

Practicing What We Preach: Experiences in Teaching IT Project Management in 30 Days

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Abstract

This paper discusses in detail the experience of the author in teaching an online graduate course in IT project management. This was the first time that the author had taught this course in the online format. One of the main constraints was that the course was restricted to a duration of 30 days. The author used a "project management approach" to designing, developing and delivering the course. In doing so, the author closely followed most project management principles, but ignored some others due to various reasons. The author explains why this was done, and the consequences of not following all the project management principles in the process of preparing and delivering the course. The paper provides the details of the course, as well as "what went wrong" and "what went right" with the course. Detailed reflections of the author as he went through the various stages of the process are given. The paper concludes with lessons learned from this exercise, which could prove to be beneficial to academics who are contemplating offering a course in IT Project Management in an online format.

KEYWORDS: project management, pedagogy, online course delivery, teaching experience, course preparation, teaching experiences

1. MOTIVATIONS

The motivation for writing this paper came from my recent experience in teaching a graduate course in IT Project Management. It was my first time ever in designing and teaching IT Project Management in a completely online, distance education format. The process of designing and teaching this course in a highly compressed schedule of 30 days (inclusive of weekends and holidays) offered me an opportunity to glean some insights into the world of distance learning, the motivations that make online learning a rapidly growing field in the higher-education arena, and its advantages and disadvantages. It also offered me some preliminary insights on what works and what doesn't work at each stage of the *process* (i.e. design, development, delivery and assessment) as well as the overall *product* (i.e. the schedule, course materials, assessment tools, pedagogy and learning). At the start of the process of preparing for the course, I consciously tried to follow project management practices, by treating the course itself as a project. As the course progressed, I tried to keep track of the progress, to see whether I was able to convert PM theory into successful practice.

My experience in this project from the start to finish, and the conclusions that I reached are reported in the rest of this paper. Briefly, some of the interesting conclusions became apparent at the end of the course were as follows:

1. Most students liked the online format, and actually commented that this is the *best* way to teach IT Project Management
2. Most students wanted at least one or two face-to-face meetings on the ground
3. The greater the work experience of the students, the more they gained individually
4. The greater the work experience of the students, the better their individual contributions to the online discussion
5. Discussions based on real-life and web-based research were considered extremely relevant and interesting by the students
6. Most students agreed that 30 days was too short for a course like this, and suggested an eight-week or 56-day format
7. A minority of the students did not like the online format and did not perform as well

- as they could have in an on-the-ground course format
8. The students required constant, rapid feedback throughout the course
 9. Some students required additional help from the instructor by way of face-to-face meetings and telephone meetings
 10. A majority of the students were willing to put very long hours into the online discussions
 11. The publisher-provided, randomly generated online quizzes were a source of irritation and confusion to most students. In some cases, the questions were indeed confusing, but in other cases the questions simply required that the students pay much more careful attention to the textbook material. While about half of the students realized this over time, and accepted it, the other half did not accept what they considered "needless trick questions."
 12. On average, the online course was more demanding, in terms of time, to the instructor than an on-the-ground course
 13. Sometimes, time schedules could not be kept by the instructor, which affected the timely feedback which were necessary to the students
 14. Evaluating class discussions (i.e. the discussion boards) in terms of the contents was time consuming and sometimes subjective, which was (and could be) a source of consternation to the instructor
 15. Several aspects of a typical on-the-ground course were excluded from the online format, which may have repercussions on the quality of the pedagogy
 16. Online course delivery software, despite continuous improvement, can still be a concern and a limitation in some situations, especially in an online course.

The rest of this paper traces the beginnings of the course, the background of online education at Quinnipiac University, how the course was designed, how it was delivered, and other critical information such as syllabi, course materials, assignments, and evaluation methods. Where appropriate, comparisons between an on-the-ground course and the online course are made.

2. BACKGROUND

The Distance Education department of Quinnipiac University, *QU Online*, has been offering online graduate and undergraduate courses in various subjects for the past 4 years. I have taught in the CIS department at Quinnipiac University for the past 2 years. My background includes both aca-

demical teaching as well as non-academic (industry research) experience over the past 16 years.

