

## Designing ENG 4/572, "Project Management," to Promote Significant Learning

*For my capstone project, I chose to use Dee Fink's ideas of integrated course design to design a new course I will be offering in Fall 2006, ENG 4/572: Project Management. In the past, I have not designed my courses in systematic ways. Although I have been generally pleased with my courses, I wanted to see the results I would get if I planned the course in a more systematic manner. The content that follows documents the process I used to plan this course, following Fink's method from the initial design phase through the intermediate design phase. To keep the content from getting unreasonably long, especially for this capstone project, in some sections I use only selected portions of the course rather than applying Fink's methods to the entirety of the course.*

### Step 1: Consider Situational Factors

*Step One, involving some preliminary planning, included some useful prompts for my thinking about the course. Most useful was the prompt about the nature of the subject because with this prompt came the realization that this course involves a much more highly practical component than the other courses I am accustomed to teaching. This has helped me identify the need to make sure that the course is not too practically-oriented so as to discourage students' thinking in the course.*

#### **Specific Context of the Teaching/Learning Situation**

- Enrollment caps are ten undergraduate students and five graduate students (total=15)
- Undergraduate students are upper division students
- Course will be taught 100% on-line
- Students will be required to be on-line at the same time on Wednesdays between 7:00 and 7:50

#### **General Context of the Learning Situation**

- The Tech Comm program expects that students who successfully complete this course would be able to successfully take on a junior project management role (with supervision).
- This course is an elective within the technical communication program (for undergraduates and graduate students)
- The course was last taught a number of years ago by a different faculty member, but there are no particular departmental requirements surrounding the course.
- These students will not emerge from this course with a certification, but they should come out of the course with an understanding of project management principles taught in the most popular project management certification program, the Project Management Institute, Inc.
- Employers would expect students who have taken a project management course to have literacy in some project management basics such as status reporting, change management, personnel skills, an understanding of a project's development lifecycle, planning abilities, multitasking abilities, and general political savvy.

#### **Nature of the Subject**

- The subject has some theory associated with it, but it is primarily practical.
- The field of project management has been relatively stable since its inception in construction management about thirty years ago. It has more recently been incorporated into the project management of technical system development projects. One of the more significant controversies surrounding the topic at present is where project managers should be housed in an organization: in a project management office, in the development shop, or in the customer's group.
- The most important changes/trends associated with project management are those occurring within the organization where the PM works.

#### **Characteristics of the Learners**

- Most students are majoring in the technical communication program, but some are not (and are majoring in CIS, Psychology, Health Science)
- I expect students to have had little, if any, exposure to concepts of project management
- I expect students to have had little, if any, experience working as a professional

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- Most students are traditionally-aged and attending MSU as full-time students.

**Characteristics of the Teacher**

- My experience: I have taught on-line and I have been a project manager for four years. I have a high level of confidence in this subject.
- My strengths in teaching: enthusiasm, subject matter knowledge, class management, innovation.

## Step 2: Learning Goals

*I began writing learning outside of the six-part taxonomy, but then finished writing the learning goals within that taxonomy. This process has led to a much more overt focus on learning goals as well as making sure the learning goals are not too highly concentrated in one area – and since this course has so many elements of application, the taxonomy was useful in making sure that I hit all six types of learning. “Caring” and “integration” were the most difficult two types of significant learning for which to formulate goals, and so I think they exemplify the nuanced and careful approach I will take to educating students how to be project managers. There are so many project management courses and certification programs out there; I hope my students will come out of my course with the basic knowledge they need to be project managers, but also with a perspective on project management, its function and its role in organizations that will allow them to be educated, thoughtful, and effective members of their teams.*

What would I like the impact of this course to be on students two-to-three years after the course is over?

- I would want this course to serve as foundational for those students who go on to project management work.
- Technical communicators are often put into the role of project manager. For those students who were working as technical communicators and then were thrust into a project management role, I hope that the learning they take from this course enables them to succeed at project management and, should they choose it as their vocations, profit from the career advancement it will enable for them.
- I want students to think of this as their first project management experience, even to the point of when encountering PM problems on the job, to thinking back to “what did I do when that happened in the PM class?”
- The ability to articulate project management on their own terms
- To have developed their own personal best practices of project management and be able to articulate them as a change agent

What would distinguish students who have taken this course from students who have not?

