# Creating Student-Centered Project-Based Courses in Moodle

Last Modified on 08/04/2020 8:15 pm EDT

In student-centered project-based courses, it's important to maintain clarity and good communication. It's also important to keep things as straightforward and simple as possible in terms of the activities you will ask your students to do. After all, it can be complicated and confusing in the online environment if you have too many places to go and things to do at the same time.

In this article, you'll learn how to best set up a student-centered project-based course. We'll focus on a few key components you can use for a successful course and also review open source applications that students can use when they collaborate to create documents, audio files, presentations, and videos. Our goal is to help you, as an instructor to quickly and easily design and launch courses.

In this article, we'll discuss the following topics:

- Configuring settings for student-centered project-based courses.
- Selecting the best theme.
- Choosing the best activities and resources.
- Ensuring that the activities are connected to the assessments.
- Selecting applications for students to use when creating collaborative projects.
- Configuring the course to allow effective instructor and peer feedback.

### Characteristics of student-centered project-based courses

The traditional face-to-face college course is a cohort course and has a fixed number of students who progress together to complete it, and they're led by an instructor who guides them and also provides feedback and assessment on student projects.

Online courses can be very similar. The only difference might be that there are more ways to communicate with each other since you're working in an online environment, and the students may be working together for one class or taking a series of classes together.

Here's an example: In order to prepare students to work together in the global, distributed workplace of today, many college build-in collaborative projects in their online courses. For example, students in some of these courses must collaborate to analyze a business situation and create a presentation as well as documents, an audio version, and a video. While it is possible to modify a course shell from a regular instructor-led cohort course, it is a complex process. So, to optimize the experience for the users and improve the course functionality, a new shell is created for all courses so that they are ideal for collaborative projects.

The main characteristics of student-centered project-based online courses include the following:

- A common start and end date.
- A clear timeline, with milestones.
- Collaborative activities that involve students working together in groups.
- Accessible feedback from peers and instructors.
- A space for students to share files and edit each other's files.
- Projects that require students to learn new skills and achieve higher standards of quality (audio editing, image editing, incorporating geographic information, and so on).

Student projects can take many forms, or include portfolios. The key feature is that there are many different

versions that are built over time and constant review and revision allows one to build on prior knowledge and develop self-awareness. The key to success in a student-centered project-based course is performance and interaction between students and the instructor.

### Setting up your project-based course

The two most important considerations in a student-centered project-based course are the following:

- Simple structure: The main focal point needs to be the collaborative space tied to a clear timeline with milestones. Avoid too many distractions such as quizzes and games.
- Clear communication: Students should always have a way to ask and answer questions as they work independently or with other members of a collaborative group.

We can make sure that we achieve the goals of clarity and communication by selecting a framework that gives us the ability to customize the appearance of the course.

### Course default settings

We have reviewed how to manage course default settings, but let's go over it again because there are a few fields that are of particular importance to all student-centered project-based courses.

Let's take a look at how to get started with changing the course settings:

- 1. From the ADMINISTRATION block in the Site administration menu, click on Courses.
- 2. Click on Course default settings.
- 3. In Course format, select the format Topics format.
- 4. In Files and uploads, select 2MB as the maximum upload size, or select the largest size allowed by your Moodle administrator. As a general rule, it's not a bad idea to use a shared cloud drive resource such as Office 365 SharePoint or Google Drive to house the drafts in order to avoid reducing the performance of the Moodle server.
- 5. Turn on the Completion tracking option by selecting Yes in the dropdown.
- 6. In Groups, select Visible groups for Group mode.
- 7. Click on the Save changes button.

# Theme selection

If your students are accessing your course using a wide array of devices, including laptops, desktop computers, smartphones, and tablets, you may wish to select a responsive theme that "flows" across devices. A responsive theme will be displayed appropriately across multiple devices. The McNeese course shell templates are all designed to be responsive for any screen size.

