Project Management in Real Time: A Service-Learning Project

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Abstract
This article describes a service-learning assignment for a project management course. It is designed to facilitate hands-on student learning of both the technical and the interpersonal aspects of project management, and it involves student engagement with real customers and real stakeholders in the creation of real events with real outcomes. As such, it helps students internalize project management principles and value project management tools. Student teams design and implement plans for events intended to result in significant contributions in support of various charitable organizations. They create the planning and execution documents required of project management teams. The article describes the assignment and its results and discusses some cautions and alternatives.

Keywords
project management; service learning; experiential learning; agile project management; fund-raising projects

There is demand today for people who can get the right things done on time. This is the essence of effective project management. Once a course only found in engineering schools, project management is now featured prominently in business school curricula. Global competition, corporate downsizing, emerging markets, and compression of product life cycles have made effective project management a key competitive advantage in most industries. Whether in MBA programs or as an undergraduate management elective, more and more students are being taught project management concepts and tools (Arbaugh, 2007).

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A project is a temporary endeavor undertaken to create a unique product, service, or result (Project Management Institute, 2004). Beginning with elementary school classroom assignments, teachers have been using projects to teach a wide range of subjects and skills. In business schools, project-based learning has become an integral part of a student’s educational experience. Instructors routinely assign group presentations and written assignments in disciplines ranging from accounting to marketing and in the form of case analyses and research on business topics. Management education has a rich tradition of using group projects as experiential learning vehicles to develop group process and leadership skills (e.g., Drexler & Larson, 1986; Ettington & Camp, 2002; Manning & Schmidt, 1995; O’Connor & Yballe, 2007).

Service learning enhances the experiential learning platform by providing students the opportunity to go “beyond textbooks and classrooms and address real-life issues and challenges” (Lester, Tomkovick, Wells, Flunker, & Kickul, 2005, p. 278). Often, these projects have the dual goals of developing critical leadership and teamwork skills as well as promoting citizenship and social responsibility. Kenworthy-U’ren and Peterson (2005, p. 272) define service learning as “creating opportunities for students to apply theory they learn in the classroom to real-world problems and real-world needs.”

The intent of this article is to share a project-based experiential service-learning assignment that we use to teach project management tools and techniques. It also serves to expose others who assign projects to how they can incorporate project management tools into the execution of their assignments.

**Project Management**

Project management is the application of modern management techniques and systems to the execution of a project from start to finish to achieve predetermined objectives of scope, quality, time, and cost. Projects range from the big to the small and include activities such as constructing a bridge, designing a new car, creating a custom database, and orchestrating a wedding. The role of a project manager has emerged as a certifiable profession with an extensive body of knowledge.

Traditional project management methodology is based on design/build or plan/do kinds of projects. Within this context, project management consists of four distinct phases, which correspond with the project life cycle:

1. **Defining stage**: The initial goal and technical specifications of the project are identified. The scope of the work is determined, necessary resources (people, money, equipment) are identified, and important organizational contributors or stakeholders sign on.
2. **Planning stage:** Plans are developed to determine what the project will entail—who will do what, what the schedule of activities should be, how potential risks will be handled, how information will be communicated, and what the budget will be.

3. **Executing stage:** The actual “work” of the project is performed. Time, cost, and specification measures are used for control. Is the project on schedule, within budget, and meeting specifications? What revisions/changes are necessary?

4. **Termination stage:** The completed project is transferred to the customer, its resources reassigned, and the project is formally closed out (Pinto, 2007).

In recent years, less plan-driven methodologies have emerged under the banner of Agile Project Management (Highsmith, 2004; Larman, 2004; Schwaber, 2004). These methodologies emphasize flexibility, close collaboration with customers, and self-organized teams. They are ideally suited for software and high-tech projects in which the end product is not well defined and evolves over time. Agile methods tend to break projects into a series of short-term miniprojects in which project execution becomes iterative, incremental, and refined as the project progresses. Often, agile methods are used during the exploratory phase of a project, and traditional project management methods are applied once the project requirements have been firmly established.

