
	student04 student04	No conguration	No conguration	No conguration	No conguration	No conguration	No conguration	0

Figure 21: EvalCOMIX assessment table.

This table shows each activity in the header section and the names of the enrolled students in the left column. The icon appears in the column for each activity configured ("Online text" in this example). Clicking on the icon opens a new window with the corresponding assessment tool (self-assessment for the student in questions or peer-assessment for a peer).

"RATING SCALE"			
DIMENSION 1	VALUE1	VALUE2	VALUE3
Sub dimension 1			
Attribute 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attribute2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sub dimension 2			
Attribute1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attribute2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure 22: Example of assessment tool: Rating scale.

It is worth noting that if the assessment icon is not visible in the cell corresponding to a student when the activity has already been configured, this is because the activity has not been set for self-assessment. The same will occur if the icon does not appear in the cells that correspond to the peers, because the activity is not set for peer-assessment.

After completing the assessment tool (a grade of 100 is given for this example) the assessment icon in the cell corresponding to the peer just assessed changes colour and becomes green ().

In the case of self-assessment, the icon will change colour to green and the grade will be shown (in this example the grade is 10, since the weighting for self-assessment was set to 10%).

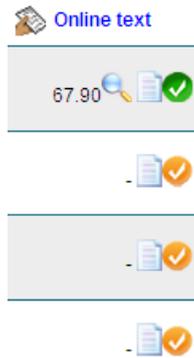


Figure 23: Change after assessment.

4.3. Breakdown of grades in EvalCOMIX

As self-assessment and peer-assessment progresses, the student can access a breakdown of EvalCOMIX grades by clicking on the icon . This breakdown includes the grades for each student in self-assessment, peer-assessment and teacher assessment (the icon can be observed after an assessment is made, see previous figure).

An important detail is that a student will not see the grades assigned by peers until the peer-assessment period is over. These grades will not be added to the final grade until such period is over.

Figure 24 is an example of a grade breakdown, after teachers and peers have assessed the student:

Ratings: Online text

student01 student01

Modality	Grade	Weighing on final grade
Teacher Assessment - TA	88/100 	70%
Self Assessment - SA	63 / 100  	10%
Peer Assessment - PA	75/100  	20%

 EvalCOMIX grade: 82.90 / 100

Figure 24: Breakdown of grades for alumno2 for the activity online text.

The options for this window are the following:

- Clicking on an icon  shows the assessment tool used with the grades given for a specific assessment.
- Clicking on a grade provided the configuration is not set to anonymous assessment a new window appears with the profile of the user that has given that grade.

4.4. EvalCOMIX in the grade report in Moodle

Once teachers and students have completed their assessments, the teacher can combine the resulting grades in the grade report.

An ARITHMETIC MEAN is performed, by default, with the grades obtained by EvalCOMIX and Moodle. If there are no grades in Moodle, the grade report will display only EvalCOMIX grades.

If changes are made after the teacher has sent the grades to the grade report, they will not be automatically included in the grade report until the teacher makes the required update of grades.