The Clean theme is highly recommended because it automatically displays across multiple devices and also comprises very little formatting/styling. Let's select the Clean theme and configure the settings as follows:

- 1. From the ADMINISTRATION block in the Site administration menu, click on Appearance.
- 2. Click on Themes.
- 3. Click on Theme settings.
- 4. On the Theme settings screen, click on the default selections for all the menu items. Make sure that the Default: Yes checkbox is checked for Enable device detection.
- 5. Click on the Save changes button.

### Providing activities and resources for the course

In previous articles, we discussed how to set up folders and links to provide resources for your students. For resources that students will use in the entire course, you may want to create a topic and name it Course materials. To include other readings and topic-specific material, add them to each topic. As we configure the courses and set the course settings, let's take a look at the activities in Moodle. Most activities you will be using will use default settings. In the previous article, we discussed several activities that you may want to add to your project-based course.

Project based course instructors are always looking for the best ways for students to work collaboratively. Which means that they are looking for ways that will allow students to work together to create and edit files, comment on them, and evaluate them. The two activities in Moodle are ideal for this type of project work: workshop and wiki. Workshop's ability to let students submit work and then grade their own work. Wiki is great because it allows students to collaborate quickly and easily, and the final results can incorporate collaboratively edited text as well as contributed video, audio, and images from members of the team.

### Configuring wiki

The Wiki activity gives you the chance to deliver content and build it at the same time. In Moodle, Wiki is often used when it's considered desirable for class members to contribute to a single project, which would be a set of web pages on a certain topic or set of topics. The Wiki activity can be a collection of information on a topic or examples, or it could be a report on a single topic which contains enough complexity to allow individual students to contribute, review, and edit a section or part of an entry. The advantage of a wiki is that it's collaborative and easy to use. Read this article to learn more about wiki. Students create HTML documents collaboratively and review each others' additions and changes.

Wikis are good for encouraging students to gain in-depth knowledge on a concept by taking a hands-on, collaborative approach. To get started, go to the topic that aligns most closely to the one in which you want to place your wiki and perform the following steps:

- 1. To add a workshop activity to a course, select from the course dashboard "Turn on editing".
- 2. Go to the module topic that aligns most closely with the one in which you want to place the Wiki.
- 3. In the Adding a new Wiki page, expand General.
- 4. Fill in the following fields: Wiki name and Description.
- 5. Click on the Wiki mode dropdown and select Collaborative wiki.
- 6. Then, in Common module settings, set Visible to Show.
- 7. Click on the Save and return to course button.

Once you have edited the settings in your wiki, you can make it available for students. Students can click on Edit and then add, delete, or comment on the entry. To see who has added or deleted content, they can click on History and see who has contributed and when.

Once students have finished contributing to wiki, the instructor can grade the activity and determine grades based on the quality and quantity of student contributions. The instructor can click on Comments at any time during the process in order to give guidance. If it's done well, wiki can create a wonderful sense of pride and camaraderie and be very motivating as well as informative.

### Workshop

Now, let's take a look at the settings of workshop. The default settings will probably work well for you, but you may want to pay attention to the following:

• Maximum submission attachment size: The default value of this option depends on the site settings and the server settings, and it could be too small for attachments containing audio, video, or a number of images. You

may wish to use Google Drive, which allows up to 15 GB of space, or another cloud storage service.

• Number of reviews: The default value of this option is usually 5. You may want more.

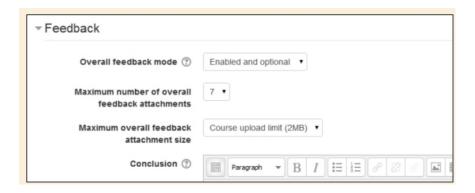
Building a workshop activity in Moodle courses is easy to do and that it provides a chance for students to create documents, which they then submit and assess. The assessments are reflected directly in gradebook, which appears automatically when the submission is set up. The following steps show you how to get started:

- 1. To add a workshop activity to a course, select from the course dashboard "Turn on editing".
- 2. Go to the module topic that aligns most closely with the one in which you want to place your collaborative project.
- 3. Go to Add an activity or resource menu and choose Workshop.
- 4. On the Adding a new Workshop page, expand General.
- 5. Fill in the following fields: Workshop name and Description.
- 6. Open Submission settings and fill in the fields for Instructions for submission and Maximum number of submission attachments, among others.
- 7. Then, in Assessment settings, be sure to fill the field titled Instructions for assessment.
- 8. In Example submissions, select the checkbox to allow example submissions for practice in assessing.
- 9. Keep in mind that most of the fields will be already set as default (which you established while configuring the global settings).