In practice, project management combines sophisticated quantitative tools with quintessential people skills. Scope definition, work breakdown structures, critical path scheduling, time-phased budgeting, resource leveling, and earned value exemplify the quantitative side of project management. Stakeholder management, leadership, problem solving, negotiations, and issue selling are some of the many behavioral skills needed to complete projects. As a whole, project management is a truly sociotechnical discipline.

**Service Learning**

Service learning has developed into a key learning tool throughout the educational system, including projects in elementary and secondary schools (e.g., Terry, 2007) and in higher education (Butin, 2005). Such experiences have also become popular in management education.

Service learning combines the value of experiential learning with community service opportunities. It creates links between the skills learned in the classroom and real-life applications, and it develops partnerships with various nonprofit agencies to help address real community needs. The community benefits by having these needs addressed, and the student benefits by learning.
Citing the Porter and McKibbin (1988) report, Zlotkowski (1996) claimed that traditional business education does not do a good job of connecting students to the external environment of business. Service learning fills this void. Faculty can help students develop their technical skills while simultaneously helping them develop greater interpersonal, intercultural, and ethical sensitivity (Zlotkowski, 1996). Zlotkowski characterized service learning as a specialized form of internship where students work with a setting established primarily to meet some social or community need.

**Learning Project Management in a Service-Learning Context**

Historically, project management courses have emphasized the more technical, quantitative side of managing projects. Although this imbalance is understandable given the difficulty in mastering some of the technical tools, too much emphasis on the technical aspects creates a distorted picture. Project management is portrayed as a fairly rational, step-by-step process resulting from detailed planning. Although planning no doubt is a critical success factor, execution provides the real test of planning effectiveness. There is often a disconnect between the rather orderly world of planning and the much messier world of implementation. After all, plans and tools do not complete projects: people do!

The authors confess that until recently planning methodologies dominated their instruction. Students created elaborate project plans for hypothetical projects, which taught them how to define the scope of a project, create a work breakdown structure, obtain time and cost estimates, create a project schedule, assign resources, identify the critical path, and develop a baseline budget plan. We struggled with the fact that these plans would never be executed and that the key implementation dynamic was missing.

We searched the project management education literature for ideas. Walker (2004) used the novel idea of planning a jewelry heist to illustrate scheduling techniques. Others have used in-class experiential learning exercises such as building a model skyscraper (Cook & Olson, 2006) or negotiating contracts (Adler, 2005) to reinforce project management principles. But many of these activities lack the reality-based experience we were looking for. Kloppenborg and Baucus (2004) best addressed our concerns by having their project management students work on service projects for the local United Way organization. But they stop at the planning phase and do not have students implement the plan.
Then, one day we had a discussion with a colleague about using service learning through charity fund-raising as a vehicle for teaching project management tools and principles. Continued discussion suggested that such fund-raising assignments could provide a useful hands-on context for teaching a range of specific project management tools. Furthermore, the colleague allayed fears that such an assignment might not be doable within a tight 10-week quarter course.

Thus, our objective became one of designing a project management course assignment that would serve several purposes. The assignment would be real, rather than contrived, and would require students to address both aspects of project management: the technical and the human. It would be grounded in experiential learning theory (Kolb, 1976, 1984) by having students actually complete a meaningful project and reflect on their experience. Students would use project management tools discussed in class and experience what it is like to manage a real project.

One learning outcome for the project management course was thus developed: Students who successfully complete the project management course use project management concepts and tools in the design and execution of a real-life project. Additional learning outcomes for the course include (a) expand the student’s basic understanding of the importance of work breakdown structures and networks to planning, scheduling, and controlling projects; (b) provide the student with a framework for a complete computer-based information system for managing projects; (c) create an awareness of the importance of social capital and the need to manage project stakeholders; and (d) provide experience in using the concepts, techniques, and decision tools available to manage projects.

The first learning outcome is met through an intensive fund-raising assignment that has the following features: (a) the project is real and has real outcomes, (b) students work as a new team and deal with the human issues they experience, (c) students have a real customer and stakeholders who can influence what they do, (d) students use the technical project management tools and create real documentation of their work, and (e) the project creates a potential resume building experience.

