A Project Manager Goes to Graduate School

Briefing by Kaylea Champion

"I'm so exhausted, but I've got to get this paper done – it's due tomorrow! Maybe if I just don't sleep…"

….click, click *I should be doing my homework* ***click, click*** *I'm so behind* ***click, click*** *I've been working really hard, I deserve a treat* ***click, click*** *What difference will it make if I watch a few videos….*

"Uh, wait. We have to do WHAT for this assignment?"

Guilt, disorganization, and procrastination all feed into one another, stressing us out and robbing us of the joy of doing academic work – the fun of exploring, being curious, learning new things, bringing ideas together in a way that makes sense. In information technology, construction, and many other fields, important projects are often assigned a project manager, or PM. The PM maintains a laser focus on getting a project done on time, in scope, and in budget. Imagine an academic project where the same focus can be brought to bear. We'd have a plan, we'd see our progress, we wouldn't get lost, and we'd get help with accountability without risking our grades.

Adapting the tools and mindset of a project manager to your academic project can help you to be more effective with your time, produce better results, and have more fun. Consider these tips as you listen for and develop the voice of your own inner PM:

1 – What project management philosophy best fits the project at hand? These methodologies are not mutually exclusive, at least for most projects, and modern project managers tend to incorporate pieces of both approaches.

Waterfall or RUP – This **approach is linear**, beginning with doing all the research, gathering all the requirements, laying down an outline of work, executing the work, then issuing the results. Each phase sets you up for the next phase, and if you complete the phase correctly, the assumption is that you won't need to go back to the previous phase. Buildings are built this way – an architect draws up plans, a foundation is laid, the walls are roughed in, the trades install utilities, the walls are

sealed up, and finishes are applied. The project would not be considered a success if once the paint was on the walls, they discovered the foundation was a foot too shallow and wouldn't pass inspections.

A common phase sequence in IT project management is: Discover, Analyze, Design, Build, Test, Deploy, Stabilize. You might find an academic project goes through phases of Discovery, Analysis, and Articulation (see sample at the end of this document). This is the "classic" methodology, often taught in K12 (Develop Hypothesis, Do Research, Write Rough Draft, Revise, Submit) or laid out as the scientific method (Construct Hypothesis, Conduct Experiment, Analyze Results). The reality is that many writers and scientists do not follow this kind of linear approach.

Agile – The philosophy here is that you want to **"fail early, fail cheap."** The agile approach is composed of multiple cycles, and emphasizes having something done and able to be at least trialed as early as possible: this is called a "minimum viable product". Buildings are not usually built this way – only in video games might we begin with a shack and gradually build it up into a mansion. But modern software is often built this way – a basic version circulates, with successive releases adding features and being shared with a successively wider audience**.** If what you're doing isn't going to work, you want to know as soon as possible so that you can adjust.

In academic terms, this might mean writing down the basic bones of your paper as early as possible, so that you can see the holes and know if your argument will hang together – and from there, the task is to make it successively better. Experimentalists might do a proof of concept, a field trial, or a focus group. Rather than first trying to find "everything" you need, then read it all, then try to synthesize it all into a narrative, how about doing "just enough" to get started, a little finding, a little reading, a little writing? Your next round of research will be substantially more focused, you may have new and more interesting questions, or you may realize your topic needs a new approach, is too vague or too narrow, and so on. You may learn that the project is going to take substantially longer than you thought – which means either you need more time, more help, or a new scope. The assumption

embedded in an agile approach is that you can indeed produce early drafts that are helpful to your process.

Caution!
The leading cause of failure in waterfall style project is a ***lack of planning*** *in the discovery phase. Do not shortchange your planning and exploration of the topic! If your objectives are unclear, agile may be a better fit, at least at first.*

The leading cause of failure in agile style projects is ***failing to fully adopt the mindset of iteration*** *– the results of the initial development cycle is NOT a finished work, and you are NOT done! Most of your first iteration will end up in the trash. Be ready to be wrong. If you want to "get it right the first time" and think you can, waterfall may be a better fit.*

2 – Have a task list (including deadlines), phases of work or cycles you'll follow, and a scope statement (the broad strokes of what's to be achieved, and what won't be addressed), at minimum.

