Project Management for Web-Based Course Development

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Transferring face-to-face courses into Web-based courses is a trend in higher education. During this transition, faculty members play a key role since they provide lesson content to instructional designers. With expected lesson content, an instructional designer can start to develop a Web-based course. Delayed or unexpected lesson content will make a project be over budget and miss deadline.

Background of the Penn State World Campus

The Penn State World Campus designs and delivers online courses for Penn State and enrolls students from around the world. Every year, the world Campus offers more than 200 Web-based courses.

The Instructional Design & Development (ID&D) Team is one of the World Campus teams. This team consists of a director, assistant directors, project managers, instructional designers, instructional designer specialists, graphic artists, a multimedia team, production specialists, technical typists and a technology team (programmers) who have different responsibilities.

The Web-based course instructors are Penn State faculty members who are often the subject matter experts (SME). These faculty members determine learning goals and objectives, generate ideas, write the lesson content and storyboard, provide test items and exercises, and suggest multimedia selections.

As the new technologies are rapidly developed, more and more departments and students from the Penn State express their interests in having Web-based courses. It is the task of the instructional designers to develop the courses within a given timeframe and within budgetary constraints.

Two-Week Cycle Model vs. the Two-Semester Model

Under the previous project management scenarios, faculty is given one semester to write and develop content, and then the design staff were given one semester to develop the course. However, in several instances, content arrived late, thus pushing out the projected completion dates. In the past year, we have adopted a new two-week cycle model that adjusts expectations for the faculty in terms of content due dates, and allows the content to be mocked up and tested in a cyclical process.

The Two Weeks Cycle model now allows designers to develop and get each lesson of a course ready for review in two weeks. During the first week of the two weeks, designers work closely with faculty in order to get lesson content on time. Then during the second week the design staff prepares the lesson for review, online, by the faculty. Also, within the second week, faculty should start writing the next lesson content. By the end of the first week of the next two weeks, another lesson content is ready for the designer to develop into Web-based course. If a Web-based course has twelve lessons, ideally, twenty-four weeks (six months) later, the course should be ready for final review and editing prior to opening. One of the
benefits of the Two Week Cycle model is designers receive content every other week, which keeps things moving. Another benefit is constant communication with faculty. He or she goes over concerns with each lesson as it is developing and gets a real feel for the instructional design process. Faculty and designers can anticipate areas to modify in the lessons as the course unfolds which results in a better course when development it completed. Thus, the two week development cycle allows faculty to get each of the lessons in on time, which is the desired goal of the designer?

How to Work With Faculty for a New Web-Based Course When Time Is Short

To address the issues above, designers need to work with faculty efficiently and effectively to guide faculty through writing online lesson content and providing the necessary materials. In order to do so, designers may use the following steps:

- create project management Gantt chart;
- create mini Web site for the project management;
- provide detailed course outline form with a sample;
- provide a lesson content template with examples; and
- make a regular communication plan.

1. Create Project Management Gantt Chart

   It takes time to establish a long six month timeline using a calendar. With software, such as Microsoft Project 2000, one can easily create a Gantt chart which contains timeline, project tasks, names of who need to complete a specific task, task starting date and ending date, and task time duration, etc. Gantt charts allow a convenient way to make a detailed project management plan, as well as remind all of the team members what tasks they should do and completion deadline for each task.

2. Create Mini Web Site for the Project Management

   When you print out Gantt chart and want to share with the rest of team on the project management plan, it is not convenient to show people since the printed Gantt chart is too long. But you can easily create a mini Web site (two pages when you print out) for this project management based on the Gantt chart with team member tasks and deadline for each task in it. Compared with Gantt chart, the mini Web site is easier and more convenient for team members to check what they should do and be aware of their tasks and deadline for each task so that they can plan their time ahead. Also a mini Web site provides a blue print of the project for the whole team. Moreover, it is easy to update in order to track a project.

