

# 4

## Incorporating Educational Standards

*Now that our Moodle site is taking shape as a CIMS with courses created, teachers assigned to courses, and students enrolled in their courses, we can begin to build standards into our site that reflect the standards, or policies, that are implemented in our educational program. We'll also streamline procedures, such as the submission of grades, and in the process, attempt to make the jobs of both teachers and educational administrators a little easier.*

In this chapter, we will introduce and explain the following tasks that will enable you to start to incorporate educational standards in your Moodle CIMS site:

- ◆ Bulk setup of the attendance module
- ◆ Setting the Gradebook to reflect educational program standards
- ◆ Implementing a final grade submission process through your Moodle CIMS
- ◆ Setting up a procedure for implementing a program-wide assessment test

### **Implementing standard policies and procedures in your Moodle site**

Almost every educational program, to varying degrees, has in place standards upon which it operates in order to ensure that every student is treated fairly and equitably. These standards may be in the form of rules that govern student evaluation methods, procedures for filing paperwork required of instructors, or policies that must be adhered to by students in a program such as attendance requirements. One aspect of expanding Moodle to function as a CIMS is through the implementation of many of these standards in the Moodle site. Doing so will not only introduce a heightened level of efficiency, it will also serve to

make your program-wide standards more transparent and thus, more easily adopted and adhered to by everyone involved in your program. The following examples are just a few introductory ideas for how to implement standards through your Moodle site. Once you have experimented with these, I encourage you to think of other standards, policies, and procedures that can be implemented through your Moodle CIMS.

## **Attendance standards**

Traditional educational programs in which students meet in a classroom for face-to-face interaction with a teacher, very often keep records of student attendance percentages. This data may be used for the purpose of enforcing attendance regulations or simply to allow educators and administrators to track attendance rates for purposes such as correlation with scholastic achievement. The attendance module in Moodle can be used in such programs to:

- ◆ Help a program implement a standardized attendance policy
- ◆ Enable a program to track attendance rates quickly and efficiently

## **Bulk setup of the attendance module**

For the following example, we are going to use the attendance module, that we installed in our Moodle site in the first chapter of this book, to help our program implement a standardized attendance policy that we are asking all of our teachers and students to adhere to. The policy is outlined as follows:

- ◆ Students are required to attend 80 percent of the total class sessions per semester
- ◆ Being 15 or more minutes late to class is counted as a *Late*
- ◆ Four *Late* attendances equal one *absence*
- ◆ Excused absences will count for 75 percent of an attendance

This is, of course, simply an example attendance policy. Additional rules that are external to the Moodle attendance module tabulation system may be established and implemented to allow for more flexibility on the part of the educators. Virtually any mathematical calculation based upon attendance data however, can be implemented within the attendance module. The example outlined here consists of three stages:

- ◆ Creation of template courses
- ◆ Setting up of the attendance template within the template course
- ◆ Importing the attendance template into other courses

## Time for action – creating a template course

We are going to set up a course to use as a 'template' course in which we will create the **Attendance** activity that we are going to use to import attendance settings into our courses. Follow these steps to get your template course ready:

1. Log in to your site as admin or as a user with administrative privileges and navigate to the **Course categories** page. One way to do this is to click on the **Show all courses** link found at the bottom of your **MyCourses** block, as shown in the following screenshot. The direct URL to this page will always be `http://www.yoursite.com/course/`.



2. From the **Course categories** page, click on the **Turn editing on** button.
3. With editing turned on, click on the **Miscellaneous** link to enter the miscellaneous category and then click on the **Add a new course** button.
4. Create the new course with a **Full name** and **Short name** that will enable you to identify it easily. This course will hold attendance settings that are going to be used as a template for classes that meet on Monday and Thursday during the first period, so we are using Attendance Template M-Th 1 as the **Full name** and AT-M-Th-1 as the **Short name**, as shown in the following screenshot:

 A screenshot of the 'General' section of a Moodle course creation form. The form has a title 'General' in a box. Below the title are several fields:
 

- Category**: A dropdown menu with 'Miscellaneous' selected.
- Full name\***: A text input field containing 'Attendance Template M-Th 1'.
- Short name\***: A text input field containing 'AT-M-Th-1'.
- Course ID number**: An empty text input field.
- Summary**: A text area with a small icon to its right.

5. You might also want to enter a simple explanation of what the course is being used for, to help identify the course to site administrators. An example is provided in the following screenshot:

This course will be used to create an attendance module to be used as a template for importing to other courses that have Monday/Thursday 1st period class sessions.

6. Make sure that the **Course start date** is set such that it falls before the first day that attendance will be taken in the course. For our example, we should use April 1 as that was the date used as the start date for our courses. Note, if you create attendance sessions for dates that occur prior to the start date of the course, they will not appear in the attendance sessions window and will be reported as invisible sessions. The only way to access these sessions is to change the course start date to a date that falls before the dates used for the invisible sessions.
7. Finally, before creating the course, change the **Availability** setting to **This course is not available to students**, as shown in the following screenshot. This will ensure that students do not accidentally enroll in this template course.

**Availability**

Availability This course is not available to students

Enrolment key   Unmask

Guest access Do not allow guests in

8. After you have entered all of your settings and clicked on **Save changes**, the course will be created and you will be prompted to assign roles, as shown in the following screenshot. If you plan to have users with other roles, such as non-editing teachers or users with other administrative roles that we will discuss in a future chapter, using this course, you may assign them here. Because the admin will always be able to access this course, for now we will skip this assignment process and click on **Click here to enter your course**, as shown in the following screenshot:

**Assign roles in Course: AT-M-Th-1** 🗨️

Roles	Description	Users
<a href="#">Administrator</a>	Administrators can usually do anything on the site, in all courses.	0
<a href="#">Course creator</a>	Course creators can create new courses and teach in them.	0
<a href="#">Teacher</a>	Teachers can do anything within a course, including changing the activities and grading students.	0
<a href="#">Non-editing teacher</a>	Non-editing teachers can teach in courses and grade students, but may not alter activities.	0
<a href="#">Student</a>	Students generally have fewer privileges within a course.	0
<a href="#">Guest</a>	Guests have minimal privileges and usually can not enter text anywhere.	0

[Click here to enter your course](#)

### ***What just happened?***

We just set up a course that will function as a template course because we will use it as a place to set up an attendance activity with the sessions we want to be able to import into various courses. This is being done because it is not easily possible to create pre-populated attendance activities in multiple courses simultaneously via any other method. Use of this type of a template course is an easy way to allow you to set up attendance activities in multiple courses in a relatively short amount of time.