The Project Management Course and the Service-Learning Project

Project management is taught as a senior elective for both management and management information systems students. Prerequisite courses to the
project management course are operations management and organizational behavior. The former provides the technical foundations for the project management course, whereas the latter provides the behavioral foundations for working effectively as a team member. The organizational behavior course is also taught experientially. Thus, the project management course builds on the skill sets learned in the prerequisite courses.

Typically, 5 to 6 sections of project management are offered each year with class sizes ranging from 24 to 45. The course meets twice a week in 2-hour blocks. We use Gray and Larson’s *Project Management: The Managerial Process* (2008) as the textbook for the course, but this exercise should work with any project management textbook. A pattern is established during the second class session, in which the first half of most classes is devoted to traditional teaching of project management methods and concepts through lecture, exercises, and cases and the second half devoted to the fund-raising project.

**Setting the Stage**

Students are told that this class will operate like a real project organization under the banner of the Project Management Foundation (PMF). The goals of PMF are to

1. Create an opportunity to learn and practice project management
2. Raise money for a worthy cause

The students are told that the PMF will simulate a matrix environment in which students work part-time on their project and need to balance the demands of project work with their other school or work responsibilities. The PMF works with three designated charitable organizations, but groups may submit to the instructor for approval an alternative beneficiary organization as long as it is nonprofit, nondenominational, registered, and has an established efficiency record. We rely on the ratings provided by www.charitynavigator.org to assess the performance of prospective charities whenever possible. Other potentially helpful Web sites are listed at the end of the article.

To introduce the assignment and create a sense of organizational memory, students, individually, are required to review project audits from prior terms, which are posted on the course Web page. Project audits are a major tool used in industry to assess project success and improve future performance (Gray & Larson, 2008; Nicholas & Steyn, 2008). They are formal reports that
include project classification, performance assessment, recommendations, and lessons learned. Reading these reports gives students a sense of the challenges faced by past students and allows them to consider some of the constraints that have real effects on project success. Students are required to write a lessons-learned memo based on this review of the past project audits (see Appendix A).

The PMF portion of the second class is devoted to a class discussion of the memo assignment with special focus on what makes a project successful and what are the lessons to be learned. Themes that typically emerge from these discussions include the danger of procrastination, the importance of picking a project that would be fun to do, and the need to test critical assumptions as soon as possible. Time is reserved for the class to engage in creative brainstorming of potential fund-raising projects. Students are asked to bring at least one fund-raising project idea to the next class.

Team Formation

Most of the third class session is devoted to team formation. Each student briefly describes his or her project idea, which is openly critiqued in terms of three questions: What will be learned about project management? Will the project earn money? and Can it be accomplished within the class deadline? Ideas are posted on the board and a straw vote is taken as to who would volunteer to work on a given project. Project ideas that receive little or no support are eliminated.

The class then engages in what one colleague describes as a form of speed dating in which students have 90 seconds to interview each other to help decide whom they would like to work with on a project. Once completed, we tell the students that the class needs to form project teams of 5 to 6 members. We designate different parts of the room as meeting places where students can congregate if they want to work on a specific project. Students are free to move from one group to another until they form groups of 5 to 6 members. Invariably, some groups try to exceed the limit, and we insist that this is not acceptable. Other groups have fewer than five members, and they have to openly recruit nonaligned students. By the end of the class period, the requisite number of teams is formed, and each team has a tentative idea of what kind of project it will pursue.

A PMF Council is created, which includes one member from each team. The council is responsible for evaluating and approving team proposals. Once proposals are approved, the council operates as a change management board, which approves significant changes in the scope and objectives of the
It was thought that creating a council of students would get the class as a whole to take more ownership in the projects and that the council, as a peer group, would serve to maintain high standards for the individual projects.

**Project Deliverables**

One of our biggest fears was that this assignment would become a labor-intensive activity in which we would have to coach each team through each phase of project life cycle to completion. To avoid this situation and to reinforce usage of project management tools, the process is managed as it would be in real life: through a series of deliverables (see Figure 1). *Deliverable* is a project management term for a major product or result that must be completed to finish a project. We use these deliverables to manage the process and demonstrate project management techniques.