3. Provide Detailed Course Outline Form With a Sample

   Once faculty has a project timeline in hand, and understands what to do overall, it’s time for him or her to know to write lesson content. The first thing you may want the faculty to draft is a detailed course outline. This provides faculty with a clear idea of what the final course will include. It can also serve as the basis for the syllabus for the course.

   Below is a typical course outline and shows what might be included:

   - Course description
In this section, faculty may answer the following questions. What will be covered in the course? Will this course be an independent learning course, or will there be other students pacing through the course at the same time (as they would in a face-to-face class)? Will you expect students to interact with fellow classmates? Will you expect students to stick to a prescribed pace of study or can they work through the course at their own pace?

- Course goals/objectives

List 4-5 broad statements of what faculty hopes students will know, or be able to do, or have experienced as a result of taking the course

- Course prerequisites

Let students know if there are course prerequisites for this course.

- Outline of overall course structure

The following questions will be answered in this section. How many lessons will the course be broken down? How much time will students spend to complete the course? How much time will students have to work through a single lesson? How much time do faculty expect students to devote to the course each week.

- Required course materials

List any textbooks, articles, workbooks, videos, software, or other special materials students will need to have in order to complete the course. For each item, provide as much identifying detail as possible (such as ISBN number for a textbook or ordering info for a brochure).

- Course requirement

List the graded assignments for the course (e.g. papers, projects, quizzes, exams, class participation grades, etc.) with directions description student can follow to complete assignments, as well as with the percentage of the course grade that each assignment will be worth.

- Each lesson specific objectives

Objectives for each lesson are listed here

- Proposed schedule

Lesson titles, scheduled timeframe, related readings, and assignments will be listed.

- Grading scale

Let students know grading policy, such as how many point is “A” grade, so on and so forth.

It is good practice to provide faculty a sample course outline from a real course to help them to understand how to draft his or her own course outline.
4. Provide a Lesson Content Template With Examples

With the course blueprint—detailed course outline in mind, faculty can start to work on lesson content. After many years working with faculty, we have found that it is easier and really helpful if we provide faculty a lesson content template, as a lesson content template with examples lets faculty know what he or she should write without taking too much time to figure how to get started. Below is a lesson content template might be included.

- Introduction
- Lesson objectives
- Reading assignment
- Reading tips/summary
- Lesson content/commentary/class notes
- Lesson activities
- Lesson summary

5. Make a Regular Communication Plan

A regular communication plan will allow the designer to work closely with the faculty, for example, weekly phone calls can save time in terms of tracking the project or solving problems.

Conclusion

In summary, designers need to work with faculty closely to meet a tight project deadline. When the designers spend time creating samples, template and detailed guide lines for faculty, this will save time and avoid the need to go back and forth between designers and faculty during the course development process. With the above method to manage a project, the two-week cycle model, and the above documents to guide faculty to write lesson content, your Web-based course project will be effectively and efficiently designed, developed, and will hopefully meet the project deadline. We hope that these ideas are helpful for you when you work with faculty to transfer a face-to-face course into Web-based course, and when time is short.

Biographical Sketches

**Dong Li** is an instructional designer for Penn State’s World Campus, where she develops and delivers CD- and Web-based courses for distance education. Mrs. Li has been involved in the field of distance education and higher education for over 8 years. She got her master’s degree from the Instructional Systems at the Pennsylvania State University.

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education, and has consulted on distance education projects with community colleges and public school systems. His research interests include systems dynamic modeling of distance education processes, learner control in distance education, interaction analysis and current policy issues surrounding accreditation and copyright law. Mr. Shearer has published several articles in the field and presented at numerous conferences. In addition to his work in distance education, Mr. Shearer has been involved with institutional research initiatives within higher education, and has helped design a number of studio classrooms and video teleconferencing facilities. He has also worked at the executive level for corporations. Prior to joining Penn State, Mr. Shearer was the Director of Research and Instructional Systems at National University.

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