

9

Promoting Efficient Communication

A key component of any quality educational program is its ability to facilitate communication among all of the parties involved in the program. Communication and the subsequent relaying of information and knowledge between instructional faculty, administrators, students, and support personnel must be concise, efficient, and, when so desired, as transparent as possible. Moodle is designed specifically to function as a tool that allows individuals to communicate and share knowledge and it is thus the perfect system for streamlining your various program-related communication needs.

In this chapter, we will introduce and explain the following strategies for establishing an efficient communication portal through your Moodle CIMS:

- ◆ Set up and use of communication and information exchange portal courses for intra- and inter-departmental or program communication
- ◆ Building a mentor/homeroom/advisor/counselor system
- ◆ Feedback systems (using the questionnaire module)

Using Moodle as a hub for internal information distribution, collaboration, and communication

Up to this point in this book, we have explored Moodle's ability to function as an information portal only from the perspective of Moodle functioning as a tool to provide information to prospective students and stakeholders who are, in a sense, external to your Moodle site. Moodle's ability to facilitate information flow and communication among users within the system, who are registered users such as students and teachers, is a capability that has been a core function of Moodle since its inception. The module most often used to facilitate communication and information flow is the *forum* and we will thus focus primarily on creative uses of forums for communication within an educational program.

Facilitating intra- or inter-departmental or program communication, collaboration, and information flow

Many educational programs comprise sub-units such as departments or programs. These units usually consist of students, teachers, and administrators who interact with one another at varying levels in terms of the type of communication, its frequency, and content. The following example will demonstrate how a sub-unit—the reading program within our language program example—might set up a communication system, using a meta course in Moodle, that accomplishes the following:

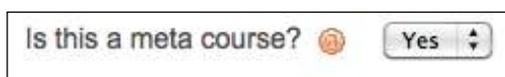
- ◆ Allows the program to disseminate information to all students, teachers, and administrators involved in the program. The system must, of course, allow for settings enabling dissemination to only selected groups or to the entire group, if so desired.
- ◆ Establishes a forum for communication between and among teachers, students, and administrators. Again, this system must be fine-tunable such that communication can be limited to specific parties within the program.

The example will also demonstrate, indirectly, how a meta course could be set up to facilitate communication and collaboration between individuals from different programs or sub-units. In such a case, the meta course would function as an inter-departmental communication and collaboration system.

Time for action – setting up the meta course

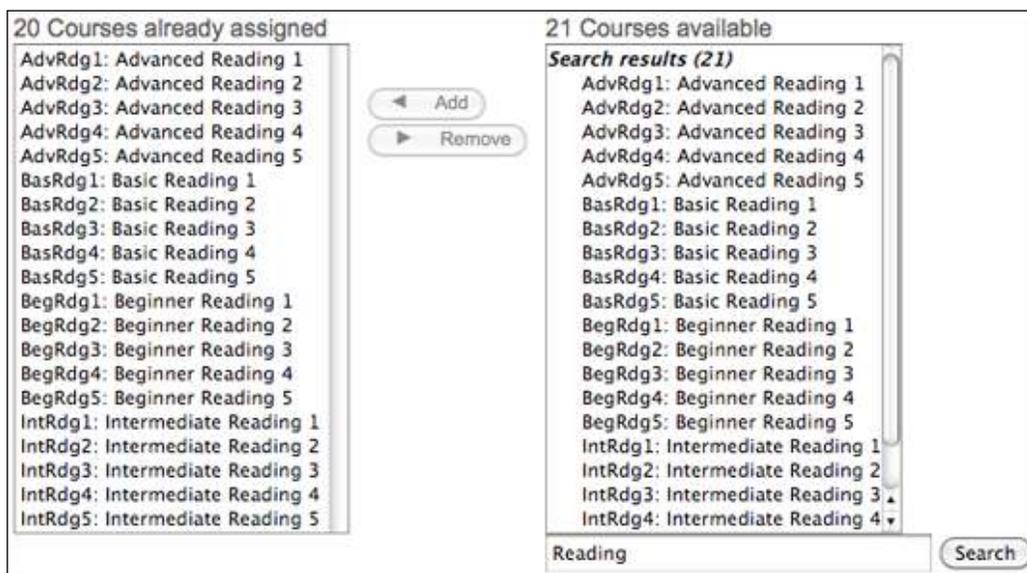
To set up a communication system that can be finely tuned to allow specific groups of users to interact with each other, follow these steps:

1. We are going to set up a communication system using a meta course. Log in to your site as admin and click on the **Show all courses** link found at the bottom of your **MyCourses** block on the front page of your site.
2. At the bottom of the subsequent **Course Categories** screen, click on the **Add a new course** button.
3. Change the category from **Miscellaneous** to **Reading** and enter a **Full name** and **Short name** such as **Reading Program** and **ReadProg**. Enter a short description explaining that the course is to function as a communication area for the reading program.
4. Use the drop-down menu next to the meta course heading, shown in the following screenshot, to select **Yes** in order to make this course a meta course:



5. Change the **Start date** as you see fit. You don't need to add an **Enrollment key** under the **Availability** heading to prevent users who are not eligible to enter the course because the enrollment for meta courses is taken from child courses. If you've gotten into the habit of entering enrollment keys just to be safe however, doing so here won't cause any problems.
6. Change the group setting, found under the **Groups** heading, to **Separate**. Do not force this setting however, in order to allow it to be set on an individual activity basis. This will allow us to set up forums that are only accessible to teachers and/or administrators. Other forums can be set up to allow only student and teacher access, for example.