*Project proposals.* Teams submit a one-page proposal in response to a request for proposal (Appendix B). Students are told that all projects much...
comply with the following Go/No-Go requirements: be legal, be safe, not embarrass the instructor, and be doable within the specified time period. Following a brief presentation, the entire class critiques each proposal focusing on the objectives and critical Go/No-Go questions.

To reinforce the use of multicriteria mission-driven project selection systems, each proposal is evaluated by the PMF Council in terms of its earning potential and its project management learning potential. Earning potential is rated in intervals of 500, beginning with a score of 1 for earning at least $500, 2 for earning at least $1,000, and so forth. We provide the students with the following factors that are likely to enhance learning: novelty of project, role differentiation, task complexity, and stakeholder management; but ultimately they rate learning potential on a scale from 1 to 5. The PMF Council decides whether to approve the proposal, and each team is given $100 (from the instructors in this case) as seed money to be reimbursed by the funds generated by the project.

Once approved, students are encouraged to focus early on critical Go/No-Go decisions that affect the viability of projects. For example, one team had to change projects once it discovered that the National Collegiate Athletic Association regulations prohibit the baseball team from sponsoring a fund-raising activity during a sanctioned game. In such cases, teams have to submit new proposals for approval.

**Implementation plan.** Teams are given roughly 1 week to generate an implementation plan. In lectures, students are introduced to the agile planning technique euphemistically called rolling wave. Rolling wave is an iterative planning approach in which instead of developing a detailed plan from beginning to end, project work is detailed in chunks, one step at a time. It is used on exploratory projects (i.e., software and new product developments efforts) in which the final result is not completely known. Teams submit a milestone schedule and a detailed responsibility matrix for only the first week of the project (see Appendix C). The milestone schedule sets targets for each major phase of the project, whereas the responsibility matrix details specific tasks to be done by team members. Teams are also expected to name their project and use the name in all subsequent documents and discussions.

**Risk management plan.** In class, students engage in the first three steps of the risk management process: identification, assessment, and response (Gray & Larson, 2008). Teams brainstorm potential risks: What could go wrong on their project? Here the focus is not on consequences but underlying causal events. For example, a common consequence is low attendance at a planned event; the causes may be conflicting events, high admission price, ineffective promotion, and so on. Risks are then assessed in terms of probability and
impact and are sorted by significance based on multiplication of those two factors. The teams are told to take the top two to three risks and develop an appropriate risk response: transfer, avoid, accept, share, or mitigate (Project Management Institute, 2004). Most responses involve mitigating, which entails taking preemptive action that will either reduce the likelihood the event will occur and/or affect the project. Teams report their response for class discussion. Finally, teams develop contingency plans in case the risk occurs, including identifiable triggers that would signal initiation of the contingency plan.

Based on the class work, teams submit a formal risk management plan for evaluation (Appendix D). A portion of the next class is devoted to reviewing risk management plans, learning from each other, and making appropriate revisions.

Status reports. At roughly the halfway point for the project, teams submit a brief status report (Appendix E) to the instructor.

Individual class time is scheduled with each group to review current status, identify key tasks that need to be done, and engage in problem solving. These meetings provide an opportunity for the instructor to critically evaluate progress and assess how well the group is working. In cases where the team seems to be sputtering, we exert some control by establishing deadlines for specific tasks. Teams, as needed, also submit project changes to the council for approval.

From that point on, at least once a week, about 20 to 30 minutes is devoted to having each team make a progress report to the class.

The day of the event. Whenever possible, we make a point to attend each event even for a short period of time. For example, one Friday night, one of the authors lost $20 at a poker tournament, endured a heavy metal rock concert, donated goods to an electronic auction, and attended a multisport tournament. Students appreciate the attention, and there is no substitute for direct observation.

Project completion presentation. During the last week of the term, each team makes an in-class presentation (see Appendix F) summarizing the results of their project. Students report how much money they earned, the obstacles they dealt with, and what they learned about project management. There is genuine excitement in the air as groups proudly report how much they earned and how they overcame obstacles to complete their projects.