The beauty of a workshop activity is that it allows students to learn from each other and to learn from their mistakes. When they assess their own work or peers' work, they enter comments in accordance with instructions, which can be posted in Instructions for assessment. You can enter instructions from Adding a Workshop in the Assessment settings expandable link, as shown in the following screenshot:



When the students read the comments, they can then apply the suggestions and insights to a revision of the documents that we have created for students to assess. The revision can be submitted as well, which allows more feedback and reflection on one's work and can be enhanced through the Feedback expandable link, which allows you to select the number of feedback attachments and the feedback size and write a conclusion that appears in the gradebook as shown in the following screenshot:



As in the case of the instructor-led and independent self-study courses, it's critical to set up a calendar that is clear and includes the main project dates along with key milestones and deadlines. Keep in mind that we're configuring course settings, to be consistent with deadline in the course syllabus. We will also set events, such as due dates, within the courses module topics themselves.

Steps to set up a calendar for a course include:

- 1. Go to the Site administration menu.
- 2. Click on Appearance.
- 3. Click on Calendar.
- 4. On the Calendar page, set the Days to look ahead, and also change the default value for Events to Lookahead to any value.
- 5. Click on Save changes.

# Links to applications for projects

If your students are creating collaborative presentations, they will need to be able to edit and add audio, video, and text files. They will also need to integrate geographical data. McNeese students have access of Office 365 SharePoint, Word and Excel to work collaboratively. In previous articles, we discussed creating links to word-processing, spreadsheet, and presentation tools. Now let's look at tools for audio and video.

### Audio, video, and geographical information tools

The following are a few tools:

- McNeese students have access to Office 365, in addition to Microsoft Teams and BigBlueButton.
- For Maps and location based resources Google Earth is a great resource. Google Earth is probably the easiest and best-known open source Geographical Information System and very helpful for supplying maps and locations for collaborative projects. To see the terms and conditions and to download it, please visit the GoogleEarth site.
- YouTube Video Editor: YouTube's video editor is very easy to use, and it's free. It's an excellent resource for
  collaborations because it's uncomplicated and allows you to add transcripts for people with disabilities have
  access to the information. You may upload text or rely on YouTube's built-in speech recognition software,
  which can be very effective if there is not much background noise. The YouTube video editor is available at
  http://www.youtube.com/editor.

# Gradebook

Your gradebook can be configured in Course administration, which controls the look, feel, and functionality course wide. To configure the grade reports within the course:

- 1. In the ADMINISTRATION block, navigate to Course administration | Grades.
- 2. In the Grade administration menu, select Course grade settings and review the settings. Keep in mind that these settings will automatically populate the gradebook.
- 3. Click on Letters to set grade ranges and other settings.
- 4. Click on the Save and return to course button.

Remember that whether or not an item shows up in the gradebook, the grading criteria for each item is determined when you add graded activities. See additional articles about setting up your Moodle gradebook here.

# **Summary**

In this article, we learned the best way to develop and configure your student-centered project-based courses. We

focused on the fact that students will need a very clear structure to manage their projects and that you'll need to provide support in terms of links to applications that they may need in order to perform their collaborative activities. We also looked at the importance of having an easy-to-modify, flexible, responsive theme so that the course has a good look and feel on all devices.

At this point in the series, we highly recommend that you read articles about classroom management strategies if you have not read them already. Also, check out recommendations for transitioning your on-campus class to an online class fast.

Next Steps? > Continue by reviewing articles for Moodle Online Communities and Classroom Management Recommendations. Or return to the previous article Designing Self-Paced Independent Study Courses.