- Click on the **Save changes** button found at the bottom of the screen and on the next screen, which will be the **Child courses** screen, search for all reading courses by entering **Reading** in the search field. After clicking on the **Search** button to initiate the search, you will see all of the reading courses, including the meta course we have just created. Add all of the courses, except the meta course, as shown in the following screenshot. There will be twenty courses if you have set up the site outlined in this book.



- Use the short name link found in the breadcrumb path at the top-left of the window, shown in the following screenshot, to navigate to the course after you have added all of the reading child courses:



What just happened?

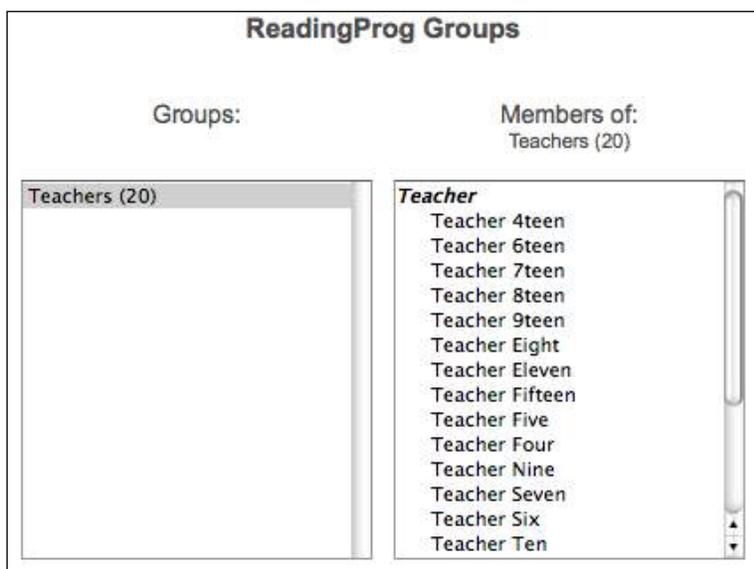
We just created a meta course and included all of the reading courses as child courses of the meta course. This means that all of the users enrolled in the reading child courses have been automatically enrolled in the meta course with the same roles that they have in the child courses. It should be noted here that enrollments in meta courses are controlled via the enrollments in each of the child courses. If you wish to unenroll a user from a meta course, he or she must be unenrolled from the respective child course. In the next step, we'll create the groups within the meta course that will allow us to create targeted forums.

Time for action – creating a group inside the meta course

We are now going to create groups within our meta course in order to allow us to specify which users will be allowed to participate in, and view, the forums we set up later. This will allow us to control which sets of users have access to the information and communication that will be contained in each forum. Follow these steps to set up the forums:

- 1.** Log in to your Moodle site as admin and navigate to the meta course we just created. It will be located under the **Reading** heading from the **MyCourses** block and titled **Reading Program** if you followed the steps outlined earlier in this chapter.
- 2.** Click on the **Groups** link found inside the **Administration** block.
- 3.** The subsequent screen will be titled **ReadingProg Groups**. The **ReadingProg** portion of the title is from the short name of our course. From this screen, click on the **Create group** button. Title the group **Teachers** and write a short description for the group. Ignore the enrollment key option as enrollments for meta courses are controlled by the child course enrollments. Leave the picture field blank unless you would like to designate a picture for this group. Click on the **Save changes** button to create the group.
- 4.** You will now see the **ReadingProg Groups** screen again and it will now contain the **Teachers** group, we just created. Click once on the group name to enable the **Add/remove users** button.
- 5.** Click on the **Add/remove users** button to open the **Add/remove users** window. From this window, enter the word **Teacher** in the search window and click on the **Search** button. Select all of the teachers by clicking once on the first teacher and then scrolling to the last teacher and, while holding down the shift button on your keyboard, click on the last teacher. This will highlight all of the teachers in the list. Click on the **Add** button to add the selected teachers to the **Existing members** list on the left.

6. Click on the **Back to groups** button to return to the **ReadingProg Groups** screen. The Teachers group will now appear as **Teachers(20)** and, when selected, the list of teachers will appear in the **Members of:** list found on the right side of the screen, as shown in the following screenshot:



7. Next, navigate to the front page of your site and from the **Site Administration** block, click on the **Miscellaneous** heading link and then on the **Experimental** link.
8. Scroll down to the **Enable groupings** setting and click the tickbox to enable this setting. This setting enables you to group multiple groups together and also to make activities exclusively available to specific groupings. We'll need this capability when we set up the forums later. For a more detailed explanation of the groupings feature, visit the associated Moodle Docs page at: <http://docs.moodle.org/en/Groupings>.

