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## Project Management for Humanists

### Preparing Future Primary Investigators

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Part of the Cluster:

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We have all seen them: large-scale collaborative projects that are just a mess. They are ages behind on their schedule. Or they have failed to produce any of their deliverables. Or, even worse, the project is so lacking in leadership that it has no concrete sense of what its deliverables even are. All of these conditions point to missed opportunities and squandered funding.

While we might all be capable of recognizing a project that is crashing on the shoals of disorganization, fewer of us are confident that we are adequately prepared to prevent these kinds of disasters. For individuals with alternative academic careers, obtaining the skill set necessary to keep collaborative projects afloat and headed in the right direction is essential. Alternative academic careers are often made or broken on the success or failure of such collaborative projects. Success can mean a path to additional funding opportunities and, sometimes, increased institutional security. Project failure can mean unemployment at the end of a term contract. Unfortunately, most people with graduate degrees in the humanities have no explicit or formal preparation in managing collaborative projects, large or small. Given this situation, as a community, alternative academics must consider more concrete methods for transmitting good project management skills and techniques to potential employees. This essay will offer some thoughts on effective project management, effective project managers, and some ways that we might transform graduate education in the humanities to convey more of these necessary skills.

I offer these suggestions as some one who was the product of a very traditional graduate education. Thus, despite having successfully managed over a dozen grant-funded and contract projects over the last six years, my preparation for project management was no different from that of most humanists. As an undergraduate at Georgetown University, I gained some experience working on grant-funded projects. In addition to my coursework, I worked 15 hours a week for one of the first generation of digital humanities centers. The Center for Electronic Projects in American Cultural Studies has since been eclipsed by the Center for New Designs in Learning and Scholarship, but in the mid-1990s it was the source of one of the very first academic association websites, the [American Studies Crossroads Project](#). My work there with Randy Bass and others gave me a glimpse into the kinds of moving parts that were inherent in a large multi-year project.

In 1997, I entered the American Studies Department at the University of Minnesota in pursuit of a doctorate. As graduate programs go, American Studies at the U was cozy and collegial, not to mention interdisciplinary. For all of the ways that interdisciplinary degrees challenge the boundaries of classical graduate education in the humanities, the program was traditional in its emphasis on readings, seminars, and individual pursuit of research

questions. Engagement with sources and scholarship in graduate seminars was primarily about challenging existing theses and interpretive points of view. We were trained to look for logical gaps in scholarly arguments, and to find ways to bridge those gaps with our own work. This stance of interrogation did not foster the notion that scholarship should be a collaborative venture.

To some extent, peer writing groups and student cohorts provided a sense that we were all moving forward in a shared experience, but we were definitely acting as single scholars. In fact, the message of traditional academic training is that a scholar must make a contribution to the conversation as an individual in order to be a full member of the scholarly community. Thus, we offered each other constructive criticism and commentary, but we never really considered anything that would involve co-creation. In the end, the production of a single-authored (and defended) dissertation was the only way to prove full membership in the community of doctoral scholars. So, while we might be moving forward on parallel tracks, our work was individualistic enough to require that we maintain a certain amount of isolation.

Along the way, I, like many of my peers, worked as a teaching assistant and taught my own courses. All of these experiences involved some collaborative work. Being one of several TAs for a large-enrollment class required that we were all on the same page about our expectations and standards for student work. We discussed assignments, teaching strategies, and the implementation of grading rubrics. Similarly, once I began teaching my own courses in Composition and American Studies, I had a series of excellent observation and mentoring experiences with more senior instructors. My department committed significant resources to supporting good teaching from graduate students, including pre-semester training, and a required course on designing and teaching courses in American Studies.

But, by far, doing research for a faculty member was the most collaborative of my work experiences in graduate school. In more than one research assignment, I was able to participate in larger-scale projects that allowed me to see how my particular skills contributed to the work of the group. In my case, these assignments inevitably involved some amount of technical work, whether it be research on newly-available digital resources, or the crafting and managing of relational databases. Regardless of the work at hand, doing research in the service of another scholar's goals requires a careful attention to detail and at least some organizational skill, even if rigid structures were not prescribed by the senior scholar. Though I might not have known it at the time, working on these projects was providing me with some methodological building-blocks toward thinking about attacking large-scale projects on my own.