- A capacity to manage multiple tasks and resources simultaneously.
- The ability to speak PM lingo
- Project management experience

A year (or more) after this course is over, I want and hope that students will . . .

### **Foundational Knowledge**

- Understand a basic project development lifecycle
- Understand management processes of technical system development
- Understand the basis/theory/function/purpose of project management

### **Application**

- Be able to analyze a situation that requires a decision, to make a decision, and to articulate a rationale for that decision
- Be able to manage processes related to change management and risk mitigation
- Create and manage a project timeline
- Manage a project

### **Integration**

- Understand the utility of the mundane, everyday practices of project management for a project’s success
- Understand the implications of the project you are managing for a company’s employees, product, culture and ongoing business practices

### **Human Dimension**

- Learn how to work together with people – the people you manage as well as the people who manage you – to enable their success

### **Caring**

- Value the management role and recognize the vast influence it has – for good and bad – in organizations

### **Learning How to Learn**

- Gain an ability to assess project management practices and be able to gauge their fittedness for your own project management philosophy and style

## Step 3: Feedback and Assessment Procedures

*The work I have done here for Step Three is only the tip of the iceberg. “Forward-looking” assessments were easy to come up with for the course since the entire course is case-based. In fact, “forward” might not actually be the right word for these assessments since I will actually be creating this real-life context for problem-solving and decision-making in the course. I brainstormed a number of assessments I’ll be able to make, and then I developed criteria and standards for only one of these assessments. Standards development gets to be repetitive, but I can see how it would be useful in cases where I am having difficulty myself in articulating my evaluative criteria for any assignment. The third and fourth parts of step three were also useful. Prior to this step, I hadn’t thought about any self-assessment activities the students could do, and so I came up with three activities that will be important throughout the course. Realizing that I was short on self-assessment opportunities in this course made me realize that I’ve cut self-assessment opportunities short in other courses I have taught too. Finally, the FIDeLity program for feedback is a good reminder of how to structure feedback opportunities and provide feedback to students.*

### Forward-Looking Assessment

- To write a project charter (to demonstrate that you understand the resource managers’ conceptions of the project. This includes your customer’s understanding of the system to be built as well as your supervisor’s [or your resources’ supervisors’] understanding of the system to be built)
- To issue a weekly project status report (and institute changes to the organization’s accepted status report format)
- To manage a customer’s change request (to exercise the change management process)
- To put a risk mitigation plan to work (to write a risk mitigation plan and then put it into effect after one of the project’s issues is escalated into a risk)
- To deal with a human resource issue in an effective and compassionate manner

### Criteria and Standards

For the learning objective of creating and managing a project timeline

- **Standard #1:** The timeline is thought through, taking into account project tasks, task relationships, and resource constraints.
  - Excellent:** The majority of project tasks are identified on the project plan and are associated with dates; task relationships are identified; tasks are associated with resources, where possible; overall, the plan looks manageable.
  - Average:** A good number of project tasks are identified on the project plan and are associated with dates; some task relationships are identified; some tasks are associated with resources; overall, the plan provides a sketch for the project’s management.
  - Poor:** Few tasks are identified on the project plan and are associated with dates; task relationships tend not to be identified; few tasks are associated with resources; overall, the plan provides little, if any, guidance for managing the project.
- **Standard #2:** The plan is kept up-to-date for the duration of the project, which includes marking in-progress and completed tasks as well as making adjustments to the schedule for tasks done early or late.
  - Excellent:** All of the project’s activities since the last status report are reflected on the plan: completed tasks are marked as such in coordination with delivery of the project status report; tasks that should have been completed but were not have been extended and subsequent tasks have been rearranged.
  - Good:** Some of the project’s activities since the last status report are reflected in the plan.
  - Poor:** Few, if any, of the project’s activities since the last status report are reflected on the plan: completed tasks have not been marked as such; tasks that should have been completed but were not have not been extended and the plan has not been readjusted accordingly.