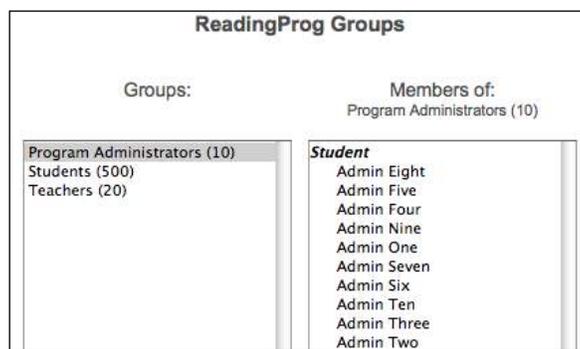
What just happened?

We just created a group, within our Reading Program meta course, for all of the teachers enrolled in the course. Because the enrollments for a meta course are pulled from the child courses associated with a meta course, the teachers are all teachers who are teaching reading courses in our program. Later in this chapter, we'll see how we can use this group when we set up forums that we only want our teachers to have access to.

Have a go hero

We need to set up at least two more groups within our meta course. One of the groups will be for the students and the other for some educational program administrators. Try to accomplish the following tasks on your own:

1. Create a group titled **Students** and add all of the students enrolled in the meta course to the group. Follow the previous steps used for creating the **Teachers** group to accomplish this task.
2. Do the following in order to be able to create an administrators group (note this is for educational program administrators, not technical site administrators):
 - ❑ Create 10 new administrator accounts
 - ❑ Create a course for administrators and enroll the 10 users you created in the previous step, in the course (Enroll these users as students of the course)
 - ❑ Add the administrator course, as a child course, to the Reading Program meta course
 - ❑ In the meta course, create the **Administrator** group and add the administrators to it
3. Download the following files from the Packt website and follow the steps introduced in *Chapter 2, Building the Foundation—Creating Categories and Courses* and *Chapter 3, Student Account Creation and Enrollment* to upload the administrator user accounts, create the course, and enroll the administrators in the course. Note, you'll use the files in the order they are listed below:
 - ❑ CIMS-CH9-adminusers.csv
 - ❑ CIMS-CH9-admincourse.csv
 - ❑ CIMS-CH9-adminenroll.csv
4. When you've completed these steps, your **ReadingProg Groups** window in your meta course should look like the following screenshot:



Time for action – setting up the forums inside the meta course

We are going to use this meta course as a communication and collaboration area for all users, students, teachers, and administrators, involved with the reading program, so now we need to set up some forums. We'll set up the following forums:

- ◆ A forum for all users in the course
- ◆ A forum for teachers
- ◆ A forum for teachers and administrators

To set up each of these forums follow these simple steps:

1. Log in to your site as admin and navigate to the **Reading Program** meta course.
2. Turn editing on by clicking on the **Turn editing on** button.
3. In the section numbered 1, just below the top section containing the **News** forum, use the **Add an activity** pull down menu to select and set up a **Forum**.
4. Title the forum **Reading Program**, use the **Standard forum** type, enter a short description, and use the following settings:
 - **Force everyone to be subscribed:** Yes, forever
 - **Read tracking:** On
 - **Maximum attachment size:** Increase to accommodate for files that may be uploaded in your forum
 - **Aggregate type:** No ratings
 - **Time period for blocking:** Don't block
 - **Group mode:** No groups
5. Click **Save and return to course** to finish the forum creation process and return to the course.
6. Before we create the next two forums, we need to create a couple of groupings in order to allow us to make the forums exclusive. Click on the **Groups** link found in the **Administration** block of your **Reading Program** course.

7. As we turned on the **Grouping** function in the previous section, you will now see the **Groupings** tab in between the **Groups** and **Overview** tabs, as shown in the following screenshot:

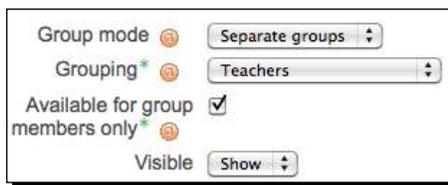


8. Click on the **Groupings** tab and add the following two groups by clicking on the **Create grouping** button:
- Teachers
 - Program Administration
9. After creating the groupings, use the **Show groups in grouping** icon link found to the right of the **delete** link under the **Edit** heading, shown in the following screenshot, to open the **Add/remove groups** window and add the appropriate group to each grouping. Note, add both the administrator's and teacher's group to the Program Administration grouping. This will allow us to create a forum to be used exclusively by members of those two groups.



10. Now that the groupings have been specified, use the **Add an activity** pull down menu to select and set up another forum.

- 11.** Title the forum **Teachers**, enter a short description and use all of the same settings as the **Reading Program** forum except for the settings under the **Common module settings** heading related to the group mode settings. Click the **Show Advanced** button that now appears as a result of turning on the grouping function. Use the pull down menus to select **Separate groups** for the **Group mode**, and **Teachers** for the **Grouping**. Tick the box next to the **Available for group members only** setting, make sure **Visible** is set to **Show**, and click on **Save and return to course**. The following screenshot is an example of these settings:



- 12.** Once again, use the pull down menu to create another forum.
- 13.** Title this forum **Reading Program Administration** and use all of the same settings as those used when setting up the **Teachers** forum with the exception of the **Grouping** setting, which should be set to **Program Administration**.
- 14.** Once the three forums have been created and correctly assigned to a grouping, they should appear in your course, as shown in the following screenshot:



What just happened?