Thus, my graduate training was not so different from the thousands of others who complete their doctorates each year. So, like many recent PhDs, I began my alternate academic career as a post-doctoral fellow at the [Center for History and New Media](#) with almost no formal preparation for what lay ahead. Armed with an eclectic set of interests, I settled in to watch, and learn, and do the best I could to fulfill the responsibilities with which I was charged. I was lucky enough to be surrounded by generous colleagues under the leadership of Roy Rosenzweig, whose legacy to the digital humanities is large, but most definitely includes stunning examples of the power of productive collaboration. As the years pass, I am increasingly cognizant of the ways that those examples prepared me for future success.

## I. Managing the Project

In the absence of those kinds of mentoring situations teaching project management in the abstract can be difficult. The nature of collaborative project work is endlessly variable. Funding and timelines will differ, but so too will team dynamics and the nature of the problems to be solved. Nonetheless, it is possible to try to make some generalizations about project management and the factors that are necessary for success.

Beginning with a clear project proposal is frequently the first step to launching and managing an efficient collaborative project. That proposal includes the vision of the project that the funders, whether they be federal agencies, private foundations, or university divisions, authorized for completion. Writing a project proposal that provides a clear statement of deliverables and a path to their completion can offer guidance for everyone involved in the work. To some extent, the project proposal is a necessary fiction. It is a leadership vision for what an idealized version of the project could be, but it is impossible to know for certain at

the distance of a year what exact steps and technologies will be appropriate to complete any deliverables. Thus, in transforming the proposal into a viable plan to finish the project, one needs to be flexible. The pace of change in technology means that once the work begins we may find significantly better and/or more efficient means to do the work. Nonetheless, the project proposal contains both the intellectual vision for the work and hopefully a modest and realistic plan for its completion.

The project proposal will include an articulation of core deliverables. Project managers need to be able to differentiate between the deliverables that are absolutely necessary to deliver a satisfactory project, and those that are secondary and negotiable. Making this distinction requires the project manager to navigate the needs and desires of core stakeholders in the project. If a central scholar on the team is particularly attached to an ancillary feature, the project manager needs to be aware of how that will affect team dynamics and decision-making about other elements of the work. Clear statements about the core deliverables and features at the start of the project can fend off future misunderstandings about the ways in which resources are allocated to work on secondary elements. It can also go a long way toward stemming the tide of feature-creep that often happens in the middle of a large project. If each member of the team has a clear understanding of the essential scope of the work at the beginning, she can set to work attacking those essential items. Once the initial scope is satisfied, team members might have the time and resources to work on enhancements that will improve the ultimate project and hopefully please the project's funders.

After determining the core deliverables for the project, the manager has to make a frank assessment of staff expertise and the resources that are available for the work. In some cases, staff working on projects have all of the skills necessary to play their part in the collaboration. But more often than not, new projects call for everyone on the team to learn new skills. The project manager needs to carefully consider who is best positioned to acquire the individual skills needed at each stage of the project development. This means more than assessing an individual's training and preparation. It also means assessing each staff member's ability to acquire new knowledge and operationalize it in the setting of the project at hand. Will this programmer be able quickly to learn enough javascript to help create these particular user interface elements in a web project? Or does this person's learning style suggest that he would only be able demonstrate a functional knowledge of the language after extended study? Would the development of this content benefit from the sole attention of a graduate research assistant? Or would having two graduate students working together for a short period of time result in a more complete and creative product? Will a small team of staff working together produce work at a quicker pace? Or is that combination of personalities a recipe for distraction and reduced productivity? All of these questions factor into a project manager's decisions about how to assign the basic project roles. Of course, staff themselves should have significant input into these decisions. If they work in an environment where they feel like they can frankly assess their own strengths and weaknesses, they can be a project manager's best source of guidance on how to plan for each stage of the work.

Similarly, one must make an evaluation of all of resources at hand, both material and intellectual/knowledge-based. In addition to human resource factors, projects can be easily hamstrung by inadequate access to workspace and supplies, including hardware and software. It is possible to make a tremendous amount of progress on very limited resources, but only if those limitations are clear from the beginning. Then, one can plan for the allocation and distribution of resources in accordance with key deliverables for the work. A good project manager also needs to assess the work at hand and ways that she can leverage existing work that is being done in the field. Even if the base project at hand is not a collaborative one, other organizations and institutions will have experience with aspects of the work and those experiences should serve as lessons and in some cases as models for the coming weeks and months as the project team moves forward. Thus, it is important to reach out to other projects and to search for best practices. Above all, strive to not reinvent the wheel if sufficient groundwork already exists.

