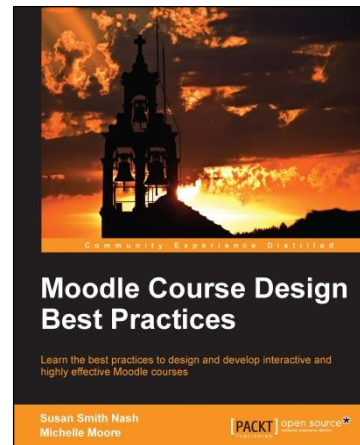# Moodle Course Design Best Practices

Susan Smith Nash

Michelle Moore

Chapter No. 5
"Designing Self-paced Independent Study Courses"

In this package, you will find:

A Biography of the authors of the book

A preview chapter from the book, Chapter NO.5 "Designing Self-paced Independent Study Courses"

A synopsis of the book's content

Information on where to buy this book

About the Authors

Susan Smith Nash, who has been involved in the design, development, and administration of e-Learning programs and courses since earning her Ph.D. in the late 1990s, has developed and administered online courses on many platforms, using many different learning management systems. She is responsible for developing degree and certificate programs delivered in online and hybrid formats and has worked on implementing e-Learning in universities, corporations, and associations.

The author of the award-winning e-Learning blog *E-Learning Queen* and several books on e-Learning, Susan Smith Nash has focused on developing courses that optimize user experience and enhance performance, outcomes, and course persistence/completion. Her portfolio of publications includes peer-reviewed articles and books, including the following:

- The video *Moodle for Training and Professional Development, Packt Publishing, 2013*
- The book *E-Learning Success: From Courses to Careers, Texture Press, 2012*
- The book *E-Learner Survival Guide, Texture Press, 2011*
- The book *Moodle 1.9 Teaching Techniques, Packt Publishing, 2010*

Michelle Moore, a former middle school math teacher, has been an advocate for Moodle since discovering it more than ten years ago during the writing of a review of learning management systems while completing her master's degree in Instructional Design and Technology. Enamored with Moodle's capabilities and its foundation in social constructionism, it wasn't long before Michelle's passion led her to a full-time position in training and providing support for educators and trainers in schools, universities, and businesses across North America. Since then, Michelle has helped thousands of Moodlers leverage Moodle's features to design quality online, blended, and mobile learning experiences.

Michelle is an energetic, award-winning speaker who presents regularly at MoodleMoots and educational technology conferences worldwide on the use of Moodle, with a strong emphasis on pedagogy and best practices. Michelle is pursuing a doctorate in Learning Technologies at the University of North Texas where she is actively researching online education and constructivist teaching methods. Follow Michelle on Twitter at `@michelledmoore` or visit her blog at `http://moodleandmoore.com`.

For More Information:
www.packtpub.com/moodle-course-design-best-practices/book

Moodle Course Design Best Practices

Moodle is a very flexible learning management system that is open source and used by millions of people around the world to host and offer online education and training programs. Moodle is an open source learning management system with a wide array of contributed activities, themes, and resources that developers make available for free.

A vast array of Moodle resources often causes difficulties such that it is not easy to take advantage of so many applications and design options. However, now you can overcome these limitations; Moodle Course Design Best Practices helps you put those resources to good use and create Moodle courses that are ideal for all kinds of organizations, teachers, and learners.

In this book, you'll learn the best practices to create effective and engaging courses for all kinds of learning organizations, ranging from online schools to colleges, universities, training centers, and even online communities.

You'll learn how to plan the structure of your courses, select the best resources, activities, and assessments for your purposes, and use the latest Moodle-friendly programs, plugins, applications, and social media.

We hope you will enjoy this book and find it to be both useful and helpful.

What This Book Covers

With the information in the chapters, you'll be able to work with Moodle from the very beginning and have the information you need at every step of the way.

Chapter 1, Preparing to Build an Exemplary Moodle Course, shows what you need to do if you're setting up your first Moodle course. It also contains information about where to go for information and support.

Chapter 2, Planning Your Course, explains how to develop a course that incorporates learning theories by showing you how to build good learning objectives. You will also learn the best approaches to plan your course so that you can structure it to maximize the chances of success.