### **Time for action – setting up the attendance template**

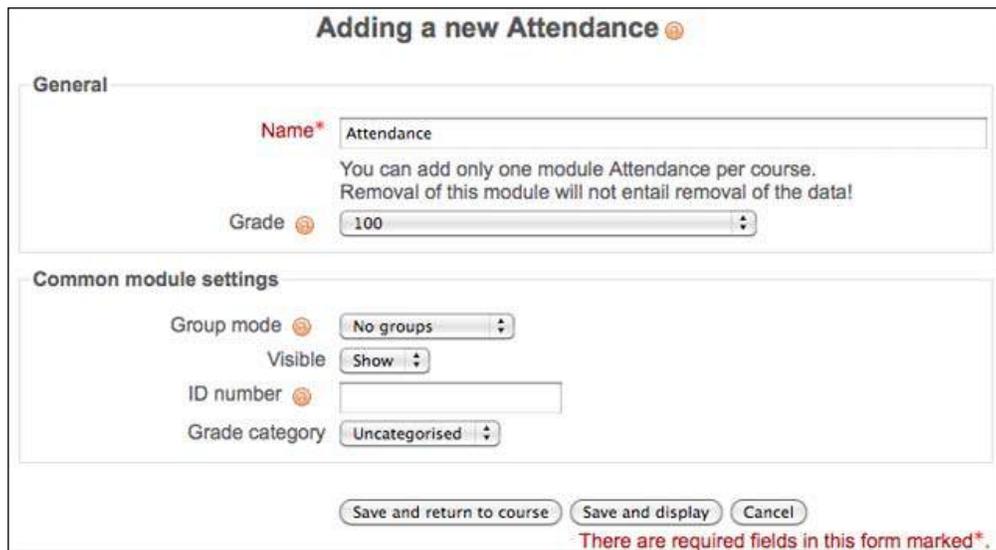
We are now ready to create an instance of the attendance module activity and pre-populate it with the settings we want to use for our classes that meet on Mondays and Thursdays during the first period. Follow these steps to set up the attendance module:

1. If editing is not already turned on, click on the **Turn editing on** button found at the top-right of the screen.

2. In the top section of the page, the one that includes the default **News forum**, click on the **Add an activity...** drop-down menu bar and select **Attendance**, as shown in the following screenshot:



3. In the **Adding a new Attendance** screen, shown in the following screenshot, you can change the name of the attendance module you are inserting in this course. You can also change the grade here if you like. For our example, we will keep all of the default settings and simply click on **Save and display**.

A screenshot of the "Adding a new Attendance" form. The form has a title "Adding a new Attendance" with a help icon. It is divided into two sections: "General" and "Common module settings". In the "General" section, there is a "Name\*" field with the value "Attendance" and a "Grade" dropdown menu set to "100". Below the "Name" field, there is a warning message: "You can add only one module Attendance per course. Removal of this module will not entail removal of the data!". In the "Common module settings" section, there are four fields: "Group mode" set to "No groups", "Visible" set to "Show", "ID number" (empty), and "Grade category" set to "Uncategorised". At the bottom of the form, there are three buttons: "Save and return to course", "Save and display", and "Cancel". A red message at the bottom right says "There are required fields in this form marked\*."

- An instance of the attendance module activity has now been inserted into the course and, because we clicked on **Save and display**, we are presented with a screen that allows us to set up the module. From the setup screen, shown in the following screenshot, click on the **Add** tab.



**Attendance for the course :: Attendance Template M-Th 1**

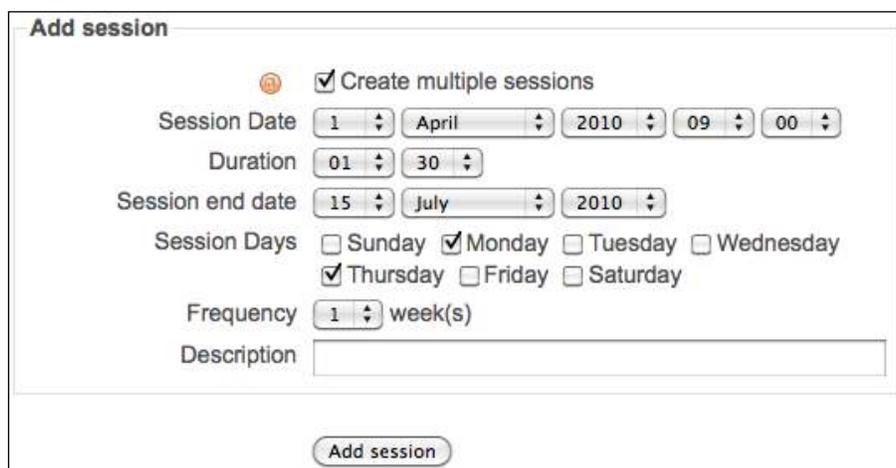
Sessions Add Report Export Settings

**No Session exists for this course**

Hidden sessions: 0

You are logged in as - Admin - (Logout)

- In the subsequent screen, first, click on the **Create multiple sessions** tickbox. We are going to create multiple class sessions for a class that begins on 4/1/2010 and runs until 7/15/2010. This class meets on Mondays and Thursdays during the first period, which in our sample institution is from 9 A.M. to 10:30 A.M., thus the duration setting of one hour and thirty minutes. The settings entered are shown in the following screenshot. Click on the **Add session** button to create the sessions.