Based on these assessments of staff and material resources, the project manager can then go on to plot out the pace at which work can be completed. Estimating time and phases of work is very difficult, especially if the group is engaging in types of work that they have never done before. Newer staff members may not be particularly good at predicting how long a task will take. Breaking deliverables down into sufficiently small parts can help with this. But,

generally, the staff will provide an estimate of time to completion, and the project manager will have to determine how significant a cushion to add to that estimate to allow for setbacks and delays. Many project managers in the technology sector counsel taking a conservative time frame from the staff and then doubling that amount of time for the overall workplan. Unfortunately, you may not find yourself with flexibility if you are locked into a time-table from a grant application that cannot absorb that amount of cushion. Funders are often willing to grant projects a no-cost extension to enable the completion of deliverables, but it is best to create an initial schedule that aims to bring the work in on time.

Good workplans are composed of several factors. First, they must contain a clear indication of the key deliverables and when they need to be completed. These statements form the main scaffolding for all of the other planning and tracking work that project managers need to do. Second, the team needs to come to an agreement about the steps that are necessary to achieve the goal of completing those deliverables on time. Breaking the core deliverables down into manageable pieces, which will serve as smaller milestones, will result in the main contents of a workplan. The pieces need to be sequenced logically, and the project manager needs to have an overall sense of the staffing for the work. Can several members of the team proceed on different fronts for a time and then come together to produce one component of the work? Or will everyone work together for a short burst to produce an element of the project? Is there a way to sequence the work to avoid overloading the members of the team? All of these issues should be discussed with the project team, and everyone should be comfortable with the strategy and schedule of work that results. If members of the team know in advance that they will need to put in an extraordinary effort at particular points in the schedule, they can plan ahead for those times, and perhaps even strategized about how to lessen the impact. Third, the workplan has to be realistic about calendaring. The project manager needs to build some flexibility into the schedule because things simply never go totally as planned.

While it is important to stay flexible and not get bogged down in overly complex systems, the team will need a clear, easy way to track progress and outstanding work. There are many good, free or inexpensive tools for this type of tracking.<sup>[i]</sup> Generally, the best systems allow the entire project team to view major milestones for the project and their due dates. Given the structure of the milestones, the project manager or members of the team should be able to create to-do lists, assign those tasks to individual members of the staff, and perhaps map those tasks to particular due dates. This is not list making for the sake of list making. Rather, it makes it possible for the team to collaboratively decide on the key steps that are necessary to complete core pieces of the work. Placing all of these tasks in a centralized system lets staff know that they have a place to refer to get the big picture and it means that they do not have to hold the scope and feature of the project entirely in their heads. Everyone is aware of the work that has been completed and the work that remains. Thus, using web-based project management software can create a system of public accountability that lessens the burden of the project manager's need to privately track individual progress.

Even though a tracking system will help keep the whole team moving in the right direction through the stages of the project, individual team members may have more or less trouble managing their own time and work. For those who are having difficulty with prioritizing and completing tasks, a manager might suggest David Allen's *Getting Things Done* system, or one of the variations such as Leo Babauto's *Zen to Done* system, as a place to start.<sup>[ii]</sup> But more than anything, a project manager needs to make an assessment of how much guidance and oversight each individual team member needs. At a baseline, everyone needs to have a clear sense of regularized work expectations, including when to be in the office and whether or not telecommuting is okay. If members of the team do telecommute, the project manager needs to establish communication standards so that work is not impaired by distance. A range of simple tools can facilitate easy communication, including asking staff to log into an agreed-upon messaging system during work hours such as an AOL instant messenger, Google chat, or Skype, all of which are free. Another strategy that can help team members improve their time management skills is to establish a way for them to report their individual efforts. Tracking and reporting effort need not be a complicated business. If the project is using a shared management system, simply checking off assigned to-dos when they are completed will allow the whole team to have a sense of individual progress. Another strategy calls for asking staff to note their accomplishments for the day or week in a shared document. Finally, while asking team members to keep track of hours spent on particular tasks might seem onerous, in specific situations it can help staff learn

more accurately to estimate the work for future projects. All of these strategies can help to improve the efficiency of collaboration by creating a set of predictable conditions under which staff can clearly see their progress toward meeting the project deliverables.