Chapter 3, Organizing Your Course, focuses on course organization and shows you how to choose the right course format, and define course settings. Chapter 4, Best Practices in Content Delivery, discusses how to manage content and the best approaches to deliver content of all kinds.

Chapter 5, Designing Self-paced Independent Study Courses, shows you how to design and structure self-paced independent study courses and where to put all the materials, assessments, and other items. It also discusses how to build a course that motivates students and encourages them to complete it.

Chapter 6, Developing Cohort-based Courses with Teacher-student Interaction, focuses on the best design for instructor-led courses that are meant to be delivered to groups of students. It discusses the best themes to use and then reviews the theme settings for a course and its ideal format as well as the best resources and activities to use and how to use them.

Chapter 7, Creating Student-centered Project-based Courses, helps you create courses that include student projects and collaborative activities. It demonstrates which universal and course-specific theme settings are best for your course, and how to select the ideal combination of resources, activities, and assessments.

Chapter 8, Moodle for Online Communities, focuses on how Moodle can be used for online communities, either closed, as in the case of specific organizations, or open, as in the case of social media. It includes strategies for motivating students and discusses how to organize Moodle to take advantage of the constantly changing landscape of the social media, programs, applications, resources, and activities that are available for Moodle.

5
Designing Self-paced Independent Study Courses

Being able to take a course at any time, any place, and at your own pace makes online course offerings very popular. While many courses are instructor led and may involve extensive interaction with other students, there are also many courses that are self guided and contain self-scoring and adaptive assessments that do not require interaction with an instructor or other students.

With Moodle, you can create standalone, self-paced, and independent study courses that can be used in many settings and for various purposes. They may be short training courses that all employees must take for safety, health, or regulatory compliance purposes. They could be review courses on certain subjects or courses that are created for a wide audience or just for fun.

In this chapter, you'll learn how to develop a consistent look and feel for all your self-paced independent study courses. We'll review plugins, resources, and activities that you will find useful to include. We'll then learn how to set up the courses at the individual course level and review the best ways to add resources, activities, and assessments. We'll also discuss how to make sure that your students can track their progress and how to automatically generate customized certificates upon course completion. Finally, we'll learn how to set up badges, build them, and also enable social media so your students can display them.

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

- Configuring global settings for self-paced independent study courses
- Selecting ideal plugins, activities, resources, and assessments
- Tracking progress and checking grades

- Designing customized, automatically generated certificates
- Incorporating badges and other social media
- Creating an effective assessment strategy
- Developing self-paced independent study

Self-paced independent study

Self-paced independent study means that your students are working on their own and that they will not have any direct interaction with an instructor or other students. Thus, there are a number of elements in Moodle that you will not need to include in your course website. For example, you will not need a forum and activities that require grading by an instructor.

At the same time, if students are working on their own, you may need to include self-help elements. You'll definitely need tools, such as a progress tracker, to help students know where they stand in the course, and you'll need to make sure that your instructional material, activities, and assessments tie together very clearly. You can build in activities such as low-stakes self-grading quizzes that keep students engaged and motivated. Keeping students motivated is critical because self-paced classes require students to motivate themselves and there is no teacher or tutor to provide external structure.

> You can learn more about how building in automated feedback can motivate students in the *Five Principles of Successful Course Redesign* article on the National Center for Academic Transformation page at http://www.thencat.org/PlanRes/R2R_PrinCR.htm.

Self-paced independent study courses can vary widely in their length, scope, complexity, and "stakes". Some can be completed in less than an hour, while others may be intended for completion over a semester. They can be offered by colleges, universities, corporations, not-for-profit organizations, retailers, and other organizations that need to provide educational courses and training.

Configuring your course – global settings

The more consistent you can make your courses, the better. There may be a bit of a learning curve the first time a student takes a course, but if the second course has the same look, feel, and functionality, chances are, the student will feel more confident. The students' user experience is very important.

We can make sure that our courses are consistent by configuring the courses in **Site administration**, which will assure us that the settings apply sitewide and are, essentially, global. So, let's get started by looking at the best way to configure the global settings.

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.