### Self-Assessment

- To engage in self assessment in preparation for the one-on-one meetings
- To engage in self assessment during weekly peer-oriented “Project Management Roundtable” sessions
- To write in a project journal (???)

**“FIDeLity” Feedback (for Frequent, Immediate, Discriminating, and Lovingly delivered feedback)**

- Structure opportunities for frequent educative assessment into the course through, if nothing else, student submission of (weekly or bi-weekly) project status reports.
- Know when project status reports are due and make time to respond to those as close to the due date as possible
- Establish criteria and standards for each assignment/educative assessment
- Be nice. Care about their feelings. Identify bright spots, where they clearly got something. Care about their *learning*. Don’t make them afraid of feedback.

## Step 4: Teaching/Learning Activities

*In comparison to Step Three, Step Four was relatively quick. I can see how this step could be challenging for others who do not usually incorporate active learning into their courses but since this course involves case-based learning throughout the entire semester, students will have a number of rich learning experiences. Again, this step provided a good prompt to include the reflective experiences in the course. While these will be valuable experiences for students, I think I will also learn something from reading their reflections about how to make future course improvements to deal with points they didn't understand well enough.*

### **Information and Ideas**

- Textbook
- Taped interviews with project managers
- External source research for presentations during PM Roundtables

### **Rich Learning Experiences**

- Students will act as a project manager in an extended case, working with project resources, customers, and a supervisor (me)

### **In-Depth Reflective Dialogue**

- Self-assessment prior to one-on-one meetings with me
- One-on-one meetings with me
- In “Project Management Roundtable” sessions as students reflect on the week’s activities
- In a project journal?
- In a class portfolio?

## Step 5: Verify that Key Components are Integrated

*This step was useful for me because it forced me to match learning goals, assessment, and teaching-learning activities. I spent a good deal of time engaged in thought in this phase and I believe this step helped me to be more comprehensive than I otherwise would have been in thinking about learning goals, assessment, and activities. I still have more work to do in this step in all of the places labeled "TBD," since my assessment activities there are loose.*

#	Learning Goals for Course	Ways of Assessing This Kind of Learning	Actual Teaching-Learning Activities	Helpful Resources
1a	Understand a basic project development lifecycle	Project plan	Textbook Lecture? Assemble project plan	
1b	Understand management processes of technical system development	Various assignments including risk mitigation, change control, phase planning	Textbook Lecture? Change management activity Risk mitigation activity Phase planning activities?	
1c	Understand the basis/theory/function/purpose of project management	Reflective writings, portfolio	Taped interviews of project managers Textbook Lessons from Project Management Roundtable	
2a	Be able to analyze a situation that requires a decision, to make a decision, and to articulate a rationale for that decision	Throughout project (TBD)	Project charter activity Change management activity Risk mitigation activity Personnel activity Reflective writing	
2b	Be able to manage processes related to change management and risk mitigation	Throughout project (TBD)	Risk mitigation activity Change management activity	
2c	Create and manage a project timeline	Project plan	Assemble and maintain project plan Project status reporting	
2d	Manage a project	Throughout project (TBD)	Assemble project plan Project-related correspondence	
3a	Understand the utility of the mundane, everyday practices of project management for a project's success	Throughout project (TBD)	Project-related correspondence Reflective writing	
3b	Understand the implications of the project you are managing for a company's employees, product, culture and ongoing business practices	Reflective writings, portfolio	Reflective writing Taped interviews of project managers Project charter Change management activity Project close-out report	

#	Learning Goals for Course	Ways of Assessing This Kind of Learning	Actual Teaching-Learning Activities	Helpful Resources
4	Learn how to work together with people – the people you manage as well as the people who manage you – to enable their success	Throughout project (TBD), reflective writings, portfolio	Reflective writings Taped interviews of project managers Project-related correspondence	
5	Value the management role and recognize the vast influence it has – for good and bad – in organizations	Reflective writings, portfolio	Reflective writings Project Management Roundtable Taped interviews of project managers	
6	Gain an ability to assess project management practices and be able to gauge their fittedness for your own project management philosophy and style	Project Management Roundtable, reflective writings, portfolio	Project Management Roundtable Portfolio Reflective writings	