In the Spring Semester of 2004, QU Online contacted me to explore the possibility of teaching the graduate course, *IT Project Management (CIS 690 DE)* in an online, distance education format. (Note that the "DE" in CIS 690 DE stands for "Distance Education"). I accepted the offer to teach the course. I had never taught any course in an online, distance education format until then. I believed that teaching CIS 690 DE during the summer semester 2004 would be a good opportunity for me to make an entry into, and learn more about, the rapidly growing pedagogical format of online education. I also hoped that actually teaching an online course would give me the opportunity to observe first hand, the advantages, disadvantages, weaknesses, strengths and opportunities of distance education.

3. DISTANCE EDUCATION: A BRIEF INTRODUCTION*

(* Most of this section and the next have been adapted from materials found in Quinnipiac University's QU Online website -- <http://www.quinnipiac.edu/x762.xml>)

According to the web site of QU Online, "**Distance education**, also known as e-learning or Web-delivered learning, provides students with the ability to take courses utilizing Internet technology. In this type of instruction, faculty and students are physically separated by distance but are technologically connected. Communication takes place via the Internet, and the classroom takes place within discussion groups and chat sessions. Syllabi, course material, academic hyperlinks, lesson plans, class discussion groups and grades are organized in a Web-based platform that enables students and faculty to communicate effectively."

According to the web site, the **benefits** to the student of distance education include the following:

1. **Convenience:** Students can work full time or part time while taking a course.
2. **Matching one's own schedule:** Students can have access to learning on their own schedule.
3. **Catching Up:** Students who have changed majors or who play varsity sports can use distance education courses to make up for lost time.

4. *Getting Ahead*: Students who want to speed up their coursework and graduate ahead of schedule can benefit from this form of learning.

4. RESPONSIBILITIES OF THE UNIVERSITY

It is generally understood that the University offering distance education courses makes every effort to maintain uninterrupted availability of information technology resources, including a stable environment on the World Wide Web for distance-learning courses, continuous e-mail communications with professors, and access to University departments. However, it is assumed that these technology resources may occasionally get interrupted or made temporarily unavailable due to extenuating causes. Usually, a University that offers distance education courses makes these disclaimers in their web sites. Other common disclaimers could include (but not be restricted to) the following: that the University shall not be responsible to refund any tuition or fees in the event of any of the above occurrence, or be liable for any consequential damages, and that instruction and/or course work that is interrupted, delayed, or lost as result of such occurrences can be completed through arrangements made directly with the professor(s) of the affected course.

5. RESPONSIBILITIES OF THE STUDENT

Distance Learning generally requires that the student be a self-motivated individual. In order to successfully participate in online course instruction, students need to be familiar with and use information technology resources. Students are typically required to have access to a computer and the Internet in order to participate in an online class.

In Quinnipiac University, QU Online students are issued Microsoft Outlook™ e-mail accounts, which are used as the primary method of communication between the student and the faculty member. Students are expected to familiarize themselves with their account and are required to check their e-mail accounts regularly. QU Online also requires students arm their computers with anti-virus software packages as well as take precautions when opening attachments from unknown sources.

QU Online students are issued a Blackboard™ Course Management System account to gain access to their online coursework. As with the e-mail account, students are responsible to learn to navigate their way through Blackboard and are expected to log on to their account regularly. In order to complete their online course(s), students are required to complete all of the coursework detailed by their professor(s) located in their Blackboard account to obtain a passing grade.

According to the QU online website, students need to designate adequate amount of time to do their coursework. The amount of hours depends on the length and subject of the course itself. The amount of work is consistent with a traditional on-campus course.

Distance education students must also meet certain basic prerequisites to take an online course before the start of the course -- they must have a working knowledge of office productivity applications such as Microsoft Office software applications (i.e. Excel, PowerPoint, and Word), possess strong reading and writing skills, and have the ability work well independently.