Meetings are an inevitable part of collaborative work. They can be efficient and productive, rather than tedious and mind-numbing. Regularly scheduled meetings of collaborators should be as streamlined as possible. Setting and sticking to a clear agenda is essential to maintaining productivity. The project manager must be committed to moving through the agenda, to preventing the meeting from being derailed by digression and tangents, and to knowing when to schedule additional smaller meetings to work through details. The clear benefit of the periodic full team meetings is that they help assure that everyone understands the trajectory of the work and the way that all of the smaller components fit together. They also provide a place to surface concerns about how pieces will integrate and the ways that one segment of the work might influence others. For long-distance collaborations, these regularly-scheduled status-update meetings are even more important. With collaborations dominated by asynchronous communication and very short messages, members of the team need to know that they have a chance to make sure that the staff from all segments of the project are on the same page and proceeding with the same assumptions about the deliverables and the schedule. Similarly, for long-distance collaboration, project managers from all of the work sites may need to schedule more frequent check-ins.

While occasionally meetings of the whole team might be necessary, more often than not smaller group work can produce more significant results. These working sessions might technically be meetings and might involve significant periods of time, but they need only involve the members of the team best qualified to puzzle out a portion of the project. Thus, they tend to be more productive than larger groups of people with less expertise. Though larger meetings may be disruptive to the flow of the work day, feedback from the project team is essential to the success of the small groups. Sharing the state of the work and the assumptions about its development with a larger group of staff help the small working groups to avoid the echo-chamber effect that can happen when they get down in the weeds of a task. Those feedback and brainstorming discussions should definitely involve a range of experts and non-experts to surface communication and logic gaps in the structure of the end product. As with the larger status update meetings, the project manager will need to guide the discussion, avoiding unnecessary derailments. At the end of the meeting, the team should be clear about the steps that are needed to move forward and who is taking responsibility for those actions.

## II. Managing the Project Manager

Planning, scheduling, and tracking work is essential to project management, but these administrative tasks do not really get at the heart of the qualities that are essential to being a good project manager. Taking on a leadership role in a project is distinctly different from being a general member of the team. The project lead or the primary investigator is ultimately responsible for fulfilling the deliverables of the project, on time and on budget. Upholding these responsibilities has implications beyond the success or failure of the project at hand. If an organization consistently fails to complete promised work adequately, it can make a difference when funders consider future applications, and it can certainly have an impact on the over-all reputation of the organization within the university and the larger community.

First, one must be at home with complex organizational structures and juggling of a lot of different kinds of information and tasks at once. In some senses it is easy to understand why individuals with advanced graduate training in the humanities and the social sciences might resist the level of structure and organizational specificity that is required by effective project management. The echos of scientific management and Fordist economic practices haunt our readings of twentieth-century industrial life. More recently, sociologists of labor have effectively analyzed the impact of "total quality management" schemes on the work environment, particularly in the realm of technology. Given these legacies, the notion of taking a hands-on approach to project management may seem fraught with possibilities for disaster.

Yet project management calls for the ability to balance the intellectual work of the project and the mundane processes that are necessary to successfully accomplish the project's goals. Pursuing this kind of work within a university environment is not like working as an

independent scholar or as part of a technology start-up. More than likely, there will be entrenched layers of management and oversight within the university that focus on hiring procedures, accounting, and reporting. For individuals who have the experience of completing large-scale research projects such as dissertations or monographs, these types of structures and requirements may seem overly cumbersome, but in the long run it is best at least to be aware of regulations and institutional practices prior to beginning work. In addition to university systems and requirements, project managers face the day to day responsibilities of keeping track of the progress of the project team.

Certainly, some people are more detail-oriented than others, but a willingness to embrace some systematic ways of tracking project work and obligations will allow the whole team to get a sense of their progress and the major issues and milestones that they face in the future. For this reason, comfort with organizational structures is intimately linked to time management skills. A good project manager needs not only to be able to manage her own time and obligations, but also to be able to see the big picture and to help manage the time and obligations of the members of the team. This type of orchestrating involves evaluating the demands of the work plan, the strengths of the team members, and the ways that they interact with one another. Each team member will likely need different kinds of guidance and support to produce her best work.

Equally important, project managers need to focus on establishing and maintaining good communication with the project team and with other stakeholders, particularly if the project involves collaboration amongst disbursed partners. Communication skills are central not only to shepherding the work of the team in fulfillment of the project goals, but they are also absolutely necessary for building trust amongst team members. Projects succeed much more easily when there is a spirit of openness in which the skills and opinions of every participant are valued.