We just created three forums, each to be used by specific groups of users involved in the reading program. The first forum is a general communication forum to be used by all users enrolled in the meta course, which includes students, teachers, and program administrators. The second and third forums were set up to be exclusively available to specific groups. We set up the **Teachers** forum to be only accessible to the teachers and the **Reading Program Administration** forum to be available to only teachers and program administrators. This means that we now have forums for communication and collaboration within one course that are each accessible only to specific groups of users. The following screenshot shows the section containing these forums as viewed by a teacher, then by a student, and lastly by a program administrator. This is a graphic demonstration of which forums are visible to members of each group or grouping. Note that the groupings title (**Teachers** and **Program Administration**) is only visible to users with the teacher role.



Have a go hero

To confirm the functionality of the forums we've just created, log in to your site as a student to verify that the only forum visible to students in the Reading Program meta course is the **Reading Program** forum. Also, log in using one of the program administrator accounts to confirm that both the **Reading Program** forum and the **Program Administration** forum are visible. This is one of the many ways in which you can set up communication and collaboration forums within a course. Fine tuning the access privileges allows you to organize communication forums within course- and context-specific locations. Once you are comfortable with this method, explore other options for setting up communication and collaboration forums. For example, if your desire is to set up an inter-departmental communication portal, you may choose to set up a meta course that pulls its enrollment from various administrator courses situated within departments that have been set up as categories within Moodle. This will, of course, depend entirely upon how you choose to organize your educational program within the Moodle framework.

Building a mentor, homeroom, advisor, or counselor system

The mentees block, introduced in *Chapter 7, Advanced Data Access and Display* allows for some simple access to users assigned to a mentor but it is somewhat limited in its capabilities in terms of interaction between the mentee and the mentor and thus provides mainly a monitoring function. Many educational programs have mentoring or advising systems in place in which students are assigned to a mentor, advisor, or counselor. Often students are asked to visit their counselor at specific times and they are also almost always encouraged to see their advisor if they have questions or problems. Setting up a system within Moodle that allows students to interact with their mentors, advisors, counselors, or homeroom teachers, can improve access to these personnel and thereby improve the overall experience each student enjoys.

Time for action – setting up a mentor, advisor, or counseling system

In order to simplify the discussion here, I will use the term advising system for the remainder of this explanation. Remember that the system could, of course, be used as a mentoring, counseling, or homeroom system with little to no modification. Additionally, many of the ideas for this set up resemble those used in setting up the communication and collaboration system explained earlier in this chapter, so explanations will be somewhat abbreviated when deemed appropriate. To set up your advising system, follow these steps:

1. Log in to your site as admin and click on the **Show all courses** link found at the bottom of your **MyCourses** block on the front page of your site.
2. At the bottom of the subsequent **Course Categories** screen, click on the **Add a new course** button.
3. Leave the category set to **Miscellaneous** and enter a **Full name** and **Short name** such as **Advising Center** and **Advising**. Enter a short description explaining that the course is to function as an area where students may contact and interact with their advisors.
4. The only other settings that should be modified are those listed under the **Groups** heading. Change the **Group mode** to **Separate groups** and **Force** to **Yes**.
5. Set an **enrollment key** if you want to prevent users who are not enrolled in the course from accessing it. We will set up the course such that users not assigned to a group have very limited access however, so you may choose to not use an enrollment key and allow all students to access the course. One option may be to post a message in the top section of the course directing students who are not assigned to an advisor to send a message to the course director requesting an advisor. For this example, we will set up the system on the assumption that all students are enrolled by a program or system administrator and are assigned an advisor.
6. Click the **Save changes** button to create the course.
7. From the subsequent **Assign roles** page, assign one of the program administrator users, created earlier in this chapter, as **Teacher**, and five of the teachers in the system as **Non-editing teacher**. The setup for this example is shown in the following screenshot:

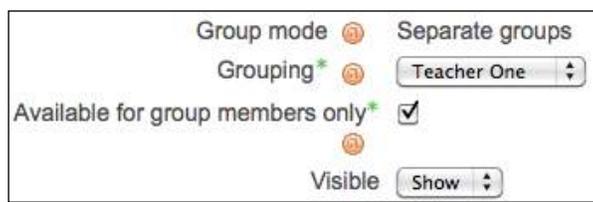
Teacher	Teachers can do anything within a course, including changing the activities and grading students.	1	Admin One
Non-editing teacher	Non-editing teachers can teach in courses and grade students, but may not alter activities.	5	Teacher Five Teacher Four Teacher One Teacher Three Teacher Two