Postproject Web audit. The final deliverable is a project audit (Appendix G) that is to be posted on the course Web site. This assignment coincides nicely with a discussion of project closure. By this time the excitement of the project is beginning to wear off and energy—just like on a real project—is...
beginning to ebb. Students experience how hard it is sometimes to close out a project.

Note that students are not only asked to give advice to future teams doing similar projects but also asked to make recommendations on how to improve the overall operation of PMF. This requirement exemplifies the spirit of continuous improvement and has led to significant changes including increasing the grade value of the assignment, adding weekly status report meetings at the end of classes, and prohibiting the use of direct donations.

**Evaluation**

The fund-raising project is worth 40% of the course grade: The six project deliverables are worth a total of 12%, whereas the remaining 28% is devoted to project success. The remaining 60% of the course grade is based on two exams (45%) and a MS Project software assignment (15%).

A simple grading scheme is used for the deliverables: fail, pass, or honors. Honors are reserved for truly exceptional submissions that greatly exceeded expectations and garner bonus points. Teams that receive a failing grade have 48 hours to resubmit an assignment to regain 85% credit for that deliverable. Because of time constraints neither the in-class presentation nor the Web project audit assignments have a resubmission opportunity.

Overall project success is based on how much money was raised and how much the team learned about project management from the experience. Team members submit a private peer assessment of each other’s performance, which is used at the discretion of the instructor to vary the final credit for each student on the project. Most students receive the same score unless there is a clear consensus that someone deserves more or less.

We have found that it is fairly easy to discriminate among poor, good, and exceptional project performance. When teams make their presentation, it is quite transparent as to how well each team performed. Poor performing groups are so shamed by the performance and enthusiasm of the more successful teams that they are relieved to simply get a passing grade on the assignment.

To create even deeper learning derived from the service-learning project, part of a student’s final exam includes a take-home essay question (see Appendix H) that requires further reflection on their experience. Students are given the opportunity to reflect more deeply on what worked well and poorly on their project. Sometimes students are more willing to address privately their concerns and their interactions with their peers that affected the project’s success. This exercise is particularly useful for students whose teams struggled to perform.
Observed Results of Fund-Raising Project

We have found this service-learning project to be a powerful assignment. Students have to develop, plan, implement, and close out a significant project within a specified time. They experience firsthand each of the major challenges to managing projects discussed during the first week of class:

1. They have to create a temporary organization that did not previously exist to complete the project.
2. They have to manage a diverse set of stakeholders for the project to be successful.
3. They have more responsibility than authority to complete the project.
4. They have to manage the part-time involvement of their team and others.
5. They have to manage uncertainty as they progress from an abstract idea to actual implementation.
6. They have to manage the entire project life cycle from idea creation to closure and dissolving the team.
7. They have to rely on the judgment of others who have superior expertise and knowledge.

Students learn how to apply project management tools to manage these challenges. They appreciate the importance of a well-defined project scope and at the same time the need to revise it when circumstances dictate it. They experience the value of creating and updating responsibility matrices to allocate work and hold teammates accountable. They see how a systematic approach to risk management can reduce the chances of failure and the importance of contingency planning in advance. They recognize the value of periodic status briefings to keep the project on course and prevent problems from escalating.

Feedback, in general, has been very positive:

Simply, [this] has been one of most informative classes I have ever taken. The hands-on experience coupled with in-class lectures created a very intense, full immersion, learning environment.

I’ve done fund-raising work before, but this was the first time I looked at it from a project management perspective. Working through the different phases of the (project) life cycle brought to life many key concepts in the book. We experienced scope creep, mitigated risks before they could happen, managed our critical path.
Negative feedback, though much rarer, tends to focus on time commitment and the perceived disconnect between event management and other kinds of projects:

The project took on a life of its own, and I really struggled in my other classes.

I don’t see how putting on a bowling tournament has anything to do with creating new software or building databases.

To date, projects have raised as little as $200 and as much as $2,500, with an average return of $1,000 to nonprofit organizations. Although Texas Hold’Em Poker tournaments are the most popular event, projects have included ballroom dancing, local American Idol competition, Internet garage sales, music concerts, a bowling tournament, haunted house, and a computer repair service. Perhaps the most novel project was *An Evening with Dr. Sex* in which a popular health professor dispelled myths and taboos about human sexuality.