Be brave and write it all down. The bigger the project, the bigger the project plan. A full project plan requires breaking the project down into phases, the phases into areas of work, and the areas of work into tasks. Assign milestones to the major steps you'll achieve along the way. Set due dates for when tasks, major areas of work, and phases will be completed. Your first guesses may be bad, but you have to make bad guesses and keep track of them in order to improve your ability to estimate. Track your time and think about your calendar. As you learn, be ready to fix the bad assumptions you made about how quickly you can progress. Project managers assume schedule slippage of 10-30%, but don't pad due dates, Do not plan to finish on the day it is due! Set up your schedule with dates set backwards from the drop-dead assigned due dates.

Why assign so many dates? Deep in the thick of a project, it can be difficult to tell whether you are making progress, or making progress quickly enough to meet a deadline – or whether you really can give yourself the evening off for some guilt-free recreation. If you blow a deadline, your inner PM doesn't really care about all the drama around why that is, unless it directly impacts the project. She wants to know the new date you're committing to, and whether the project will be on time.

3 – Know your critical paths and pursue them relentlessly.

The critical path is the steps that must be done in order, because other tasks depend on them. Examples include approvals, key interviews, scheduled events, waiting for something to be delivered, and so on. A plumber can make a lot of progress on your building, but the fixtures are on her critical path. If she needs an item and doesn't have it, she's stuck – and everyone will say that the team should've seen this coming. Minimize dependencies and have a backup plan. If topic approval takes a while and then the answer is no, will you already have another topic in mind? If your boss says no to you leaving the office to do some fieldwork, or your favorite expert won't allow an interview, what could you do instead?

4 – Know your resource pool.

IT or building project plans will identify individuals or organizations with key roles (programmer, tester, designer, carpenter). Your academic project resources might be just you, or maybe a colleague or advisor will also play a role. But even as a "solo practitioner" don't forget you have a few different kinds of resources within yourself. Assign tasks to yourself when you can complete them successfully.

- When do you have both energy and time – when can you focus for prolonged periods? Weekends? Days off?
- When do you have time but no energy? Late nights?
- When do you have energy but limited time (up early, but you only have 30 minutes)
- When do you have low energy and low time (and perhaps trying to make progress would only stress you out)?

Taking on some heavy reading when you have time but no energy is probably a bad idea. Be kind to yourself and don't set yourself up for failure! A low-energy span might be a perfectly good time to set appointments, track down a detail, update your task list, fix your APA formatting, double-check the assignment details, etc. Similarly, don't waste high energy times on trivialities.

5 - Celebrate the kick-off and the completion – and the major milestones.

A kick-off can be as simple as a cup of really good coffee on a park bench while you look through your project plan and do some freewriting to set your intention. Milestones and completion – why not celebrate a little? Take a walk or a nap, fire up that killer game of Candy Crush you've been neglecting, drink a glass of wine, crack

open that thriller you've been dying to read, share your good news on Twitter or Facebook. This isn't just about incentivizing yourself to finish – it's also a matter of self-care and stress management. You are the key resource in this project, and completing the work on time, in scope, and on budget – with your happiness intact – is your inner project manager's goal.

Sample Project Plan

Supporting Accreditation with Software - Project Plan					
Work Phases	**Area of Work**	**Target Date**	**Connected to Deliverable...**	**% Complete**	**Notes**
Discover					
	Identify Potentially-Relevant Peers (Public Sources)		Peer Survey		validate sources
	Gather Data about Accreditation in General (Public Sources)		Accreditation Briefing		
	Gather Data about Our Accreditation in Particular (Public Sources)		Accreditation Briefing		
	Collect General Data about Peers (Public Sources)		Peer Survey		
	Develop Briefing Paper Outline		Accreditation Briefing		
Checkpoint	Review data gathered so far; validate peer choices; review outline				
Analyze					
	Determine LMS at Peer		Peer Survey		depends on result of peer validation discussion
	Determine Archival System at Peer		Peer Survey		direct conversation required to fill gaps
	Determine Curricular Mapping Tool at Peer		Peer Survey		direct conversation required to characterize usage and fill gaps; when these systems are present, exactly how are they being used?
	Draft Briefing				
	Draft Summary				
Checkpoint	Review any gaps in findings				
Articulate					
	Submit Findings				
Checkpoint	Discuss additional work if applicable				

This project focused on learning how institutions managed their accreditation reporting obligations through software. The expected outcome of the project was a survey of peers, summarized in both a report and in a quick-reference chart, and a briefing on what accreditation really involves and how it works. Project management does not require complex software – Google Docs is sufficient for many projects. Your planning and tracking process is more important than the tools you use to support yourself.