8. For this example, we will enroll 50 students in this course. You may select 50 users randomly or use the file downloadable from the Packt website titled `CIMS-CH9-advisingenroll.csv`. Follow the process, explained in *Chapter 2, Building the Foundation—Creating Categories and Courses* for enrolling students in courses using the **Upload users** function found under **Users|Accounts** headings in the **Site Administration** block.
9. Once you have enrolled the students in the Advising course, navigate to the course and click on the **Groups** link found in the **Administration** block.
10. Click on the **Auto-create groups** button found at the bottom of the window.
11. Use the following settings for the auto group creation:
 - ❑ **Select members from role:** Student
 - ❑ **Specify:** Number of groups
 - ❑ **Group/member count:** 50 (the number of students enrolled in the course)
 - ❑ **Naming scheme:** Student #
 - ❑ **Create in grouping:** No
 - ❑ **Grouping name:** leave blank
12. Click on the **Submit** button to create the groups. You will see that 50 groups, each containing one student, have been created as evidenced by the long list of groups under the **Groups:** list.
13. Next, click on the **Groupings** tab and create five groupings, one for each of the five teachers we have enrolled in the course as non-editing teachers. It is recommended that you title the grouping with the name of the teacher that will be assigned to the grouping. There is unfortunately, no auto-grouping feature like the auto-creation feature for groups, so you will need to create each grouping individually.

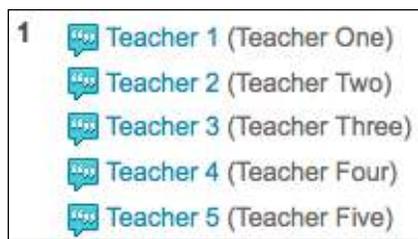
- 14.** After creating the groupings, click on the **Show groups** in the grouping icon to open the **Add/remove groups** window and add 10 groups—each is an individual student in our case—to each grouping, which designates a teacher or advisor in our case. When you have finished, your **Groupings** window will look something like the following screenshot:

Grouping	Groups	Activities	Edit
Teacher Five	Group 1, Group 10, Group 2, Group 3, Group 4, Group 5, Group 6, Group 7, Group 8, Group 9	0	  
Teacher Four	Group 11, Group 12, Group 13, Group 14, Group 15, Group 16, Group 17, Group 18, Group 19, Group 20	0	  
Teacher One	Group 21, Group 22, Group 23, Group 24, Group 25, Group 26, Group 27, Group 28, Group 29, Group 30	0	  
Teacher Three	Group 31, Group 32, Group 33, Group 34, Group 35, Group 36, Group 37, Group 38, Group 39, Group 40	0	  
Teacher Two	Group 41, Group 42, Group 43, Group 44, Group 45, Group 46, Group 47, Group 48, Group 49, Group 50	0	  

- 15.** Finally, we need to create forums for each of the five teachers who will serve as advisors. Navigate to the Advising course and use the **Add an activity** pull down menu to create five forums. Change the name of each forum to coincide with the name of the advisor. Other than that, the only settings that must be changed for each forum are the **Grouping** setting, which must be set to each respective teacher, and the **Available for group members only** setting, which must be ticked. For Teacher One, the settings will look like the following screenshot:



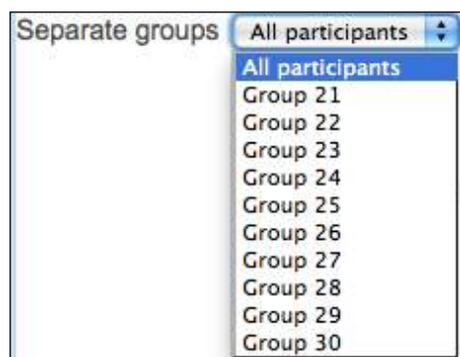
- 16.** When you create a forum and assign a grouping, the name of the grouping is listed after the forum title in parentheses. After you have created all five forums, and if you placed them all in the same section, they should appear like the following screenshot:



What just happened?

We just created a course to be used to house the advising program run by our imaginary school. We enrolled 50 students and five teachers, who will be our advisors, in the course and then used the **Auto-create groups** feature in Moodle to create 50 groups, one for each student. After creating the groups, we created five groupings, one for each teacher that will function as an advisor. We then assigned 10 students to each grouping, thereby assigning them to an advisor. Finally, we created a forum for each teacher/advisor and set the forum to use the grouping affiliated with one of the teacher/advisors. We also selected the setting that makes the forum available to group members only in order to prevent other group members from seeing the forum.

This setup allows each teacher to navigate to the advising course and view student posts in their respective forums. When a teacher navigates to the advising course and selects his or her advising forum, the advisor should be instructed to use the pull down menu, shown in the following screenshot, to select the group prior to viewing a post and responding to it. If the advisor posts a message when **All participants** is selected, the posted message will be visible to all of the members of the group.



Note also, that from within the advising course, each advisor teacher may view and interact in a different teacher's advising forum. See the following *Have a go hero* section for instructions on how to prevent this type of access.