Each student is required to take an "assessment preview" test in order to be aware of his/her responsibilities with regards to the amount of work that would typically be required, and other responsibilities such as the amount of time taken to return emails from the instructor. For example, it is noted in the assessment preview that students should return Email (under normal circumstances) within 24 hours or less of receiving the Email during the Monday through Friday work week. It is also noted in the assessment preview that "for a 15 week, 3 credit, on-ground course the work load ratio is 3 to 1 (3 hours outside of class for each of the three 1 hours in class or approximately 12 hours)." The implication is that the time commitment for an online course will be more than an on-ground course if the term runs less than 15 weeks, and the student in an online course should be prepared to make a greater time commitment."

6. RESPONSIBILITY OF THE FACULTY

The responsibilities of the faculty include a high commitment to course design and delivery, prompt email replies to students (within 24 hours, Monday through Friday), and prompt evaluations and feedback.

Training the first-time distance educator

Typically, a first-time instructor at QU Online is required to participate in two QU Online training courses about six months prior to starting the course design process. The first course, "Designing and Developing an online course" consists of three modules: "Designing an online course," "Creating an online syllabus," and "Developing learning modules." The second course, "Teaching an online course" also consists of three modules: "Establishing course expectations," "Building a community," and "How to deal with special issues." The contents of these modules are fairly self-explanatory, and hence will not be elaborated here. The courses also include introduction to managing files, and

using the Blackboard CMS (Course Management System).

7. MANAGING THE CIS 690 DE PROJECT

The project team

Since the complete title of the course CIS 690 DE is *IT Project Management*, I decided to apply, wherever possible, project management concepts to the design, development and delivery of the course. Thus, I created a "project team" with myself as the part-time project manager, and two other part-time team members: a graduate assistant from the MS CIS program at Quinnipiac University, and a staff member from QU Online. QU Online also assigned one additional graduate assistant on a part-time basis, to perform some data management tasks such as uploading files, movie-clips, etc. to the server as and when required.

Project Management Knowledge areas

The Project Management Institute (www.PMI.org) lists eight "knowledge areas" in project management practice consisting of four "core" functions and four "facilitating" functions. They are:

Core Functions: Scope Management, Time Management, Cost Management and Quality Management

Facilitating Functions: HR Management, Communications Management, Risk Management and Procurement Management

For this project, I focused primarily on defining the project's scope, project quality and project procurement (two core functions and one facilitating function). My reasoning was simply that the other functions were not relevant to the project at hand, namely the design and delivery of a distance-delivered course in IT Project Management. In the following paragraphs, I will briefly describe functions that I focused on.

Project management textbooks define the **project scope** statement as a document that describes, in as much detail as possible, the work to be accomplished on the project. It typically provides a justification of the project, a brief description of the project's products, a summary of the project deliverables and a project management plan. The graduate student, QU Online staff member and I initially developed the project scope through a process of discussions, which yielded a more detailed **work breakdown structure**, as follows (Table 1).

Table 1: Work Breakdown Structure for CIS 690 DE

1. CIS 690 DE
a. Designing and Developing the online course
i. General design of the course
ii. Creating an online syllabus
iii. Developing learning modules
iv. Quality testing
b. Teaching the online course
i. Establishing course expectations
ii. Building a community
iii. Delivering the learning modules
iv. Conducting assessments
v. How to deal with special issues
c. Outcomes, feedback and lessons-learned

The above work breakdown structure (WBS) also gives the project's overall product and stage-by-stage deliverables, which were mostly in the form of detailed documents. With the exception of the actual delivery (item "1.b.iv" above), all the above deliverables were developed during the course of approximately 30, 4-to-5-hour days.

The course design process

The overall constructs of the course's design was discussed and decided by me and the graduate assistant. We developed a list of **issues and constraints** that we should keep in mind while designing the course. They are:

1. The student group would be a mix of experienced professionals as well as inexperienced, full-time students who may or may not have project management experience.
2. The students may or may not have extensive IT experience, which may affect the projects and computer assignments that each could do.
3. The students may or may not have experience in taking distance-delivered courses.
4. The students may have different levels of motivation. Some students may be highly motivated, whereas others may require constant urging, feedback and guidance.
5. The students may have other engagements in summer, and thus may not be able to meet on campus or use the campus library facilities.
6. Due to prior research and personal commitments, I (the instructor) could only offer the course for a maximum period of thirty days (inclusive of weekends and holidays).