The assignment does an excellent job of bringing home the importance of managing stakeholders and social capital (Brookes, Morton, Dainty, & Burns, 2006; Dinsmore & Cabanis-Brewin, 2006; Pinto, 2007). Students realize the significance of using the existing social capital they already have, whether it consists of connections to a band to play at a concert or access to audiences through personal connections to the campus Greek System. Some students who have connections to student government or to campus administrators can also help their peers connect with people whose goodwill will facilitate their ability to successfully execute their project. This activity demonstrates firsthand how relationships developed in informal organizations can facilitate project success in the real business world.

Working with various constituencies sometimes tests students’ patience as they experience resistance and different sets of priorities firsthand. Students soon realize that social capital is essential to garner collaboration. They learn how to merge their interests with those others and cultivate friendships. This important message dominates the lessons-learned section of the project audits:

Never underestimate the power of social capital. It gets rid of impediments much quicker than going up the chain of command.

People do not like surprises, and one of the keys to building relationships is keeping them informed and looking out for their interests.
Build relationships before you need them. It is much easier to say no to someone you don’t know than it is to someone you do know.

The assignment does a good job of illustrating the value of conducting postproject audits, which is not an industry norm. Not only do students learn by reviewing their own experience, but the audits also provide useful information to future generations of project teams. For example, one group applied the lessons learned and recommendations from an initial Halo video game tournament to more than double the amount raised when they orchestrated a second video tournament. This experience brings home the importance of organizational learning.

The assignment also provides opportunities to explore deeper, more complex issues. For example, students naturally assume that whoever came up with the project idea should be the project leader. Although sometimes this works out, many times they realize, unfortunately after the fact, that the skill set and personality of a project champion does not always fit the duties and responsibilities of a project manager.

Students report that the assignment has given them a competitive advantage in the job marketplace. Students often list their fund-raising experience in their resume. For example, one student stated that he was a member of a team that effectively used project management methodologies to implement a bowling tournament that raised more than $1,400 for the Smile Train charity. Others cite their experience in job interviews when they are asked to describe a situation in which they practiced good leadership skills or worked on something they were proud of.

The assignment has generated a lot of positive press on campus and in the local community. Projects have been featured prominently in the student newspaper and local news. In addition, our dean reports very positive feedback from alumni when the projects are highlighted in college promotional material.

Finally, for many students this is their first taste of charity work, and it kindles a commitment to making a difference in the lives of others. As one student put it, “I never realized I could have so much fun doing something that helped others.”

**Some Cautions**

This assignment provides students with hands-on exposure to managing risks. Liability is no less important in this assignment than it is for other operational projects. For example, the first time this assignment was used, one team organized a rock concert in which alcohol was served on campus.
We are a public institution and our state’s administrative rules prohibit students from organizing fund-raising events that involve alcohol on campus. In addition, because the fund-raising events are associated with the university—especially because it is an assignment required for earning academic credit—the university itself has some liabilities associated with this assignment. These liabilities range from whether students are paying project bills to making restitution for a sound system that might have been damaged. The vendors do not always disassociate the university from the student team.

Fortunately, the university risk management officer is a proponent of experiential learning. She now makes a presentation on associated risks to each class during the idea generation phase of the project. Students learn what the risks are and how to protect against them. As a result, instead of seeing university policies as unnecessary red-tape, students learn to appreciate the value of identifying and preparing for such risk issues.

Students can be overly aggressive in pushing their projects. We have received some less than flattering e-mails from university officials that complained about students who would not take “no” for an answer. Guerilla marketing tactics can get out of hand and offend people. We have found that early on we need to establish that the instructor is the “project sponsor” and that the cardinal rule in project management is that you should never embarrass or make your sponsor look bad.