Once the advising system is set up, it can be a very powerful communication tool that allows advisors, counselors, mentors, and the like, to interact with their advisees. As you probably noticed, however, setting up the system is somewhat complicated and tedious. You'll probably want to use student names or ID numbers for group titles to make assigning students to advisors easier. The problem is however, you cannot specify student names or ID numbers for group titles when auto-creating groups. Additionally, the auto-creation feature that is available for groups is not currently available for groupings. As Moodle evolves, improvements to the grouping feature will likely include auto-creation of groupings, which, if the Moodle CIMS is used as the default grouping assignment tool, will significantly increase the time required for setting up this type of advising system. If your institution allocates students to advisors through some process external to Moodle, the difficulties mentioned here will remain and may prompt you to have custom development work done for your Moodle CIMS such as the development of a group and groupings upload tool.

Have a go hero

The advising system we have set up thus far is one that will enable your advisors, and the students who utilize them, to access each other more efficiently and, at the same time, to better archive the content of communications. You may desire to have your system more tightly regulated such that advisors are only able to view their own advising forums. This will provide for a higher level of security and privacy by ensuring that the content of communications between advisors and their advisees is kept confidential. Modifying the advising system we set up to effectively lock out advisors from other advising forums is a fairly straightforward, but somewhat tedious, process. It involves the following two steps:

1. Modify the permissions via the **Override Permissions** tab accessible from the **Assign roles** link found in the **Administration** block of the advising course. You should modify one permission setting for **Non-editing teachers**, which is the role used for the advisors. The setting is: **Access all groups** and is found under the **Course** heading. Change this setting to **Prevent**.
2. Next, to each group, you must add the teacher who is functioning as the advisor. If you do not add the teacher to each group, not grouping, he or she will not be able to see any groups as the permission setting change we made earlier prevents the non-editing teacher from viewing forums he or she is not a member of. In the future, a permission setting that allows locking out access to all groupings, except for those that a user is assigned to, will make this an easier process.

Completion of these two steps will allow your advising forums to be accessible only to the advisors, students assigned to that advisor, and the advising director to whom you assigned the role of teacher, **Admin One** in our example. Note that after completing the steps, when you log in as one of the advisor teachers, the drop-down menu—containing all of the advisees—no longer contains an **All participants** heading. While not intentional, this will prevent the advisor from accidentally posting a message that will be visible to all advisees because he or she will always be viewing, and thus interacting with, a specific advisee.

Feedback systems—using the questionnaire module

In addition to the various methods for promoting, mediating, and controlling communication and collaboration systems within Moodle, there are also various tools available to the Moodle user that allow for polling or surveying to obtain opinions and other forms of feedback from users of the system. Surveying students and teachers in order to obtain information about attitudes and opinions as well as background information is a practice common to many educational institutions. The results of this type of information gathering allows institutions to adapt to their students and teachers as well as to conduct research that, for example, may help to inform them about the effectiveness of their programs. Traditionally, surveys and questionnaires have been conducted via paper-based systems but with the advent of computers and the Internet, electronic polling has become a commonplace practice that allows for extremely efficient data gathering. One Moodle module that can be used for this type of data collection is the Questionnaire module. For the final section of this chapter, we will look briefly at the installation and use of the questionnaire module.

Time for action – installing and using the questionnaire module

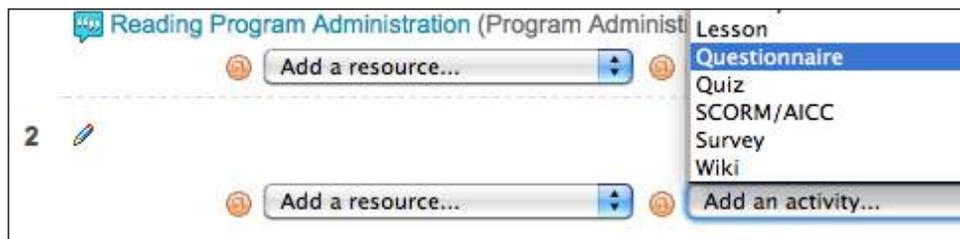
Installing the Questionnaire module is a straightforward process that involves a few simple steps. Once you have installed the module, you can begin the slightly more involved process of creating your first questionnaire. We'll walk through the installation and creation of a simple questionnaire in the following steps:

1. Download the **Questionnaire** module from www.moodle.org by clicking on the **Modules and Plugins** link found in the drop-down menu under the **Downloads** heading in the menu bar. Use the search string **Questionnaire** to locate the module. Click on the **Download latest version** link to download the ZIP package to your hard drive.
2. Expand the compressed package and place the subsequent folder, which should be titled `Questionnaire`, in the `mod` directory, which is located in your Moodle root directory.
3. Log in to your Moodle site as admin and click on the **Notifications** link found at the top of the **Site Administration** block on the front page of your site.

4. You will then see a long series of messages informing you about tables being set up in the Moodle database that will finish with a **Success** message, shown in the following screenshot. Click on the **Continue** button and then navigate back to the front page of your course.