**Add session**

Create multiple sessions

Session Date 1 April 2010 09 00

Duration 01 30

Session end date 15 July 2010

Session Days  Sunday  Monday  Tuesday  Wednesday  
 Thursday  Friday  Saturday

Frequency 1 week(s)

Description

Add session

6. You will get a **Sessions successfully generated** message as shown in the following screenshot. From this screen, click on the **Sessions** tab to view the sessions you just created. Note, if you click on the **Continue** button, you will be taken back to the **Add session** screen. You can select the **Sessions** tab from this screen as well.



7. Notice that there are 31 sessions with each session titled **Regular class session**. Let's remove the 31st of May for *Memorial Day* and the 17th of June for a *School Founders Day* holiday. These sessions can be deleted one at a time by clicking on the red X or together by first clicking in the **Select** box found at the far right for both days and then using the **With selected** drop-down menu found at the bottom of the page. The following screenshot is of the confirmation window that appears after selecting both dates using the **Select** box and then using the drop-down menu to delete the sessions at the same time.



8. After we have deleted the two unneeded sessions, let's change the name of the 1st and last sessions to *First Day of Class* and *Last Day of Class*. Click on the small pencil icon to edit the individual session and enter the new title, as shown in the following screenshot. Click on **Update** to save the changes and then do the same for the last day of class, the 15th of July.

### Update Attendance for the course :: Attendance Template M-Th 1

Change session 

Old date 1.04.2010 09.00

New date

Duration

Description

9. We should now have 29 sessions in our **Attendance** activity. Lastly, we want to enter the settings that will allow the conditions, described earlier, to be calculated by the module.
- ❑ **Students must attend 80 percent or more of the class sessions:** This will be calculated for us because we set the module to calculate out of 100 points.
  - ❑ **Four Late attendances equal one absence:** To accomplish this we will set a regular attendance to be worth 4 points and a late attendance to be worth 3 points.
  - ❑ **An excused absence will count for 75 percent of an attendance:** This means that an excused absence will also be worth 3 points.
10. Click on the **Settings** tab to enter the settings that will look like the following screenshot. Click the **Update** button to save the new settings.

### My Variables

#	Acronym	Description	Grade	Action
1	<input type="text" value="P"/>	<input type="text" value="Present"/>	<input type="text" value="4"/>	 
2	<input type="text" value="E"/>	<input type="text" value="Excused"/>	<input type="text" value="3"/>	 
3	<input type="text" value="L"/>	<input type="text" value="Late"/>	<input type="text" value="3"/>	 
4	<input type="text" value="A"/>	<input type="text" value="Absent"/>	<input type="text" value="0"/>	 
*	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Add"/>

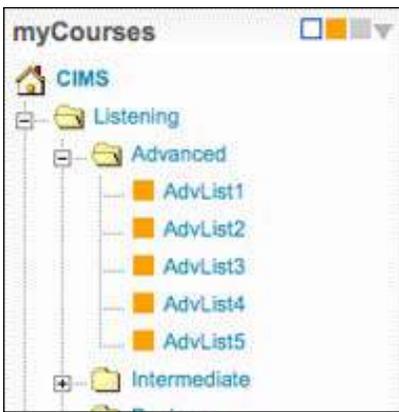
## ***What just happened?***

We have just created an attendance template using the attendance module. In our template, we have created 29 attendance sessions for classes that meet on Mondays and Thursdays from 9 A.M. to 10:30 A.M. between the 1st of April and the 15th of July. We also added settings that govern how many points a student gets for being present to class, late to class, absent from class, and for an excused absence. Next, we'll use this template to quickly add pre-formatted instances of the **Attendance** activity to other courses.

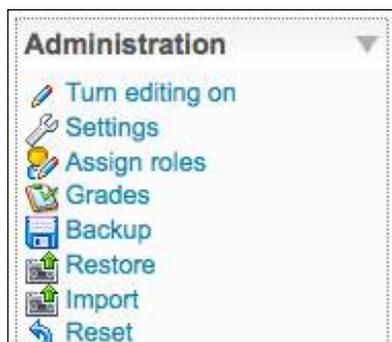
## **Time for action – importing the attendance template to other courses**

For this example, we will import this attendance setup into all advanced listening and advanced speaking courses. This means we'll need to import the attendance settings into a total of ten courses. Carry out the following steps to import an instance of the pre-formatted attendance module activity that will include all of the dated sessions we created in the template, into these courses:

1. Navigate to the first course we are going to import the attendance module into. Using the **MyCourses** block, click on **AdvList1**, as shown in the following screenshot:



2. From inside this course, click on the **Import** link found in the **Administration** block on the left side of the screen, as shown in the following screenshot:



- Enter the short name of the course that was used to create the attendance template (AT-M-Th-1) in the **Search courses** field and click on the **Search courses** button, as shown in the following screenshot:

- The result of the search will present the **Attendance Template** course we created earlier, as shown in the following screenshot. Click on the **Use this course** link.

Search results	
Attendance Template M-Th 1	<a href="#">Use this course</a>

- The **Import course data** screen will present a list of activities that may be imported from the course you have selected. We only want to import the **Attendance** module so we will unselect the **Forums** items by clicking on the tickbox. Additionally, we will set the **Course files** and **Site files used in this course** drop-down menus to **No** as we don't want any files to be backed up. Finally, click on **Continue** to begin the import process. These settings are all shown in the following screenshot:

**Import course data: Attendance Template M-Th 1 (AT-M-Th-1)**

Include [All/None](#)

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Forums

News forum

Attendances

Attendance

---

Course files **No** ▾

Site files used in this course **No** ▾

[Continue](#) [Cancel](#)

- The following screenshot will present a note in red text stating that there are no users in the course being used for the backup. This is ok as we are not attempting to backup user data. Click on **Continue** to proceed with the import.