7. The course would be developed and delivered using the Blackboard™ CMS software.

Keeping these constraints in mind, we arrived at the following “guiding precepts” for the course:

1. The course would be delivered completely online – no face-to-face meetings would be required.
2. The course would be completely asynchronous.
3. The course would primarily follow the prescribed textbook, and would require a thorough (self) reading of it. The textbook chosen was “Project Management: The Managerial Process (2nd Edition),” by Clifford F. Gray and Erik W. Larson, published by McGraw-Hill Irwin. This is a well known and popular book for teaching Project Management “on-the-ground,” and I had used it in the past to teach on-the-ground courses in Project Management.
4. We decided that the book was somewhat wordy and contained “heavy reading,” and therefore decided to supplement the textbook with “chapter lecture notes” prepared by me. Each lecture note was an average of four pages in length and gave a compressed view of what was contained in the actual chapters of the textbook.
5. We decided that all assignments would be from the textbook, and additionally from current topics that could be researched on the ‘Web.
6. There would be one long computer-based assignment that would be spread over several chapters and several parts. The students would be required to email the project files for each part at a pre-defined date and time.
7. There would be no group assignments. This decision was taken because it was felt that students’ schedules may not permit group meetings and that might add a further level of complexity to the course.
8. There would be several asynchronous “online group discussions.” The topics for the discussions would be selected from current events, current research, and video clips of specific well-known projects. Different “discussion boards” (DBs) would be set up for each of these discussions.
9. There would be a single discussion board that will run throughout the course, which would be for the students to post any questions or comments about the course material, due dates, etc.
10. The course would be split into 5 modules, with each module corresponding to ap-

proximately 6 days. Each module will cover several chapters from the textbook. In addition, each module will also address specific related issues

11. At the end of each module, each student would be required to take a quiz corresponding to each chapter in the module. Each quiz would be a **randomly generated online quiz** provided by the publisher of the textbook. The quiz would be open-book and could only be taken once.
12. The grading for the course would be based as follows: 40% for class discussions (on the various discussion boards), 40% for the course-long computer project, and 30% for the quizzes.

8. THE SYLLABUS

Working from these “guiding precepts” we developed a course syllabus. ***It is important to note that the syllabus for this distance-education course, while similar in many features to that of an on-the-ground course in project management, also differs in several areas:***

1. Both the online course and the on-the-ground course use the same text book and “chapter-lecture notes.” The on-the-ground version however also requires a supplemental book, SimProject (by Pinto and Parente – published by McGraw-Hill/Irwin). SimProject is a real-life Internet simulation of a project management scenario in which teams of students bid for resources from a common pool, based on individual resource costs and characteristics. They then develop a work breakdown structure, and assign resources to tasks. Weekly performance feedback is generated by the simulation software, which enables the participants to adjust, rework, reassign, remove or add additional resources. The instructor can add complexity by introducing new events and variables that could skew the performance of the simulation. While this is a very good tool to teach students the intricacies of project management, it was decided to exclude this module in the online course in order to avoid the need for teams.
2. The on-the-ground version has at least one or two guest lecturers – real life project managers with years of experience in the field – to give their perspective on where the field was heading. This feature was not possible in the online version.
3. The quizzes in the on-the-ground version were closed-book, closed-notes, whereas that was not the case in the online ver-

- sion.
4. There were more short, computer exercises/assignments in the on-the-ground version of the course.
 5. The students in the on-the-ground version were required to write an end-of-semester report and make a team presentation explaining every aspect of the team's performance of the entire simulation project (SimProject). This was, again, not the case in the online course.
 6. The online course required a lot more discussion board-based class discussions, whereas the on-the-ground version required in-class participation in discussions.
 7. In most cases, the on-the-ground version also required students (in pairs or individually) to review seminal books or articles in project management and present them in class.
 8. The course required that the students do projects using Project Management software, such as MS Project™. In the on-the-ground version, there was at least one or two sessions devoted to installing, teaching and demonstrating MS Project fundamentals. In the online version, however, it was decided to simply refer the students to an online tutorial in MS Project. The students were also required to install the student version of MS Project from the student CD by themselves.
 9. Automated student tracking: This is a feature that is available on the Blackboard CMS. By turning this feature on, the instructor can track to number of visits to any module, lecture or other learning object. This feature was turned on in the online course with a view to using it for assessment and class participation purposes, as well as to determine if the "chapter-lecture-notes" were useful to the online students.

