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Lynne Siemens

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The Potential of Grant Applications As Team Building Exercises: A Case Study

Lynne Siemens, PhD

Assistant Professor
School of Public Administration
University of Victoria
Victoria, British Columbia
Tel: (250) 721-8069
Email: siemensl@uvic.ca

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The author thanks the members of the research team that is the subject of this discussion for allowing her to reflect on their experiences in team building and development.

Abstract

Faced with increasingly complex and technologically sophisticated research questions, academics are working with others through collaboration and research teams. To be effective, these research teams need to maximize the factors that contribute to success while minimizing the potentially negative impact of associated challenges. One particular challenge, especially with multi-disciplinary teams, relates to the development of a shared understanding of team objectives, tasks, and working relationships. In industry, many teams undergo specific exercises designed to accomplish this end. In academia, the grant application process might serve as a team building exercise. Through the examination of the experience of one academic research team, this paper discusses the potential of a grant application to accomplish this goal. Recommendations for research teams and offices will be offered.

Keywords: Collaboration, Research Teams, Grant Development, Research Offices, Case Study

Introduction

Faced with increasingly complex and technologically sophisticated research questions, academics are turning to the use of research collaboration and teams (Hara, Solomon, Kim, & Sonnenwald, 2003; SSHRC, 2004). The growing number of multi-authored papers and presentations provides evidence of this trend (Cronin, Shaw, & Barre, 2003; Kraut, Galegher, & Egidio, 1987-1988; Qin, Lancaster, & Allen, 1997). However, researchers and academics must develop new skills in areas of communication, negotiation, conflict resolution, problem solving, coordination, and others beyond disciplinary ones to function effectively within these research teams (Amabile, et al., 2001; Bennett &

Kidwell Jr., 2001; Hara, et al., 2003). As a result, research teams must find mechanisms to maximize those factors that contribute to success while minimizing the potentially negative impact of the associated challenges. In this regard, teams must develop processes to effectively plan, communicate and coordinate among individuals, activities and resources, and to select members who are oriented toward collaborative research (Amabile, et al., 2001; Cuneo, 2003). One particular challenge relates to the development of a common understanding of the interrelationships and task dependence among individual members as they relate to the overall research project's objectives. In industry, many teams undergo specific activities designed to accomplish this end. In academia, the process of developing a grant application might serve as a team building exercise and create the opportunity to negotiate research objectives, approaches, and common vocabulary while establishing team membership, allocating resources, negotiating timelines, and writing important internal governance documents. To this end, the grant application serves as an important base from which the actual research work will then be effectively undertaken (Bruhn, 1995; Kishchuk, 2005). This perspective extends Lowry, Curtis and Lowry's (2004) recommendations for collaborative writing, which tend to focus on a single document, to the development of a large-scale research project with the many interdependencies among individuals, resources, tasks and extended timelines, often spanning several years.

By examining the experience of one research team, this article explores the use of grant application development as a large team-building exercise for multi-disciplinary academic research teams. First, the nature of teams and team building exercises will be discussed before turning to the consideration of the case study. Key learning moments for the team will be explored along with the challenges faced as members continue to collaborate. Recommendations for research offices as well as research teams will be made at the conclusion.

Context: Importance of Team Building

As noted, research teams are becoming increasingly common across all academic disciplines. A team is generally defined as a group of individuals who work towards a common goal and whose tasks are interdependent (Salas, Sims, & Burke, 2005). In today's networked world, academic teams are often dispersed across campuses and the country, and even internationally. As discussed below, this physical distribution can increase the challenges faced by these teams as they undertake their collaboration. In addition, academics are often not prepared for the levels of interdependence required within team research given their academic training (Birnbaum, 1979). Inherent within this definition of a team is the assumption that members share a common understanding of the team's goals and objectives and the manner in which they will be accomplished. To be effective, team members must reach this understanding, thereby creating a common identity for the team.