**Import course data: Attendance Template M-Th 1 (AT-M-Th-1)**

Note: This backup contains no users and so all activities have been switched to "without user data" mode. Exercise and Workshop activities will not be included in the backup, since these modules are not compatible with this type of backup.

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**Include Attendances without user data**

Attendance	
Sessions	29

[Continue](#) [Cancel](#)

7. The next screen will present a list of items that are being included in the backup that will be used for the import. Click on the **Continue** button shown at the bottom of the screen.
8. The next screen will consist of a simple **Import course data** message with a **Continue** button. Click on the **Continue** button to proceed.
9. The following **Import course data** screen will show the list of items that were presented in step 7. These are the items that have been unzipped from the backup file and were used for the import. Click on **Continue** to proceed to the course that we imported the attendance module into.
10. Click on the **Attendance** link in the target course, **Advanced Listening 1**, to confirm that all of the sessions have been imported just as they existed in the template course.

### ***What just happened?***

We have just imported the template attendance activity, complete with its settings, into our **Advanced Listening 1** course. This method allows for the relatively easy and efficient creation of a standardized attendance module activity within courses throughout an educational program. Cooperation from teachers in maintaining their attendance records on the Moodle site then enables administrators to quickly access attendance data throughout their program. Later in this book, we will explore methods of aggregating the attendance data without having to navigate to each individual course.

### **Have a go hero**

Following the process described, practice the import process and import the attendance module into the remainder of the **Advanced Listening** courses and the **Advanced Speaking** courses. Copy the short name of the course that is used as a template and paste it into the **Search courses** field to speed up the process a little. Note, if you plan to set up a pre-formatted Gradebook for all of your teachers, jump forward to the next section before importing the attendance module into any more courses.

## Grading standards

Educational programs utilize grading standards to varying degrees ranging from simply identifying a common grading scale to defining how much of a student's grade is determined by certain evaluation categories such as attendance, participation, standardized testing, and the like. Moodle can be set up to help make the grading and grade reporting process more standardized, transparent, and efficient. In the following section, we will discuss and demonstrate how to implement grading standards through our Moodle CIMS site via the following two methods:

- ◆ Creating a standard grading scale
- ◆ Creating a Gradebook template complete with standard graded items

### **Time for action – creating a standard grading scale**

Let's start by first adjusting the site-wide settings for grades on our site to coincide with the scale used in our program. The scale we'll use is a simple 90, 80, 70, 60 scale used in many educational programs as shown:

- A →  $\geq 90\%$
- B →  $\geq 80\% \sim < 90\%$
- C →  $\geq 70\% \sim < 80\%$
- D →  $\geq 60\% \sim < 70\%$
- F →  $< 60\%$

To change the site-wide grading scale to our scale, follow these steps:

- 1.** From the front page of our site, logged in as admin or a user with administrative permissions, click on the **Grades** link found in the **Site Administration** block. Then click on **Letters** to reveal the default letter grade settings. The default grade letter settings uses pluses and minuses so we will need to change the settings to agree with the scale we are going to use. After entering the new settings, the **Grade letters** screen will look like the following screenshot. Click on **Save changes** when you have finished modifying the settings.

**Grade letters**

Grade letter 1  A

Letter grade boundary 1  90 %

Grade letter 2 B

Letter grade boundary 2 80 %

Grade letter 3 C

Letter grade boundary 3 70 %

Grade letter 4 D

Letter grade boundary 4 60 %

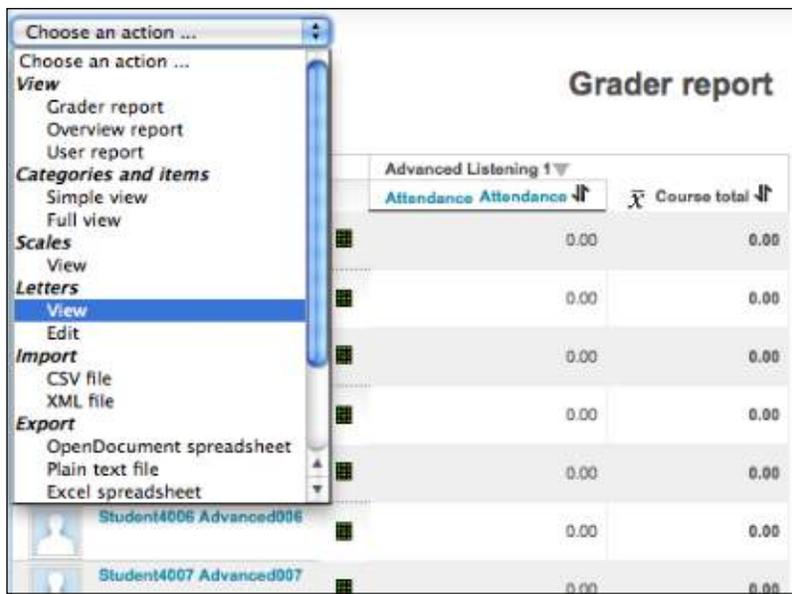
Grade letter 5 F

Letter grade boundary 5 0 %

Grade letter 6

Letter grade boundary 6 Unused

- To confirm that the settings are working correctly, navigate to any course and click on the **Grades** link found in the **Administration** block. From the **Grader report** window click on the **Choose an action...** pull down menu and select **View** under **Letters**, as shown in the following screenshot:



The screenshot shows the 'Grader report' window for 'Advanced Listening 1'. A dropdown menu is open, displaying various actions. The 'Letters' category is selected, and the 'View' option is highlighted. The background shows a table with columns for 'Attendance', 'Attendance', and 'Course total'. The table contains several rows of data, including student information like 'Student4006 Advanced006' and 'Student4007 Advanced007'.