Because the teams consisted almost exclusively of MIS and management students, marketing generally was not a team strength. In fact, the mantra after the first class was “If you build it, they will not necessarily come.” Subsequent classes inferred that the solution was more marketing (i.e., increase advertising via flyers and newspaper ads) when in fact it would have been better to conduct market testing to see if there was sufficient interest in the activity. As one older-than-average student pointed out in class one day, “This is exactly what happens in the real world, when a bunch of brilliant engineers create something no one wants other than themselves!”

Class composition leads to consideration of how students become members of project teams. In this case, students self-select into teams, but in the real world of project management, needed skill sets are identified and team members are selected for possessing the range of requisite skill sets. Determining a way to ensure that each team has the appropriate skills remains a challenge.

Grading the final project can be problematic in that the objective of learning about project management does not always coincide with the amount of money raised. Students who raise the most money automatically assume that they deserve an “A.” They have to be reminded that they also need to firmly demonstrate what they have learned in their presentation and project audit. It also
became apparent early on that some teams inflated their fund-raising total by soliciting direct donations from family members. This procedure is now prohibited, and funds must come from the actual events the teams implement.

The project can dominate the classroom experience and diminish the perceived value of traditional instruction and, in particular, the quantitative side to project management. We have found that from the beginning we have to emphasize that this is a class that focuses on both the theory and practice of project management. Students are expected to master core concepts and tools. We are quick to point out that although tools such as resource leveling and earned value do not apply to the fund-raising projects, they are used extensively on larger, more complex projects. Real-world examples and guest speakers are used to augment this point.

We have found that managing the projects from a distance through deliverables not only replicates real life but is also an efficient means for overseeing the assignment. One of us has managed as many as 10 projects at one time without undue hardship. Not all projects are successful; in fact, a few have been real “failures.” Perhaps a more hands-on, coaching approach would yield more consistent results. Still, some of most powerful lessons have been articulated by students who worked on projects that failed. Others blame the instructor and a lack of guidance. One has to expect a certain degree of criticism when using this approach.

**Summary**

Although the focus of this assignment is on fund-raising activities, a similar approach could be directed to other kinds of projects. This observation is particularly true for other service-learning projects; for example, developing a Green Guide for a local community, creating a database for a school system, or renovating a children’s playground that had developed some safety hazards over the years. Furthermore, specific deliverables could be applied in other management classes. For example, rolling wave planning and postproject audits/reviews should prove useful for any project-based learning assignment.

We have described what we have done with the fund-raising project designed to teach project management skills and concepts. The way we structure this assignment will continue to change as we gain more experience with it. For example, we plan to use a formal group process survey as part of the status report in the future. Although not universal, most students report that it is one of the most memorable learning experiences that they have had. More to the point, students appear to have a better grasp of how to use project management tools and principles to get the right things done on time.
Appendix A

Lessons Learned Memo

Review all the project audits from the past two terms at the course Web site and prepare a one-page (single-spaced) memo that addresses the following questions:

1. Which two projects appear to be the most successful in terms of
   (a) Raising funds
   (b) Learning about project management
   (c) Having fun? Why?
2. Which two projects appear to be least successful in terms of
   (a) Raising funds
   (b) Learning about project management
   (c) Having fun? Why?
3. When you compare these projects, what appear to be their keys to success?
4. When you review all the projects, what are 2 to 3 important lessons you should try to apply to your project?

Appendix B

Project Management Foundation Request for Proposals

The Project Management Foundation has been created to support students’ fund-raising projects at the university. These projects are intended to generate revenue for worthy causes and provide learning opportunities to practice project management. Project proposals should be limited to one page and address the following issues:

- Project objective
- Reasons why charity was chosen
- Tentative plan of action
- Estimated revenue generated (best case, worst case, most likely)
- Major obstacles to success
- Go/No-Go questions that need immediate answers

Signatures of team members
Appendix C

Project Implementation Plan

Submit a responsibility matrix that details your project execution plan for the first week. Your matrix should consist of

<table>
<thead>
<tr>
<th>Task</th>
<th>Estimated Man-Hours Needed to Complete</th>
<th>Team Member 1</th>
<th>Team Member 2</th>
<th>Team Member n</th>
<th>Expected Completion Date</th>
</tr>
</thead>
</table>

Be sure to code the role each team member will play (L = Lead; S = Support; C = Consult) and have all members sign the document.