Creating an environment of innovation with dedication to core principles of openness and access undergird so much of sponsored academic project work. And, given the marginal resources available to support this work, project managers need to use all of the tools at their disposal to maintain energy, interest, and the investment of staff/collaborators. Openness is important in all aspects of successful project management. Every member of the team needs to have a clear sense of the larger goals of the project, the schedule for completion, the range of deliverables and the ones for which she is responsible. Teams need to know the kinds of pressures each member is under if they are going to work effectively together. A shared schedule and list of deliverables allows individual contributors to know that their work is intimately connected to that of their colleagues and that it plays an important part in the overall success of the project. This type of openness is also connected in an important way to other ingredients necessary for overall success: respect and trust among team members. Similarly, it should extend to an open discussion of the means of achieving deliverables. This should encourage team members to respect the particular skills that each person brings to the tasks at hand, and should create an environment where they feel free to ask for the help that they need to complete their own tasks, whether that be help from the project manager or from other team members. The trust needed to achieve this level of comfort can only happen when the project manager actively fosters open communication and collaboration.

Even the most well-run project teams will eventually experience some level of conflict amongst the staff. Disaffected team members are simply not productive, and a project manager who has not established sufficiently open lines of communication with collaborators may have difficulty dealing with problems because they have festered past the point of easy resolution. Thus, dealing with conflict early and decisively helps to keep a team moving forward. Ineffective communication can be the source of significant amounts of conflict, so whatever a project manager can do to encourage team members to deal openly and respectfully with one another will contribute to swift resolution to conflicts.

Project managers frequently have to make decisive choices about staffing, development paths, and core elements of the project. This leadership needs to be careful and informed, not arbitrary. Nonetheless, in some cases, the project manager is going to make decisions that not everyone on the team likes or agrees with. If a project manager has a long-standing track record of being a fair, honest ally of the staff, they are more likely to accept those decisions and move on. Building up this kind of trust involves more than open communication. It requires that team members know the project manager does what she

has to do to secure them an environment in which they can perform their best work—an environment free of unnecessary distractions and road blocks, an environment in which their expertise is respected.

Finally, effective project managers must be willing to learn enough about a whole range of things to be able to talk effectively to those who are real experts. Knowing how to seek out expertise and evaluate a range of good options is essential to providing strong leadership. The manager simply cannot be the keeper of all knowledge for a project. Thus, she needs to know how to weigh the options provided by experienced and informed team-members. If the team knows that their recommendations are likely to influence the overall direction and success of the project, they are more likely to bring carefully-considered options to the table. Then, the project manager can guide the group to consensus on issues at hand and delegate the work and responsibility necessary to complete the project's deliverables.

### III. Models for changing graduate preparation

As more and more people pursue alternative academic careers, better preparation for project management is essential. The emphasis on isolated research and scholarship that is so much a part of graduate education often leaves those individuals wholly unprepared for a significant aspect of their work: managing projects and the variety of staff who must work together to complete them. For those who have never participated in any sort of large-scale collaborative venture, this process can be even more mystifying.

In comparison, the sciences have a long tradition of combining the teaching of some management skills through apprenticeship. Graduate students work in research labs that provide training grounds for learning how to manage their own labs. Additionally, professional journals provide occasional advice about lab management issues and strategies. For example, the Careers section of *Science*, the journal of the American Association for the Advancement of Science, offers a collection of articles on “How to Manage a Lab and Staff.”<sup>[iii]</sup> Much of this material is general enough that humanists can draw significant lessons from it, for managing their own collaborative projects.

Professional organizations in the humanities are in relative agreement about the current focus of graduate training and some ways that it fails to provide sufficient preparation for the types of careers that recent graduates obtain. For example, in 2003, the American Historical Association's Committee on Graduate Education provided an introduction to their study of the field, *The Education of Historians for the 21<sup>st</sup> Century*, in part by explaining: “Most doctoral programs do a good job at what they presently see as their main task: teaching research skills. But they must recognize that more expansive obligations are involved in preparing graduate students for careers as educators and institutional citizens, to say nothing of their public obligations as professional historians.”<sup>[iv]</sup> The Modern Language Association has made a call for graduate institutions to take a larger role in helping support students who pursue these alternative paths, in part because they feel that individual departments and the faculty who compose them are not prepared to offer such guidance and support.<sup>[v]</sup> To some extent, this plea is offered in support of those who pursue work in wholly non-academic settings, but it is equally applicable to those who pursue alternative academic careers.