This section shows you how to get started on developing the ideal look and feel for your independent study course. Fundamental to the course design is the selection of a theme, which may seem odd; however, in this case, selecting the theme is critical for many reasons ranging from the course being displayed across multiple devices to being easy to navigate.

The **Clean** theme, which was new in Moodle 2.5 and is available as a core theme in Moodle 2.6, 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.

For more information on the **Clean** theme, you may visit the blog post on the following website:

```
http://www.somerandomthoughts.com/blog/2013/05/08/moodle-2-5-and-the-
bootstrap-based-theme-clean/
```

Activities

As we configure the courses and set the global settings, let's take a look at the activities in Moodle.

Most activities you will be using will use default settings. However, there are a few that may require customization, such as **Quiz**, **Book**, and **Badge**.

Quiz

Because the default settings may not be appropriate for your organization, you may wish to change some of the options. When you make changes in the **Quiz** activity, the values you set will be the default values used globally. Perform the following steps to configure the **Quiz** plugin:

1. In the **Site administration** menu, click on **Plugins**.
2. Click on **Activities modules**.
3. Click on **Quiz**.
4. On the **Quiz** screen, review the different options. You may wish to update the settings, such as the **Time limit (seconds)** setting, and restrict students to a fixed number of attempts (rather than maintaining the default setting, that is, **Unlimited**),
5. Click on the **Save changes** button.

Review some of the other plugins in the **Site administration** menu. Keep in mind that we may not use all the options. For more information, refer to the Moodle Docs (`http://docs.moodle.org/26/en/Main_page`) for Moodle 2.6.

Book

The **Book** plugin is a great way to create an online text for your students.

To configure the Book plugin, perform the following steps:

1. In the **Site administration** menu, click on **Plugins**.
2. Click on **Activity modules**.
3. Click on **Book**.
4. On the **Book** screen, set the option for **Chapter formatting**. We recommend **Numbers**.

Badges

Badges, which were new in Moodle 2.5, are very useful for motivating students to complete their courses. When students complete a learning module that involves a skill and a summative assessment, they can begin working on their course assessments. You can set up the course to automatically generate badges when students achieve their goals. Then, they can display the badge in their "backpack" or on social media sites such as Facebook. Mozilla's Open Badges project includes a Badges Backpack in which badges can be displayed.

Let's configure our courses for badges. Remember, we are enabling the badges sitewide. You may also configure and upload badges for individual courses by performing the following steps:

1. In the **Site administration** menu, click on **Badges**.
2. Click on **Badges settings**.
3. On the **Badges settings** screen, type in the name of your organization or the issuing agent. Then, include your e-mail address. Make sure that you check **Yes** for **Enable connection to external backpacks** and **Enable course badges**.
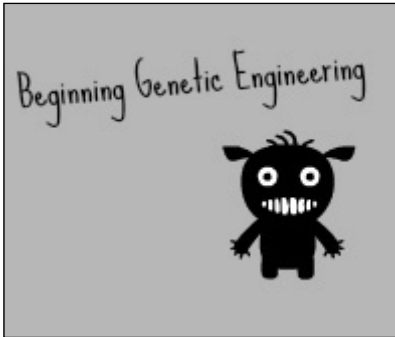4. Click on **Save changes**.

To add a badge, perform the following steps:

1. In the **Site administration** menu, click on **Badges**.
2. Click on **Manage badges** and then click on the **Add a new badge** button.
3. On the **Badge details** screen, type the name and a description of the badge. Then upload an image. This will be the badge image that will be displayed. It should be in the `.jpeg` or `.gif` formats and no larger than 200 x 200 pixels in size.
4. Click on **Create badge**.

> You can learn more about badges in the Mozilla Open Badges project at `http://openbadges.org/`. You can also sign up for a backpack in which you can display your badges at `backpack.openbadges.org`.

To create a unique design for your badge, which incorporates your own photos, you can use free web-based photo editing such as PicMonkey (`http://www.picmonkey.com/`), which is an easy-to-use cloud-based program that does not require registration.

The following image is a rather whimsical example, which took about five minutes to create using PicMonkey:

PicMonkey offers a wide array of elements that allow you to upload and modify your own photos or create your own design using stock elements.