9. AUTHOR'S REFLECTIONS # 1

The distinctly short duration of the online version of the CIS 690 course (5 weeks versus 15 weeks in an on-the-ground course) was clearly of concern to me. I was also concerned that the online students would not be doing any final report, presentation, or the simulation. Most importantly, the online students would not participate in groups or teams. I was worried if these would affect the learning outcomes of the course. However, I decided to go forward with the online syllabus in view of the constraints mentioned earlier.

In the following section we expand on the syllabus by looking in detail at the learning modules.

10. LEARNING MODULES

We developed five specific learning modules. They are as follows:

Table 2: Learning Modules for CIS 690 DE

Module 1: Project Management Overview - July 6 - July 11
Module 2: Project Definition and Planning - July 12 - July 18
Module 3: Managing Project Risks and Constraints - July 19 - July 26
Module 4: Soft Skills and Challenges - July 26 - Aug 1
Module 5: Project Review and International Factors - Aug 2 - Aug 5

We discuss Module 1 below.

Module 1: Project Management Overview

A student, upon following the link to Module 1, will be served the following page:

Table 3: Module 1 details

1	Expectations Students must complete this Expectations Agreement prior to beginning work in this course. The purpose of this agreement is to establish a common set of student and instructor performance standards to be followed throughout the course. This is a required assignment, meaning your answers will appear in your professor's gradebook. Please let your professor know if you have any questions or concerns.
2	CIS 690 - Module 1 Objectives and Tasks Click here to view , click to view as HTML or see more choices [DOC, 39Kb] The Objectives and Tasks document - posted in each module - describes exactly what tasks and assignments are to be done.
3	Chapter 1 Lecture Notes - Modern Project Management Click here to view , click to view as HTML or see more choices [DOC, 190Kb]

4	Chapter 2 Lecture Notes - Alignment of Projects with Organizational Strategy Click here to view , click to view as HTML or see more choices [DOC, 597Kb]
5	Chapter 3 Lecture Notes - Organization: Structure and Culture Click here to view , click to view as HTML or see more choices [DOC, 1054Kb]
6	Video Folder This folder contains the three videos for Module 1. Please view one of the three videos and answer the discussion questions listed in the "Module 1 Objectives and Tasks" document.
7	Chapter 1 Quiz Click on the quiz to begin.
8	Chapter 2 Quiz Click on the quiz to begin.
9	Chapter 3 Quiz Click on the quiz to begin.
10	Module 1 - Video Discussion Questions (Click here to go to the Discussion Board) After viewing one of the three videos post answers to the following questions: 1. Define what the project is...mission, goal, desired output, etc. 2. Identify the driving forces behind the project? Why was it going to be undertaken? What would happen if it failed? 3. Identify the project's stakeholders, customers, and suppliers. Who wanted it done? Who was going to benefit? Who needed to get involved/participate to get it done? 4. What risks were involved? Rank them by degree of risk. Was time the major one? Budget? Skilled resources? Raw materials? Know-how? 5. What factors contributed to the project's success? What came together to make it work? What could have been done better?
11	Module 1 - Web Research of Projects (Click here to go to the Discussion Board) Research on the web: 1 successful project and 1 failure. Post web links for each and provide your

reasoning behind why each ended up as they did. Also, explain what changes in project management could have been made to cause the failure to succeed.

12

Open Forum (Click here to go to the Discussion Board)
Use this discussion board to post any questions or comments about the course material, due dates, etc.