Advanced Listening 1		
Attendance	Attendance	Course total
	0.00	0.00
	0.00	0.00
	0.00	0.00
	0.00	0.00
	0.00	0.00
Student4006 Advanced006	0.00	0.00
Student4007 Advanced007	0.00	0.00

3. You will see the scale we just entered in the site-wide settings, as shown in the following screenshot. Note that in addition to viewing the **Letters** setting, teachers also have the ability to edit this setting. Later in this book, we will discuss how to modify user role permissions. This may be useful if you wish to remove the capability to change the grading scale from the teacher role.

Highest	Lowest	Letter
100.00 %	90.00 %	A
89.99 %	80.00 %	B
79.99 %	70.00 %	C
69.99 %	60.00 %	D
59.99 %	0.00 %	F

### ***What just happened?***

We have successfully modified the site-wide settings for the grading scale that is used by the Gradebook within Moodle. This allows us to dictate the default scale that will appear in all courses throughout our Moodle site and thus can help to implement a standardized grading system.

## **Time for action – creating a Gradebook template**

Next, we will set up a Gradebook complete with standardized categories that are used by every teacher in our program. For our example, we will be using *Attendance* and *Final Exam* as categories that are used by every teacher. Grading for these two categories is standardized as follows:

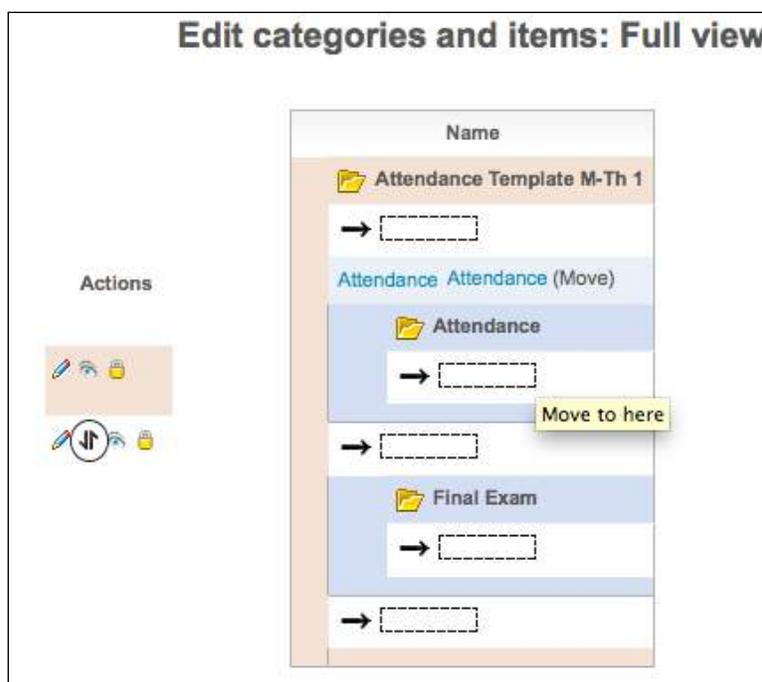
Attendance = 20% of a student's final grade

Final Exam = 40% of a student's final grade

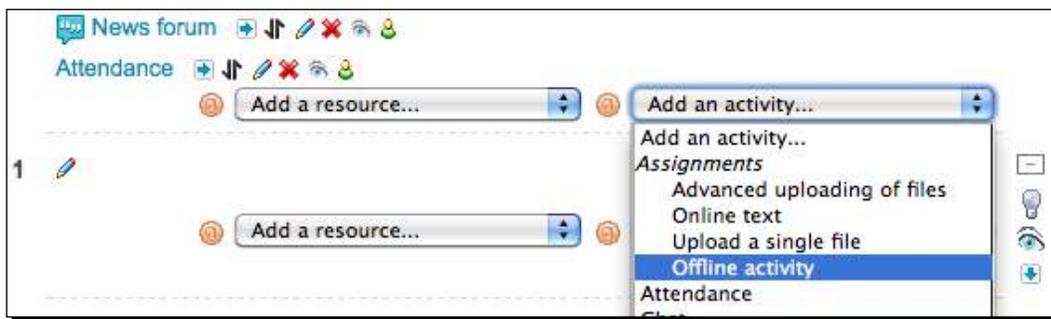


In this example, the two categories only add up to 60 percent. The remaining 40 percent would be filled by individual teachers with other categories and items such as *Participation*, *Quizzes*, and so on.

1. We will start by first creating the Gradebook template in the template course we used to set up the attendance template. Navigate to the attendance template course (**AT-M-Th-1** in our example) and then click on the **Grades** link found in the **Administration** block. From the **Choose an action...** pull-down menu, select **Full view** found under **Categories and items**. From the subsequent **Edit categories and items: Full view** window, enter the following settings:
  - Change the **Aggregation** method from the pull-down menu to **Weighted mean of grades**.
  - Click on the **Add category** button and add the following two categories (Note, enter the category name and click on **Save changes**. You can ignore the other settings that will appear.):
    - Attendance
    - Final Exam
  - After entering the two categories, make sure that the **Aggregation** method is set to **Weighted mean of grades**. Click on the **Save changes** button at the bottom of the screen, if you make any changes.
  - Move the **Attendance** item inside of the **Attendance** category you just created by clicking on the arrows found on the right side of the screen under **Actions**. See the following double-imaged screenshot for reference:



2. Next, we want to create an activity that will serve as a placeholder for our final exam scores. Go back to the front page of your course and, with editing turned on, click on the **Add an activity** drop-down menu and select **Offline activity**, as shown in the following screenshot:



3. Title the activity **Final Exam**, enter a short description, and click on both of the **Disable** tickboxes to disable the availability period. Because this activity is only going to be used as a place to store final exam scores, it does not need to be set to be available to students for any specific time period. For other activities, the availability setting allows you to specify when students will have access to the assignment. Click on **Save and return to course** to create the activity and return to the main page of the course.
4. From the front page of the course, click on **Grades** again and then select **Full view** of **Categories and items** from the **Choose an action...** pull-down menu.
5. You will now see the **Final Exam offline activity** that we just created but it needs to be moved inside the **Final Exam** category. Move it the same way we previously moved the **Attendance** item into the **Attendance** category.
6. Make sure all of the **Aggregation** methods are set to **Weighted mean of grades**.
7. Finally, change the weight for the **Attendance** category to 20 and for **Final Exam** to 40. Note that the **Weight** for the actual items should be set to 100. The following screenshot shows these weighting settings as they should appear once you have finished moving the items to their categories and assigning them weights. Click on **Save changes** to make sure your settings are saved.