To manage a badge within an individual course, perform the following steps:

1. In the **Course administration** menu, click on **Badges**.

2. Click on **Manage badges**.

3. Click on the name of the badge you want to edit. On the **Badges details** screen, you will see the following tabs: **Overview**, **Edit details**, **Criteria**, **Message**, and **Recipients**. Enter the criteria for issuing the badge in each of the screens.

4. Click on **Save changes**.

Calendar

Assuming that all individuals start a course on a specific date, it might not be a bad idea to create a calendar if the course takes more than a week or so to be completed. For example, you may be offering month-long courses and the students can start working on them at the beginning of every month.

Let's set up a calendar for a course that lasts 30 days using the following steps:

1. Go to the **Site administration** menu.

2. Click on **Appearance**.

3. Click on **Calendar**.

4. Modify **Days to look ahead** to **30** and also change the default settings for **Events to Lookahead**.

5. Click on **Save changes**.

Course-level configuration

Now that you've configured the course at the site level, you will need to configure the elements at the course level and make sure that they are ideal for self-paced independent study. So, go to the **Course administration** menu.

Course settings

Let's take a look at the course settings. We'll want to make sure that the course is arranged in an "any time / any place / any pace" way. The following are the ideal course settings:

1. In the **ADMINISTRATION** block, go to **Course administration**.
2. Click on **Edit settings**.
3. Select the course format as **Topics format** and as you do so, add at least two more topics (in addition to those that will be units in your course). You'll use one of the topics for the instructional material that you'll be using throughout the entire course. The other topic will include practice tests/exams/quizzes.
4. In the **Appearance** section, select **Yes** for **Show gradebook to students**.
5. In the **Completion tracking** section, **Enable completion tracking** should be set to **Yes**.
6. In the **Groups** section, make sure that you do not include groups. So, select **No groups**.
7. Click on Save changes.

Course completion

Course completion is very critical in self-paced courses. The following are the ideal settings:

1. In the **Course administration** menu, click on **Course completion**.
2. In order to use **Course completion**, you must set up your course completely. So, all activities and resources must exist in the course in order for it to be set up. On the **Edit course completion settings** page, open the options. In **General**, select **Course is complete when ALL conditions are met**. In **Condition: Activity completion**, check all the activities that must be completed. Select **ALL selected activities to be completed**.

The following screenshot illustrates **Condition: Activity completion** field:
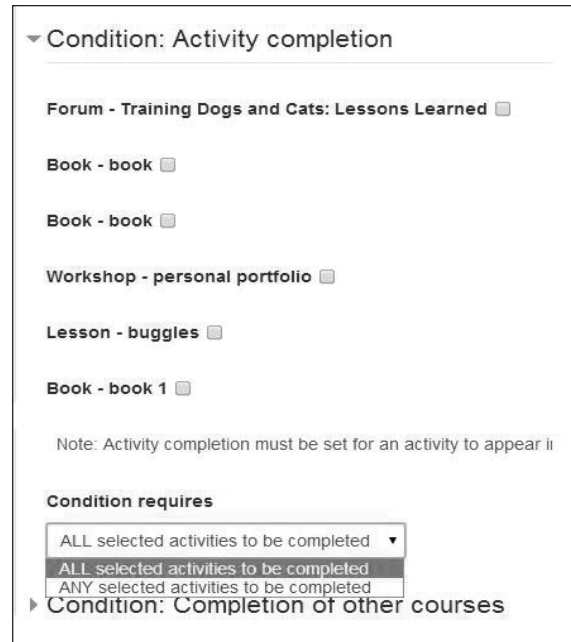
3. In the other settings, you may choose the default settings or add your own conditions depending on your preferences.
4. Click on **Save changes**.

Resources

Organize your resources around your topics. For resources that students will use in the entire course, create a topic and name it `Course materials`. Other resources can be added to each topic.

To select a resource, perform the following steps

1. In the **Home** menu, click on your course.
2. Select **Add an activity or resource**.

Book

You've already configured the **Book** resources so that they have a look and feel that is consistent across all your courses. Now, for each individual course, you may add HTML files that you can combine and present as a book. You can even enable students to download them. To configure the **Book** resources, perform the following steps:

1. On your course page, click on **Add an activity or resource**.
2. Select **Book**.
3. On the **Adding a new Book** screen, add the name and description.
4. On the **Editing chapter** screen, enter your content into the **Content** box.
5. Click on **Save changes**.