As can be seen from the above tables, Module 1's *objectives* mostly reflect the objectives of the assigned textbook chapters. Module 1's *tasks* include:

1. Reading the chapters, lecture notes, and other supplemental materials.
2. Viewing video clips from the student CD provided with the textbook as well as specially chosen videos stored in a server on campus and streamed to students upon request.
3. Self assessment, through practice quizzes provided at the end of the textbook chapters (not graded) as well as the on-line quizzes for each chapter (graded).
4. Research and participation: Answering questions posed from the videos, as well as other chapter-related questions posed.
5. Note that one of the tasks in this module was to familiarize oneself with MS Project software. We had decided not to specifically "teach" the software to the students, and instead required the students to self-learn the software by studying an online tutorial.

12. AUTHOR'S REFLECTIONS # 2

At this point, two weeks from the start of the course, the Modules were almost complete, the learning modules, objectives and tasks were already decided and entered into the Blackboard CMS. The online quizzes were set up. The graduate assistant and worked with the QU Online staff to procure the videos required for Module 1.

The first video (The Golden Gate Bridge Project) was already loaded on the server. However, the quality of the video stream was not good, and we

were working at that time with the QU Online staff to improve the quality. The second video was not available yet, and the QU Library Acquisitions Department was sent a request to purchase the video as soon as possible.

Then QU Online decided to change the server in which the course and the videos were stored as part of an upgrade process. This caused some minor complications, as some of the course materials required to be reloaded and minor alterations required to be made the modules' hypertext links

I still felt comfortable with the course in general, and the overall progress in designing and developing the course. We did not have time to do a complete quality check and usability test of each element of the course, but I did not think that it was necessary. In addition, the course was to be made "available" to the students one week before the actual start of the course, and I therefore felt that there would not be enough time to complete all the testing, even if we were to start the process.

13. AND OFF WE GO! THE COURSE BEGINS

The course officially began on July 6, 2004. There were twenty one registered students in the class. Of these, eleven (11) were from the MS-CIS program, eight (8) were from the MBA program, and two (2) were "undecided" students. Since this was my first ever experience in teaching a distance education course, I decided to keep the class size reasonably small, and did not add any more students even though there were many last-minute requests.

Between July 6 and July 11, the students had access only to Module 1. The other modules were made visible to the students at the appropriate date at which each module began (please see Table 2 for the actual dates).

The online activity on the course began to pick up on July 7th. Some students started taking the online quizzes and started posting on the discussion boards. It was interesting to note that in addition to answering specific questions posted on the appropriate DBs, students also started using the "open forum" DB. This DB was meant to provide feedback about the course, the quizzes and assignments, but the students used it to discuss additional topics that were related to the textbook chapters and to their assignments.

This tenor continued throughout the course. The students consistently out-performed my expectations in the depth and breadth of their postings in class discussions. The discussions were often lively, and there were several exchanges, argu-

ments and counter arguments.

At the end of the first module, there were, however, some students who had not participated in the discussions. I sent out an email to the class reminding the class that class participation was very important, and that a substantial portion of the grades awarded would be based on the students' postings in the DBs. This succeeded in "bringing in" those students who had remained silent observers until then.

14. PROBLEMS (1)

The first problems started surfacing towards the half-way point (i.e. three days after the start of the course) of Module 1.

1. The first problem related to the randomly generated, online quizzes. The quizzes did not explain the results or provide the correct answers to questions when they were marked as wrong. This was a simple problem to solve by changing some of the quiz settings on Blackboard. *However, I realized that the problem was the result lack of inadequate quality-testing and usability-testing, which we had avoided during course preparation. My earlier over-confidence during the design stage was coming back to haunt me!*
2. Students working on Module 1 quizzes started noticing that the quizzes were becoming progressively difficult as they moved from chapter one upwards. This was by itself not a problem. However, in many cases, students started complaining about what they called "trick questions" – questions that could potentially have more than one meaning and could be perceived to mean different things until different subjective conditions. *In most cases, out of fairness, I agreed to look into the specific complaints of individual students. This entailed that I open up the student's quiz in question, look at the student's answer, and compare that with the "correct" answer supplied by the publisher's software. In some cases I agreed with the software, and in some other cases I agreed with the student's argument. The student could, in some cases, be deemed "partially correct." For each of these cases, I then sent individual emails to the students with their corrected grades (where warranted) and detailed explanations of my decisions.*
3. In some quizzes, the same question appeared more than once. In other cases, two different questions and their associated "correct" answers seem to contradict

themselves. In some cases, clearly correct answers were marked as wrong. *In these cases, I had to go into the quiz on Blackboard, and, in almost all cases, award grades favoring the student.*

What went wrong?