**Edit categories and items: Full view**

Name	Aggregation	Weight	Max grade	Aggregate including subcategories	Drop the lowest	Multiplicator	Offset	Actions	Select
Attendance Template M-Th 1	Weighted mean of grades		-	<input type="checkbox"/>	0	-	-		All None
Attendance	Weighted mean of grades	20.0000	-	<input type="checkbox"/>	0	-	-		All None
Attendance Attendance	-	100.0000	100.00	-	-	1.0000	0.0000		<input type="checkbox"/>
Category total	-		100.00	*	-				
Final Exam	Weighted mean of grades	40.0000	-	<input type="checkbox"/>	0	-	-		All None
Final Exam	-	100.0000	100.00	-	-	1.0000	0.0000		<input type="checkbox"/>
Category total	-		100.00	-	-				
Course total	-		100.00	*	-				

### ***What just happened?***

We have just created a Gradebook template complete with two categories that each contain one graded item. The template will be used to import a pre-formatted standardized Gradebook into other courses throughout our Moodle site.

### **Time for action – preparing the target course**

We are going to be using the **Import** tool from within the target course the same way we did when we imported the attendance activity template. As we must import the attendance module from the template course together with the newly formatted Gradebook, in order to have the Gradebook categories imported correctly, we will need to first delete the **Attendance** activity we have created. Deletion of the **Attendance** activity should be done as follows to ensure that all of its components are removed from the course. Simply deleting the **Attendance** activity from the top of the course is not sufficient. Doing so will not delete the **Attendance Sessions** and **Settings Variables**, which will mean that they will be included in the **Attendance** activity that we are planning to import later. This will create a situation in which we have multiple instances of the same sessions and settings. To make sure this does not happen, follow these steps:

1. Go to the front page of the course we imported the attendance module into (**AdvList1**) and click on the **Attendance** link found at the top of the page.
2. From the **Sessions** tab view, scroll down to the bottom of the page and click on **Select all**. From the **With selected** drop-down menu select **Delete** and then click on the **OK** button to delete the sessions.

3. Next, click on the **Settings** tab and use the red X on the right side of the screen to delete all four of the **Variables**. These will have to be deleted one at a time.
4. Once the **Sessions** and **Settings Variables** have been deleted, go back to the front page of the course and, with editing turned on, click on the red X next to the **Attendance** activity link to delete the activity. (Note, future versions of the attendance module will likely be improved such that simply deleting the instance of the attendance module from the front page of the course will delete all of the attendance-related data from that course. As of October 2010 however, this is not the case, so please make sure to delete everything as outlined in this section.)

### ***What just happened?***

The **Attendance** activity has now been completely deleted from the course and we can use the **Import** function again, this time to import the pre-formatted **Attendance** activity, an Offline graded item for Final Exam scores, and a pre-formatted Gradebook.

### **Time for action – importing the Gradebook template**

We are now ready to import the Gradebook template. Because the template now includes not only the Gradebook, but also two activities, the attendance activity and a final exam score placeholder, it is in reality more appropriate to think of this as the standardized component of a course and thus a template course. The import process is virtually the same as the one used for importing the **Attendance** activity.

1. First, click on the **Import** link found in the **Administration** block from the front page of the course.
2. Next, use the **Search courses** field to locate our template course (**AT-M-Th-1**). Select the **Use this course** link from the search results.
3. From the **Import course data** screen, untick the **Forums** box, as the default forum already exists in the target course and we don't want to create another.
4. Click **Continue** to start the import process and then on **Continue** again on the next screen that contains the backup **Note**.
5. Click **Continue** again on the **Import course data** details screen.
6. Click **Continue** on the empty **Import course data** screen.
7. Click **Continue** on the **Import course data** completion screen, which will take you to the course where you can confirm that the attendance module activity has been created and the Final Exam Offline graded item has been added.

8. To confirm that the Gradebook template has been imported to the course, click on the **Grades** link from the **Administration** block and then select **Full view for Categories and items** from the **Choose an action...** pull-down menu. The screen you see will be identical to the previous screenshot from the setup in our Gradebook template.

### ***What just happened?***

We have just imported the Gradebook, or course, template into another course in our Moodle site and then verified that the import resulted in the creation of two activities, the **Attendance** activity and a final exam placeholder assignment. The import process also set up our Gradebook with two weighted categories with each housing one of the graded items that were imported. This type of process can enable an educational program to set up a standardized evaluation system that is easily implemented, maintained, and monitored.

### **Have a go hero**

Now that you have walked through the process for creating a course and grading template, try importing the template into other courses or be adventurous and design your own template in another new course and try importing it to a different course. Experimentation with this process will likely influence you to come up with additional ideas about template formatting that will best serve your institution.

## **Implementing a final grade submission process**

Most educational institutions have grading policies and procedures that can be incorporated into your Moodle site relatively easily, as we have just observed. Additionally, most institutions require their teachers to submit grades when courses or terms are complete. In recent days, this submission process often includes an online or electronic component in addition to a paper-based component. In these 'dual-submission' systems, the paper-based component usually serves as a backup hard copy. The following is an explanation of one way that Moodle can be utilized in the grade submission process. This method assumes that we have set up Moodle to function as a CIMS, meaning that all courses in a program are created in the Moodle site and students and teachers are properly enrolled in those courses.