You can update and change your book and its contents by adding material.

Resources

Let's start with resources. Having understood your subject and defined the learning outcomes of each topic, it's time to gather and organize your resources. For a self-paced course, you may consider using the types of resources described in this section.

In general, to add resources, click on **Add an activity or a resource**. Check the drop-down menu or simply drag-and-drop them in the course area.

Resources – File

Using the **File** resource to add resources is very effective. Make sure that your file is in a format that your students will be able to download. For example, it's a good idea to upload a PDF file rather than a Microsoft Word document.

Presentations (slide shows) can be uploaded as PDFs in order to avoid problems with versions and compatibility when using Keynote or PowerPoint.

Scripts and notes of your presentations can be uploaded as PDF or HTML. HTML is a good choice if you have students with low vision because screen-reader software uses HTML.

Audio files / podcasts can be uploaded directly or hosted with a service such as SoundCloud (or YouTube). Allowing MP3 downloads is often a good idea because students may wish to download the files and play them on their MP3 players or smartphones.

Resources – URL

If file sizes are large, it is often a good idea to first create the presentations / course content and then upload them to a cloud-based hosting service. If you do so, you may need to be able to create your presentations in different formats.

The following sections are guidelines for a number of different types of presentations.

Recording webcasts/presentations

One popular approach to creating a narrated presentation is using screen capture software in which you record audio as you make your presentation. You can then save and upload the presentation to a number of sites, such as YouTube, Flickr, and UStream.tv. The advantages of using screen capture software are that the quality tends to be high, and there is quite a bit of flexibility. The disadvantages are that there can be a steep learning curve and the software licenses can be expensive.

For high-quality audio, be sure to invest in a good headset microphone. Avoid using the built-in microphone on your computer. When you record using your headset, be sure to double check the settings to make sure that they not default to the built-in microphone.

CamStudio (`http://www.camstudio.org`) is a free open source program that records screen motion and audio and saves them as AVI files. It then converts them to SWF (flash). There are obvious limitations with this software program (that is, the Flash files will not play on all devices and platforms).

QuickTime (built-in on Mac) has built-in screen recording that can record the entire screen or part of it, with or without audio or audio only.

The following are a few free (some have limited functionality) products for screencasts. We're only including the ones that include audio, as follows:

- **ActivePresenter**: For this product, please visit `http://atomisystems.com/activepresenter/free-edition/`.

  This product can save screencasts in numerous formats.

- **BB FlashBack Express**: For this product, please visit `http://www.bbsoftware.co.uk/`.

  This product can save screencasts as flash or AVI that can be "one-click" uploads to YouTube.

- **Jing**: For this product, please visit `http://www.techsmith.com/jing.html`.

  You can't include audio, but Jing is a very easy and convenient way to create screen captures and videos, and then upload them. Jing works for both Mac and Windows operating systems.

- For this product, please visit `http://www.screenpresso.com/featuresall`.

  This product is portable, that is, you do not have to download it. It may not include audio. It is ideal for screen captures and recording only part of your screen.

- **Camtasia Studio 8**: For this product, please visit `http://www.techsmith.org`.

  Camtasia is a very robust product with much flexibility. It is possible to produce a very high-quality screen capture and maintain high quality. You can also optimize for different aspect ratios, which is important when thinking about users who may use smartphones and tablets. It is available for Windows and Mac. You can download a free trial.

Producing and sharing presentations

There are many options to include presentations in your course that you can build yourself or embed from other sites.

Audio only

You may be in a situation where you want to create a high-quality audio file and, perhaps later, sync it with your presentation.

This is a good way to avoid poor-quality audio. Having high-quality audio is important if your users are hard of hearing and use assistive speech-to-text software. Even if they do not, it is a good idea to develop a script and an outline for your course to make available when you create a screencast. You will then be following the practices of Universal Design for Learning and also complying with ADA guidelines.