Some of the things that went wrong in the above situations can be categorized as follows:

- External technical problems
- Lack of quality checking on my part
- Lack of usability testing on my part
- Poor project risk management

15. PROBLEMS (2)

4. By the end of the second week into the course, the class discussions were beginning to overwhelm me. There were more than forty or fifty postings each day! Timely, individual feedback was becoming a problem.
5. It was also becoming very clear that I had not developed a good plan to evaluate and grade the discussions. Since class discussions amounted to 40% of the total grades, this was an important issue.
6. In some cases, a particular posting by a student had to be discussed in detail with the student in evaluating the student's grade for class participation, all via email. In some cases, students contested the grades I had awarded them for a particular module's class discussion, and these had to be discussed via telephone.
7. In some cases I could not respond to students' queries in time. In some cases I completely missed responding to email queries.
8. I was spending over 5 hours each day on this course alone, and this was getting in the way of my research and personal commitments. (After all, it was summer, and summer was supposed to be a time for quite contemplation, research and personal life issues!)

What went wrong?

- From the point of view of PM practice, my management of time was poor. I had not considered or anticipated in any realistic fashion the amount of continuous, daily time periods that would be required to address routine problems arising out of the course. Upon reflection, this was perhaps due to my lack of experience in distance education.
- There was clearly inadequate planning on

how to conduct assessments of discussion board postings. Considering the heavy weight for this, I should have given much more thought on how to evaluate the content, relevance and participation on the discussion boards.

- Some of my expectations regarding the nature of the online course and the requisite time commitment were unrealistic.

16. PROBLEMS (3)

9. The project management software "MS Project™" was required to be used in working on one of the projects, titled "Zuma." Zuma is a running case provided in the textbook, and focuses on a new product development project – a scooter code-named "Zuma." Doing the project required that the students have a familiarity with MS Project, and that the students install an academic version of the software on their computers. The MS Project installation caused some problems to a few students, which had to be followed up on an individual basis. Some students were hobbled by their unfamiliarity to MS Project. Even though I had provided an online site offering tutorials in MS Project, I felt that students would have benefited much more if I had been able to (or had planned) a live tutorial or demonstration.

What went wrong?

- I categorize the above as a "Technical feasibility" problem that I had not addressed earlier during the planning and design stage.

17. PROBLEMS (4)

10. As the modules progressed in rapid succession, the Zuma projects could not be graded in time. Many questions regarding Zuma project had to be answered via email. Zuma feedback was delayed for the first part, which affected the second part of the Zuma project.
11. I was forced to cancel several Zuma assignment modules in the latter half of the course in order to make up for not grading earlier modules on time, and not giving timely feedback. It was taking me 4 to five days to grade a particular module, by which time the feedback was getting useless, as each module was only five to six days on average. In my view, canceling some Zuma projects amounted to weakening the level of the graduate course.

What went wrong?

- Lack of time, and a clear over-allocation of available resources (which was me, the instructor). I had not considered requesting additional resources to help me deliver the course

18. PROBLEMS (5)

12. At the beginning of the third module, the mail client on my laptop computer (MS Outlook™) started causing problems. I had to spend 0.5 day with the Quinnipiac University computer help desk to get it analyzed. At the end it was decided that my laptop had to be replaced and a new laptop issued. This resulted in a waste of 1.5 days
13. One quiz in the last module disappeared (i.e., became unavailable to a student) before the deadline. I had to interact with QU Online regarding that, and finally ended up awarding full points to the student, as it was too late to resolve the issue before the course officially concluded.

What went wrong?

- Both problems above were unanticipated, and to an extent, cannot be anticipated. However, the problems fall under the category of “unanticipated problems” which are likely to emerge in any well-planned project. In such situations, there should exist contingency plans that could be used to work around the problems. I had not developed any contingency plans that pertained to these issues.