## Step Six: Course Structure

*Planning the structure of the course was not too difficult, in part, because I want the course to follow the trajectory of an actual project; therefore, the course must necessarily proceed from project initiation to the planning phase, then to the execute and control phase, and finally to the project's close. Although these are the main topics of the course, I also want to include other topics (like how to work effectively with project team members) that will need to be incorporated throughout the entire course.*

					<b>Close</b>
				<b>Execute and Control</b>	
				Project Plan Management	
				Project Status Reporting	
			<b>Plan</b>	Personnel Issue	
		<b>Initiate</b>	Phase Plans	Risk Mitigation Process	Portfolio
	<b>Introduction</b>	Charter	Project Plan	Change Control Process	Project Close-Out
<b>Week:</b>	1	2-3	4-6	7-13	14-15

## Step Seven: Instructional Strategy

*I had significant difficulty putting this section together, in part, because Fink uses the castle-top structure to illustrate the integration of in-class and out-of-class activities. The castle-top structure makes a great deal of sense for face-to-face classes but because so much more instructional activity needs to occur in out-of-class time in an on-line course, the simple division by in-class versus out-of-class activities doesn't make sense for an on-line course. I made a number of attempts to remedy the shortcomings of the castle-top diagram for an on-line class. First, I tried to divide activities by type, e.g., I separated reading from viewing from e-mailing from collaborating from writing (see Week One: Introduction). This type of division didn't seem adequate since it was a division of tasks and not a division related to the purpose of those tasks.*

*Next, I tried to divide activities by individual work versus cooperative work; however, this didn't work because project management requires that an individual serve in the role of project manager (see A. Weeks Two – Three: Initiate). This division between individual work and cooperative work may have worked for my on-line Technical Communication class I taught this spring, but it proved to be inadequate for the Project Management course since so much of the work students do in the class will be on an individual basis.*

*Third, I tried to divide activities by purpose (see B. Week Two – Three: Initiate). This division appears to be working better because the left-most column is not a simple division by task, but is related to purpose. Additionally, the items in those columns follow a rough progression from passive to active learning activities and the table retains the idea of chronology as the activities in the table's cells, then, will proceed from beginning to end of the unit, tracking left to right. This is still a work in progress as I work toward more concrete ideas of how the case itself will progress, but I think that my third attempt at putting together a structure with which to create an instructional strategy retains what I consider to be the most important aspect of Step Eight – to “set up activities that (a) get students ready or prepared for later work; (b) give students opportunities to practice – with prompt feedback – doing whatever it is I want them to learn to do; (c) assess the quality of their performance; and (d) allow them to reflect on their learning” (Fink, 27).*

### Week One: Introduction

<b>Read</b>	Read syllabus		Read assigned text		Read project background
<b>View</b>					View taped interview
<b>E-Mail</b>					
<b>Collaborate</b>				Participate in first meeting to get overview and ask questions	
<b>Write</b>		Introduce self to peers			

### A. Weeks Two – Three: Initiate

<b>Individual</b>	Read assigned text		Read and view correspondence from project resources	Respond to project resources via e-mail		Draft project charter		
<b>Cooperative</b>			Participate in PM Roundtable to review week's occurrences					

B. Weeks Two – Three: Initiate

<b>Subject-Related Materials</b>	- Read assigned text				
<b>Case-Related Materials</b>	- Read e-mails from project sponsor, supervisors - View organizational chart - Read additional background on project				
<b>Collaborative Work</b>		Class introductions	- Review project charters in progress		
<b>Supplementary Synchronous Material</b>		Additional explanation of project, context, syllabus	-		
<b>Correspondence w/Project Resources</b>		As needed	As needed	As needed	
<b>Key Project Documentation</b>					Project Charter
<b>Project Journal</b>					Reflect on initiation phase

## Step Eight: Creating the Overall Scheme of Learning Activities

*Step Eight, the last step of the intermediate phase of integrated course planning, logically follows from Step Seven. After I have finished creating instructional strategies for each of the five units I have designated for the course, Step Eight appears to involve bringing those unit-based instructional strategies into a cohesive course structure. At the conclusion of this step, I should also be able to “lay out a week-by-week schedule of activities for the whole semester” (Fink, 29).*