To download and install audio tools, perform the following steps:

1. Download Audacity at `http://audacity.sourceforge.net/`. Audacity is available for both Mac as well as Windows.
2. Select the Audacity installer option since it will guide you through the entire process. If you do not have permissions, you may need to download the ZIP files.

3. In order to convert the AVI files to the MP3 files, you'll need to download an encoder. The LAME MP3 encoder for Windows can be found at `http://lame1.buanzo.com.ar/#lamewindl`.

4. If you have any questions about downloading/installing Audacity or LAME, read the manual at `http://manual.audacityteam.org/o/man/faq_installation_and_plug_ins.html`.

5. To share the audio file, optimize it using MP3 encoder and then upload it to Webspace, or open a site on SoundCloud at `http://www.soundcloud.com`. You can also share audio via YouTube.

Presentation only

As you create your presentation, do not forget to create a script or notes. You can make these available as notes or as a separate file. It is particularly important to do so if your presentation is very graphics intensive and does not include much explanatory text. You can also avoid the temptation to fill the screen with too much text using the following options:

1. You may convert your PowerPoint (or other presentation software) file to a PDF file and then upload it to the server space that you have.

2. You can upload your PDF file to a discussion forum in a Learning Management System (Moodle) or share it in your company's repository (for example, Google Docs).

3. You can upload your presentation to SlideShare at `http://www.slideshare.net/`.

Activities and assessments

As you build your course, you'll need to configure the settings so that they automatically score assessments and allow your students to complete their courses in a self-paced independent study environment. This section describes various activities that are easy to implement because they are easy to create and simple for the learner to follow. These are self-scoring activities.

Choice

The activity **Choice** can be easily configured for self-paced self study. Perform the following steps:

1. On the **Adding a new Choice** page, click on **Activity completion**.

2. Select **Show activity as complete when conditions are met**.

Quiz

Quiz is another good activity to include for automated courses. Now, let's give these new user accounts a course to work on using the following steps:

1. In the **Adding a new Quiz** page, click on **Activity completion**.

2. Select **Show activity as complete when conditions are met**.

3. You may wish to select **Students can manually mark the activity as completed**.

Certificates

Moodle allows you to generate certificates if you have installed the **Certificates** add-on from the Moodle Plugin Library. You can configure them to include the name of the course as well as the student's name, score, and other important information. Certificate is a third-party plugin, and if your Moodle site does not have it, you may need to install it.

Now, add a certificate by performing the following steps:

1. In the **Activities** menu, click on **Certificate**.

2. In the **Adding a new Certificate** page, fill in the required fields.

3. Configure the certificate using the different fields and options.

4. In the **Activity completion** menu, select **Show activity as complete when conditions are met**. The conditions to meet depend on the qualifying scores for "mastery".

Achievement

Moodle provides a wide array of options for self-paced independent study students to demonstrate achievement. We've recommended using certificates and badges because the process of earning, issuing, and displaying them can be automated.

In the case of badges, there is an element of gamification, which encourages students to compete with each other to earn badges and be the best in their respective skill sets and interests. We have discussed badges and certificates and it's useful to review them and remind ourselves that they both motivate, while the course is *in progress* and when it is complete.

Summary

In this chapter, we've learned the best way to develop and configure your course for self-paced independent study, which is ideal for students who want to study at any time, any place, and at their own pace.

We've learned how to configure global settings so that your courses have a consistent look and feel. Then, we moved to the course level and determined the best types of resources and activities for your courses. Then, we discussed how to configure them so that they are automated.

Finally, we looked at ways to motivate students, increase their engagement in the course, and encourage course completion by means of demonstrating achievement first via certificates and then by adding a light element of gamification to your course using badges.

In the next chapter, we will guide you through developing cohort-based courses with teacher-student interaction. We'll take a close look at how to configure your courses and determine which resources, activities, and assessments will be the best fit for your cohort-based courses.

Where to buy this book

You can buy Moodle Course Design Best Practices from the Packt Publishing website:
`http://www.packtpub.com/moodle-course-design-best-practices/book`.

Free shipping to the US, UK, Europe and selected Asian countries. For more information, please read our shipping policy.

Alternatively, you can buy the book from Amazon, BN.com, Computer Manuals and most internet book retailers.

www.PacktPub.com