19. EVALUATING THE COURSE**What went right?**

The course ended on August 5th. Much to my surprise, I received very good evaluations for the course, with several students saying that this was one of their best online courses at Quinnipiac. I was clearly very surprised by that, and upon looking at the evaluations in detail, some observations are worth noting.

- All students seemed to think that I was

very responsive in interacting with them in a timely fashion.

- The students appreciated the fact that I cancelled some important (and difficult) project segments because I could not give them feedback in time. (I however wonder if this was a good thing?)
- A very large majority of the students seemed to like the online format very much. Many seemed to leave their inhibitions behind, and participated very freely in all the discussion boards. The quality of the postings was very superior compared to what I have seen in similar courses offered on-the-ground. The students hardly needed any urging to participate, except right at the beginning of the course. They uniformly contributed their experiences, and brought other news items and experiential facts relevant to the discussion at hand. It was a very impressive display of what could be accomplished in an online setting.
- They loved the depth quality of the online discussions. The students uniformly liked the assignments and the discussion topics, and felt that the topics were very realistic and current. Because all students participated very well, the online module tracking system provided by Blackboard was rendered unnecessary.
- While a lot of them appreciated the fact that the course was very compact, in the sense that it lasted only 4 ½ weeks, a majority seemed to think that the appropriate course length for such a course should be eight weeks.

20. REFLECTIONS, LESSONS LEARNED AND CONCLUSION**Reflections**

- From a practical point of view, the course was a very good success. The students liked it. However, from a **Project Management practice** point of view, the project's success could be questioned. Several components and tasks could not be completed as originally planned. Several re-adjustments had to be made. The reasons could be generally attributed to instructor inexperience, and at least to some extent, to some project management deficiencies such as:
 - Lax attention paid to critical components of the project during the planning stage,

- Failure to anticipate problems and planning for contingencies,
 - Inadequate time management,
 - Inadequate quality checking and usability testing.
- Project Management practice plays a very important role in all aspects of work and personal life. In this paper I used my own experience to show how easily many practitioners and experts can fall into the easy trap of ignoring some elements of PM practice, which may result in sub-optimal results. I hope to use my experience as a case study in Project Management and actually hope to include in a future class.
 - Even though the students liked the course and gave the course and the instructor high ratings, the reasons for this could be facts unrelated to course quality (such as the reduction in course work explained earlier), depth and rigor of the type expected in a graduate course.
 - From a **pedagogical point of view**, a question that is of great concern to me is: *"Is the learning derived from 5 weeks of rapid learning online superior to that derived from 15 weeks in an on-the-ground setting?"* It occurs to me that it is self-evident that more time spent on learning would give a richness of depth and experience which would just not occur in a compressed, online, 5-week setting. In addition, the compressed, online format does not allow all the pedagogical tools that one would otherwise bring to bear in an on-the-ground course. My conversations with other faculty who are experienced in offering online courses leads me to conclude that it is a well understood fact that online learning can never really equal on-the-ground learning, despite all its conveniences and current popularity.
 - Another question is whether IT Project Management can be successfully taught using the online format. My opinion is that it cannot be taught as well as in the "on-the-ground" format because IT project Management is a very specialized course that requires knowledge of several tools and techniques, which cannot be taught in a strict online format.

Lessons learned

The lessons learned from my experience are rather

self evident. However, the main lessons are:

- Determine whether the content of the course in question will fit well into an online format. The more the tools and techniques required to be learnt in the course, the less likely it will be that the course will be a success.
- The importance of prior planning in designing an online graduate course
- The importance of following *all* elements of proper Project Management practice. In my opinion, effective design and delivery of a course is definitely a project.
- Assume that you will actually spend more time in every element of the design and delivery of the online course than in an on-the-ground course.
- Never try to compress a 15-week on-the-ground course into 5 weeks in an online course. That simply cannot be done, unless you are willing to compromise on the quality of your course.
- Be prepared for unforeseen contingencies.
- Be very flexible.

Conclusion

While one can argue about the merits and demerits of distance education, it is a fact that the online, distance education format is here to stay. I believe that my experience will only help me in understanding the format better, and use my experience to improve my online offerings in the future.

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