As a result of these concerns and others, in the course of the last fifteen years, a number of efforts have been made to broaden the scope of the training received by graduate students, across disciplines. One such effort was the Woodrow Wilson Foundation's *Responsive PhD* project, which existed formally between 2000 and 2006. This project called for a “Cosmopolitan Doctorate,” and worked to foster change and encourage innovation in graduate training with an emphasis on creating productive partnerships with organizations and institutions outside of academe, as well as encouraging increased diversity in graduate programs.<sup>[vi]</sup>

Perhaps the best well-known and wide-reaching of these programs is *Preparing Future Faculty* (PFF), which was a joint project launched in 1993 by the Council of Graduate Schools and the Association of American Colleges and Universities, and which enjoyed significant support from the Pew Charitable Trusts, the National Science Foundation, the Atlantic Philanthropies, and key professional societies and associations. Between 1993 and 2003 dozens of graduate institutions participated in elements of the program, and its practices continue to live on in programs around the country. PFF succeeded in setting out a

model for graduate-student training that complimented the traditional focus on solitary scholarly research.

While recognizing that mastering an ability to do original research and to create new knowledge within a scholarly conversation is the central mission of graduate education, the *Preparing Future Faculty* program worked to systematically prepare graduate students for those other aspects of a faculty position for which they would be responsible upon landing a tenure track job. Since most graduates will not find employment in research universities, but rather in smaller liberal arts and community colleges, a significant portion of the program deals with improving preparation for teaching.<sup>[vii]</sup> Planned and intentional professional development activities that take place through mentoring relationships and other kinds of institutional programming allow participants to gain first-hand experience in range of situations and environments. Such programming functions on six key assumptions:

1. Apprenticeship experiences should be planned and intentional based on the participating student's experience;
2. Students should be exposed to a range of responsibilities in different types of institutions;
3. Mentoring for doctoral students should be formalized at every stage of development;
4. Experiences should prepare students for changing classroom and workplace environments;
5. Professional development experiences should be integrated into the rest of the degree program;
6. Professional development experiences should build upon and integrate with existing successful programs.<sup>[viii]</sup>

Participating graduate schools facilitate partnerships with other colleges and universities so that graduate students can benefit from mentoring relationships with faculty from those schools. They gain a variety of types of teaching experiences and come to learn about service obligations at institutions other than research universities. Graduate programs also provide a host of seminars, workshops, and other ongoing support activities to supplement the mentorships. Some provide course credit and others issue certificates to increase the official recognition that students gain for their participation.

A host of professional societies, including the American Historical Association, the American Political Science Association, and the American Sociological Association joined in the later stages of PFF, lending support by selecting doctoral programs to participate. As the report on the program's work in the humanities and social sciences explains, those professional societies put their weight behind PFF because they recognized both that doctoral education is a "powerful socialization experience" and the there is a need to focus on this type of broad-based mentoring and preparation.<sup>[ix]</sup>

Just as graduate schools and professional societies came to recognize in the 1990s that they needed to support more pedagogical training, they should come to understand that they have a responsibility to help with similar kinds of training for project management. One could imagine launching a "Preparing Future Primary Investigators" program that would provide mentoring opportunities and workshops for those interested in pursuing alternate academic, private sector, government, or non-profit careers. Internships or mentoring programs would be invaluable if they could provide a mechanism through which graduate students could begin to understand the scope of practical work that project managers must do, in addition to providing the intellectual vision for large-scale collaborations.

[i] See, "Comparison of project management software," *Wikipedia*.

[ii] See David Allen, *Getting Things Done*, Nels P. Highberg, "An Introduction to GTD (*Getting Things Done*)," Profhacker in *The Chronicle of Higher Education* (September 22, 2009), and Leo Babaut, *Zen to Done: The Simple Productivity E-Book*.

[iii] "How to Manage a Lab and Staff," in *Science*. See Also: <http://www.scripps.edu/services/postdocs/career/labmgnt.html>.

[iv] "The Education of Historians for the 21st Century," *Perspectives* (October 2003) [summary of findings]. See also, Thomas Bender, et al., *The Education of Historians for the*



*Twenty-first Century* (Urbana and Chicago: University of Illinois Press, 2004).

[v] "Professionalization in Perspective" MLA Ad Hoc Committee on the Professionalization of PhDs (No Date).

[vi] *The Responsive Ph.D.: Innovations in U.S. Doctoral Education* (Princeton, NJ: Woodrow Wilson National Fellowship Foundation, 2005).

[vii] For a detailed discussion of the program and its practices, see Jerry G. Gaff, et al., *Preparing Future Faculty for the Humanities and Social Sciences* (Washington, DC: Association of American Colleges and Universities, 2003).

[viii] *Ibid.*, 6-7.

[ix] *Ibid.*, 14.



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