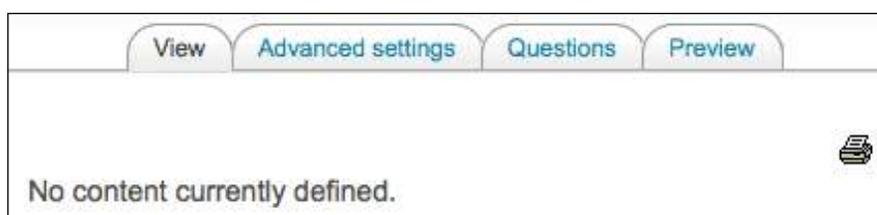


5. For this example, we will create a questionnaire, with three questions, in the **Reading Program** course, we worked with earlier. Go to the **Reading Program** course by clicking on the plus sign next to the **Reading** category folder from the **MyCourses** block and then on the **ReadingProg** course link.
6. From within the **Reading Program** course, click on the **Turn editing on** button and then use the **Add an activity** pull down menu bar to insert a **Questionnaire** into section two below the forums we created earlier in this chapter, as shown in the following screenshot:

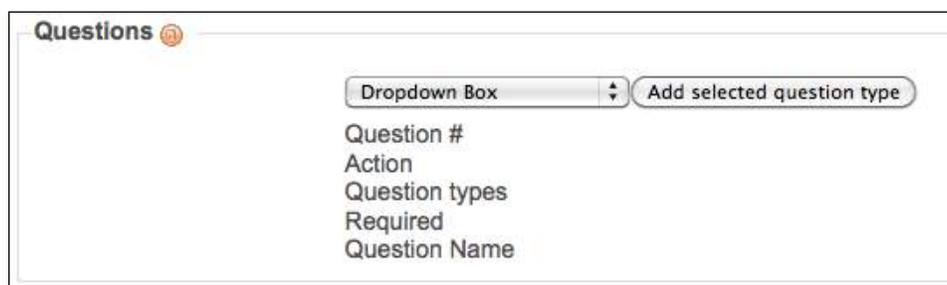


7. The first screen you will see is the **Adding a new Questionnaire** screen. This is where you enter details about your questionnaire and determine some of the settings that will control how the questionnaire is delivered and when it is available. Enter a title and description for your questionnaire and make necessary and desired adjustments to the other settings presented. All of the settings are well-documented via the question mark icon links. The following are a few of the noteworthy settings:
 - **Response options (Type):** Here you can set your questionnaire to be accessible to a student only once, many times, or at regular intervals. In most cases, allowing a questionnaire to be completed only once is the standard approach. If you wish to poll students over a period of time however, you may opt to use the regular intervals or multiple access approach.

- ❑ **Response options (Respondent type):** This setting allows you to deliver a questionnaire anonymously, which may be desirable depending on the content and planned use for the data that is obtained.
 - ❑ **Content options:** After you have created one or more questionnaires, you will have the option here to reuse a questionnaire. As we have not yet created a questionnaire, **Create new** will be the only option.
8. Once you have selected your description and delivery options, click the **Save and display** button to view the questionnaire content window, shown in the following screenshot:



9. Click on the **Questions** tab to view the **Questions** page, shown in the following screenshot, and use the pull down menu, labeled **---page break---** by default, to select a question type. We will use the **Dropdown box** type for the first question in this example.



10. Click on the **Add selected question type** button to view the question settings window. Enter the name of the question, use the radio button options to make response to the question required or optional, enter the text you want to display with the question, and then list your possible answers at the bottom of the screen. Enter each possible answer on a new line. For this example, we are going to be asking students to select the name of their reading teacher. We would thus set up our question, as shown in the following screenshot :

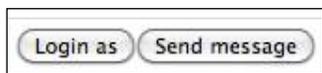
The screenshot shows a form titled "Adding Dropdown Box question". It contains the following elements:

- Question Name**: A text input field containing "Teacher".
- Response Required**: Radio buttons for "Yes" (selected) and "No".
- Question Text***: A rich text editor containing the text "Select your reading teacher from the drop down menu list." The toolbar includes options for font style (Trebuchet), size (1 (8 pt)), language (Lang), bold (B), italic (I), underline (U), strikethrough (ABC), subscript (x₂), superscript (x²), bulleted list, numbered list, indent, outdent, link, unlink, image, video, audio, and help.
- Possible answers***: A text area containing three lines of text: "Teacher One", "Teacher Two", and "Teacher Three".
- Buttons**: "Save changes" and "Cancel".
- Path**: "body".
- Warning**: "There are required fields in this form marked*" at the bottom right.

11. Click on the **Save changes** button to create the question. Note that the subsequent **Questions** window now displays the question that was just created and lists a few lines of information about its type and settings. Click on the **Preview** tab to preview the question. Once you have finished previewing the question, click on the **Questions** tab again and then add a question using the **Rate (scale 1...5)** question type.