## **The policy**

Regardless of whether instructors choose to use the Moodle GradeBook to calculate, and display grades to their students, it can be used to record final grades and provide educational administrators access to those grades. First, the details of the submission process should be determined and this information relayed to instructors. The following policy is an example of such a process:

- ◆ Teachers must submit their grades within two weeks of the final day of class.
- ◆ Final grades must be recorded in the Moodle Gradebook.
- ◆ A hard copy printout, with final grades clearly visible, must be provided in addition to the electronic submission copy. This can be in the form of a screen printout or of a printout of an exported Gradebook format, such as Excel.
- ◆ The hard copy format must include:
  - The instructor's printed name and signature
  - The official course name and course number
  - Clearly legible student names and numbers
  - Each student's final grade for the course in both percentage and letter format
- ◆ After the grade submission deadline has passed, Teachers will be locked out of their courses for a period of five days as grades are processed.

## **The process**

The policy listed previously is, of course, simply an example of how a grading policy that utilizes Moodle might be presented. The following is an explanation and demonstration of how this policy could be implemented in Moodle.

The first four points from the policy simply require effective transmission of the policy details to teachers and possibly some hands-on training for teachers unfamiliar with Moodle and the Gradebook. The last point refers to locking teachers out of their courses, is the only portion of the policy that requires adjustments be made in Moodle.

The process of implementing this final point within Moodle could range from being very complicated and involved in terms of setup to being very simple and straightforward. The following is an explanation and demonstration of the simple and straightforward method followed by a brief discussion of its limitations and other possible options.

## Time for action – locking courses for grade retrieval

The Gradebook cannot actually be locked in a clean, quick, and easy fashion, so we will instead remove the teacher's ability to access the course in order to give us time to extract the grades from the Gradebook, so that they can be transferred to whatever student records management system is in use on our campus. For our example, all Listening courses are offered in the same term and thus have the same ending date. To prevent access to these courses do the following:

1. On the day that falls two weeks beyond the last day of class, we will log in to our site as admin and access the main course page found at <http://oursite.com/course/>. From the course page, click on the **Turn editing on** button and then select the category containing the courses we want to prevent access to. In our example, this is the **Listening** category. Click on the small eye icon next to the **Listening** category to hide this category and all of its contents. The resulting screen will look like the following screenshot with the **Listening** category colored in grey:

Course categories	Courses	Edit	Move category to:
Listening	0		Top
Advanced	5		Listening
Intermediate	5		Listening
Beginner	5		Listening
Basic	5		Listening
Speaking	0		Top

2. Click on the **Front Page** link and then the **Front Page settings** link found in the **Site Administration** block on the front page of the site. Scroll down to the bottom of the page and make sure that the **Allow visible courses in hidden categories** box is unticked.
3. Next, we need to modify the permission settings for the editing teacher role in order to prevent teachers from accessing courses that have been hidden. Access the role permissions via the **Site Administration** block by clicking on **Users | Permissions | Define roles**.

4. From the subsequent **Roles** screen, click on the **Teachers** role link and then on **Edit** to view the editing screen for the permissions associated with this role. Change the following two permissions to **Prevent**, as shown in the following screenshot:
  - ❑ **Course categories: See hidden categories** (Prevent)
  - ❑ **Course: View hidden courses** (Prevent)
5. Click on the **Save changes** button at the bottom of the screen to save the changes made to the role.



### ***What just happened?***

We have just made our Listening courses inaccessible to teachers by making the **Listening** category invisible and by modifying the permissions associated with the teacher role. If you now log in as a user that has the role of a teacher in any of the Listening courses, you will see that the entire **Listening** category and all of its contents have disappeared and both are inaccessible. The category and courses within are however, still intact and accessible to the site admin.

This method of 'locking' courses allows the educational program to suspend access to courses, thereby ensuring that grades will not be modified and thus enables administrators to retrieve grades for use in other systems. The weakness of this method however, is that it does not completely ensure that the grades retrieved from the Moodle system will be the same as those submitted by the teacher on the hard copy format. This is because of the time window allotted to teachers at the end of the course or term. If a teacher, for example, finalizes his or her grades the day after classes have finished and prints out the hard copy for submission at that time, there is still the possibility of a student entering the course and interacting with a graded item that may change his or her grade in the Gradebook. In this

scenario, the grades retrieved from Moodle by program administrators could differ from those submitted in hard copy format by the teacher. Development of a **Grade Submission** block is currently being explored and will hopefully be available to the Moodle community soon. This block will allow for a one time electronic submission of grades by the instructor to a location that is not accessible by students. As long as the teacher prints out his or her grades at the same time as submitting them via the block, the possibility of inconsistencies will be eliminated.

## Setting up a program-wide testing procedure

Another standard utilized by many educational programs is the test. Many programs administer a standardized test to students and include performance on the test in the student's overall grade for a class or classes within a program. As we set up Moodle to function as a CIMS, we can implement a testing procedure that greatly increases the efficiency of the test administration as well as the grading process.

For our example, all students in **Listening** classes are required to take a program-wide final exam. This final exam is the one that comprises 40 percent of the student's grade as set up in our Gradebook template, introduced earlier in this chapter. The following two examples will cover the two main methods of implementing a program-wide testing procedure of this nature. These are the administration of an exam outside of the Moodle system and the administration of an exam via the Moodle Quiz module.