Use MS Project to create a milestone schedule for your overall project. The schedule may be in the form of a network or a Gantt chart, whichever is most appropriate.

Appendix D

Risk Management Plan

Your risk management plan should incorporate the following:

1. Brainstorm potential risks associated with this project. Try to come up with at least 5 to 10 different risks.
2. Use a risk assessment matrix to analyze identified risks based on likelihood of occurring and impact on the project.
3. Develop a risk response matrix to outline how you would deal with each significant risk. Be sure to distinguish between the actions that you would take to reduce the likelihood or impact of the risk event (response) versus your backup plan (contingency) if the risk occurs.

Do not simply present matrices but use text to integrate items 1 to 3 in a concise report.
Appendix E

Status Report

Your status report should address the following issues:

1. Overall performance of the project to date.
2. Tracking of actual progress with implementation plan. Explanations for variance.
3. A written assessment of how well the group is working together as a team. Assessment should reflect team morale, quality of decision making and problem solving, utilization of team talent, and other relevant issues.
4. Risk watch—update assessment of risks that currently threaten the project.
5. Signed by all team members.

Appendix F

Project Presentation

Purpose: The purpose of this assignment is to demonstrate effective, professional presentation skills, as well as share your project results with the class. Presentations should display effective communication skills and teamwork through the sharing of presentation burdens, creativity in presentation methods and in the discussion of how the team dealt with changes as they implement their project. After the presentation, the class should have a clear understanding of how your project was implemented, if your team successfully completed your project, and how well your team understands project management competencies.

Description: At a minimum, your presentation should address the following issues:

- Impact of your project on the objective stated in your proposal
- A description of implementation activities as well as the finished project
- An analysis of your goals and objectives and whether they were accomplished
- Examples of challenges and your team’s response(s)
- Examples of effective and ineffective project management
- One or two take-home lessons for managing projects

(continued)
Appendix F (continued)

Students are instructed to follow general guidelines:

- Informative
- Creative and energetic (figure out a way to keep the class interested!)
- 8 to 12 minutes long
- Use visual aids
- Professional business attire and a formal presentation
- Provide instructor with hard copy of slides prior to team presentation

Appendix G

Web Project Audit

Your audit report should be posted on the class Web page and address the following issues:

1. Classification of the project
   Brief description of the project
2. Factual analysis of success in terms of project objectives and methodologies used
3. Advice for future teams doing similar projects
4. Recommendations for improving the management of future fundraising endeavors at PMF
5. Two or three lessons learned about managing projects
6. Photos and signatures of all team members

Appendix H

Personal Learning Essay

Reflect on your experience in your PMF project and analyze three specific issues or concepts in the context of course readings and lectures on project management. Conclude with three personal take-home lessons based on your analysis. Please do not summarize the readings for me, but do give me subheadings so that I can see what issues or concepts you are addressing. The three issues or concepts do not have to be successful experiences. I believe that we can often learn more from our failures than from our successes. If you describe an unsuccessful experience, address how you might handle it differently in the future.
Appendix H (continued)

I encourage you to take advantage of this assignment to engage in meaningful reflective learning!
At the top of the first page, please identify yourself as follows:

Your name
Project team name

You are limited to two single-space typed pages, 12-point font. You do not need to use all the space available

Authors’ Note

The authors would like to thank Sandy Neubaum for providing the spark for this assignment and the anonymous reviewers for their helpful comments on earlier drafts. Please address correspondence to Erik Larson, College of Business, 200 Bexell Hall, Oregon State University, Corvallis, OR 97331-2603; e-mail: erik.larson@business.oregonstate.edu.

Notes

1. PMF is not a legal entity but a term created for this class.
2. Useful Web sites: For information on MBA charity competition Google challenge4charity or see www.challenge4charity.com. An example of one of many sites that offer “how to” advice on fund raising can be found at http://ezinearticles.com/?Charity-Fund-Raising---Finding-the-Right-People-to-Succeed&id=501022. To review recent project audits including examples of deliverables go to http://www.bus.oregonstate.edu/faculty/bio.htm?UserName=Larson

References