- 12.** Create a required response question that asks students how well they like to read in a foreign language. You'll need to direct them in the body of the question to use a **1**, if they don't like it and a **5**, if they love it. Although the information popup window for the **Possible answers** field will direct you to leave it blank for single line questions, leaving this box blank will generate an error. As an option, you can enter titles for the scale in the **Possible answers** box using the following formatting:

 - **1** = I don't like it
 - **2** = It's ok
 - **3** = Average
 - **4** = I like it a little
 - **5** = I love it
- 13.** If you use this style, you won't need to direct students about the scale in the body of the question text.
- 14.** For the last question, create a **Yes/No** type question and use it to ask students if they plan to take more reading classes.
- 15.** Once you have created all three questions, preview your questionnaire, using the **Preview** tab, to make sure it appears as you have planned.
- 16.** Let's now quickly test the questionnaire to see how it appears to students and also from a teacher or administrator's perspective, once the questionnaire contains response data. Return to the front page of the **Reading Program** course, click on the **Participants** link and then randomly select a student from the list by clicking on the name link.
- 17.** Use the **Login as** feature, found at the bottom of the profile page, shown in the following screenshot, to log in as that student and take the questionnaire. When you have finished you can scroll to the bottom of the course window and click on the **-Admin-** link located to the left of the **You are logged in as** message. Repeat the process for five or six different students.

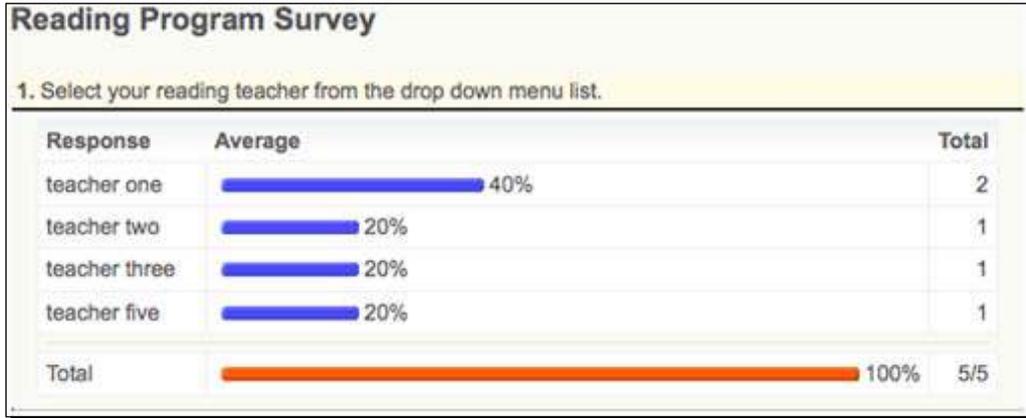


18. Note that depending on the settings you choose for how the questionnaire is delivered, students may or may not be able to review their responses after completing the questionnaire. After you have completed the questionnaire as five or more students, return to your admin role and view the questionnaire. Notice that there is now an **All responses** tab with the total number of responses listed in parenthesis. Click on the **All responses** tab to view the responses and the various display methods available, as shown in the following screenshot, and experiment with the various onscreen and downloadable formats:



What just happened?

We just created a very simple questionnaire that contains three questions and then logged in as different students to take the questionnaire. After populating the questionnaire with response data, we logged back into our site and viewed the contents of the questionnaire to see how the data can be displayed and downloaded. The clean and easy-to-read aggregated results display, shown in the following screenshot, makes for very easy initial interpretation of results, and the ability to download the results in a variety of formats makes further data analysis with advanced statistics software possible. As you can see, the Questionnaire module can function as a valuable tool for obtaining information and data from users in your Moodle CIMS.



Have a go hero

To get a better idea of how you might use the Questionnaire module, try creating a longer questionnaire using some, or all, of the other question formats. Try also answering the questionnaire with more student accounts to see how the graphic representation of the results shifts as the number of respondents increase. Also, try using the anonymous questionnaire and viewing the responses to that questionnaire, after it has been completed by one or more students, to see how Moodle protects the identity of the respondents when the anonymous option is used. Finally, try installing and using the Feedback module, available on the Moodle.org Modules and Plugins page. The Feedback module is very similar to the Questionnaire module and is scheduled to be a core module for Moodle 2.0. Both the Questionnaire module and the Feedback module are very similar but Moodle users often prefer one over the other based upon the appearance and ease-of-use of the interface. Experiment with both and see which one you prefer.

Summary

In this chapter, we have explored several methods of expanding our Moodle CIMS into a tool that facilitates efficient communication between the various users of the system. We started with the creation of a meta course that was assigned all of the courses in our reading program as child courses. Within this course we set up three groups: teachers, students, and educational administrators. We then created a special course to house our educational administrators and also assigned that course as a child course to our meta course and then created various forums for our groups. One forum was set up for all members to participate in, one for only teachers, and a third for only teachers and administrators. This was one example of how Forums, combined with the use of groups, can be set up to facilitate communication and collaboration.

Next we built an advising system, using some of the concepts we learned in setting up our communication forums, by creating groups and groupings within our Reading Program course. Each student was assigned to a group and then we assigned 10 groups each to an advisor, teachers functioning as advisors with the role of non-editing teacher, by using the grouping feature available in Moodle. Finally, to make our advising forums as private as possible, we removed a permission from the non-editing teacher role and then added each teacher to each single student group within his or her advising grouping. This process, while a bit tedious, enabled us to set up an advising system using forums that keeps communication between advisors and advisees confidential, but that is still easily navigable for advisors and program supervisors.