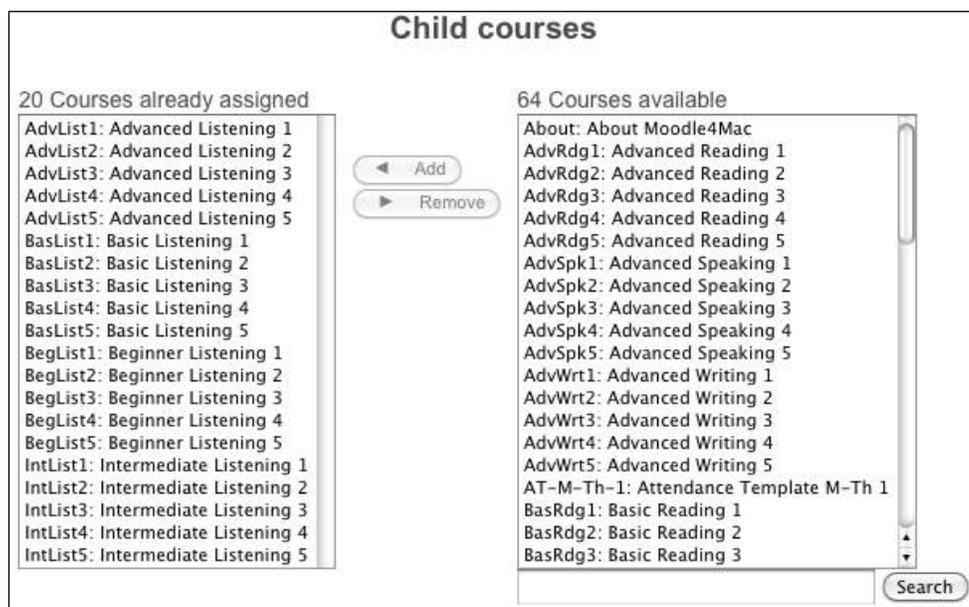
### Time for action – an exam administered outside of Moodle

The first step in setting up a system within Moodle for organizing an exam that is administered outside of Moodle is to create a new course.

1. Click on the **Show all courses** link found at the bottom of the **MyCourses** block and then scroll down to the bottom of the subsequent page and click on **Add a new course**.



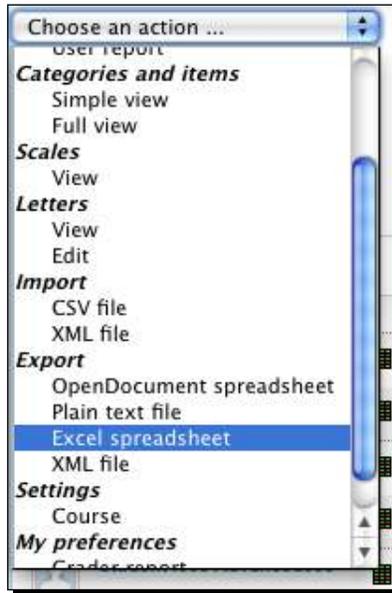
- Click **Save changes** to create the course and from the following screen, select the courses that are to be specified as **Child courses**. In our example, all students in Listening classes are required to take the test so we have included all of the Listening classes as **Child courses**.



- Once all of the child courses have been added, click on the course breadcrumb link found at the top-left of the screen. In our example, this is **LT101** as that is the **Short name** we designated for our course, as shown in the screenshot before step 3.
- Clicking on the **Assign roles** link found in the **Administration** block will reveal that all 500 of our students and 20 teachers have been automatically enrolled in the course from the child courses.
- Next, click on **Import** and search for our template course. Import all of the contents of the template course, except for the **News forum**, to the Listening test meta course.
- Once the import is complete, click on the **Attendance** link and delete all but one of the attendance dates. Note, if you see **Hidden sessions**, you may need to change the start date of your meta course to the same date as the template course. You can access and change the start date of the course by clicking on the **Settings** link from inside the course.
- Now, change the date of the remaining attendance session to the date the exam will be administered.

### ***What just happened?***

We now have a meta course that can be used to check in students on the exam day via the attendance module. Additionally, all students eligible to take the test are enrolled in the course and can be exported via the Gradebook. This export can be used to format a file that can then be used to reimport the results of the exam. Simply select the **Export Excel spreadsheet** option from the **Choose an action...** drop-down menu, as shown in the following screenshot:



Then download the exported information by clicking on the **Download** button, as shown in the following screenshot:



Scores can be merged from the spreadsheet containing the results of the test into the Final **Exam** column and then imported back into the Gradebook via the **Import CSV file** option found in the drop-down menu in the Gradebook. Alternatively, grades for each course could be uploaded directly into the courses for teachers. A more advanced technique would be to set up an automated script that searches for test scores in the meta course and automatically copies the scores into the appropriate location for each user in the child courses. Exploration of this technique will be discussed in *Chapter 7, Advanced Data Access and Display*.

## **An exam administered via the Moodle quiz module**

For a final examination that is actually delivered through the Moodle system, the previous setup can also be used. The only difference will be that the exam will need to be created in or imported to the meta course that will serve as the administration site for the test. As all of the students from child courses are automatically enrolled in the meta course, they will be able to access the quiz module, that will contain the final examination, and take the test. The only difference in working with the test results data via this process is that the scores will already be stored in the Moodle Gradebook. In this case, the advanced option of automatically having scores copied over to the appropriate location in the child courses, that was mentioned in the previous paragraph, is likely one of the best choices for working with the grades.

## **Summary**

In this chapter, you learned how to implement some basic program standards by setting up the attendance module as a standardized module for all courses in an educational program. We also explored standardization of grading through site-wide settings for the Gradebook as well as through the creation of a Gradebook template. This template was used to create a base Gradebook for teachers to build upon, which already contains categories and items that are standardized within the educational program. Towards the end of the chapter, we worked with implementation of a grade submission policy that allows Moodle to function as an electronic grade submission tool. Further development of this process, that will allow for a more precise grade submission system, was introduced and will hopefully be available shortly after this text has been published. Lastly, we discussed and demonstrated how Moodle can be used to organize a program-wide testing process. This chapter has thus taken an additional step in positioning our Moodle site as a CIMS. In the next chapter, we will continue to build upon this system by expanding Moodle's capability to serve as an information portal for an educational program.