One of the primary methods to accomplish this objective is through team building exercises. Routinely undertaken in the private sector, these activities take a variety of forms, and range from ropes courses to sports to virtual game shows and others (Bennett & Kidwell Jr., 2001). Whatever the specific activities may be, they are designed to solidify team membership and an understanding of common goals as well as develop trust and rules for engagement. The end result is often more effective and productive working relationships (Bagshaw, Lepp, & Zorn, 2007; Salas, et al., 2005; Svyantek, Goodmand, Benz, & Gard,

1999). At the same time, team members can learn about each other's individual skills and potential areas for contribution to a research project (Jarvenpaa, Knoll, & Leidner, 1998).

This common understanding exhibited within effective teams has been conceptualized in a variety of ways. Salas, et al. (2005) suggests that teams must develop "shared mental models" (p 565), while Cramton (2001) emphasizes the creation of "mutual knowledge." Regardless of the term, this common understanding ensures that team members are more likely to understand each other and be able to communicate more effectively and efficiently. Especially for those teams with a range of disciplinary backgrounds, this process can take time (Jarvenpaa & Leidner, 1999; Sackett, 1990). Within these types of teams, the development of a common understanding can be particularly challenging given the important role played by disciplines. These communities of practice provide guidance to their members on the nature of research questions, methodologies, quality standards, funding and resource levels, career progression, authorship, work and communication patterns, and other issues (Bruhn, 2000; Cech & Rubin, 2004; Russell, 1985). From an administrative point of view, the representation of more disciplines within a research collaboration means more coordination between administrative units that control access to resources, funding, incentives, and other factors (Russell, 1985).

An important part of team development is reflection and analysis on past experiences. With this, individual members and the team as a whole can work cooperatively and effectively by examining those factors that had contributed to or detracted from success (Bagshaw, et al., 2007; Barry, Britten, Barber, Bradley, & Stevenson, 1999; Lingard, Schryer, Spafford, & Campbell, 2007; Lowry, et al., 2004; Massey, et al., 2006). Further, this knowledge can be transmitted to others in the form of best practices. For example, Bracken and Oughton (2006), Bryan, et al. (2002), and Lawrence (2006) outlined their lessons from their research projects, but did not discuss any particular lessons that they might have learned from the grant development process.

To that end, the rest of this paper explores an example of an academic research team and its efforts to develop a multi-million dollar grant application. This effort will be characterized as a team building exercise. By taking this perspective, the process of writing a grant is more than just producing the document; it is also an opportunity to develop an effective team in advance of the "real" research being undertaken, a step not often taken by academic research teams. Hence, a wide variety of activities beyond the writing itself are reflected upon in this analysis.

Methodology: A Case Study Approach

This analysis will be explored within the context of a case study research methodology as defined by Yin (2003) and Stake (1995, 2000). This research methodology is appropriate when one is considering "how" and "why" questions, particularly over a period of time, as is the case with this example (Yin, 2003). In addition, by considering a single case, one can explain a situation, explore the dynamics that are at play within that particular setting, and develop recommendations for others who face a similar situation (Eisenhardt, 2002; Stake, 1995, 2000; Yin, 2003).

The data are drawn from the author's role as participant-observer in the grant

writing exercise under consideration (Marshall & Rossman, 1999; Yin, 2003). From early on, the author served as a consultant/facilitator to the research team through the full grant application process by introducing team development theory and facilitating the team's development. For this paper, the author drew upon meeting minutes and other documents, conversations and her own observations. The conclusions presented in this paper were also tested with members of the administrative team and against team development literature (Eisenhardt, 2002; Yin, 2003).

Case Study: Research Team Development Time Line

This particular research team has been in development for approximately six years. The first meeting occurred over five years ago, when several individuals who shared a history of working together and had similar research interests drawing from a variety of academic disciplines explored potential areas of collaboration. From this initial discussion, the interested individuals drew in others with similar research interests and received a grant to explore possible collaboration.

In the second year, this group met over a weekend to discuss potential research questions with the intention of applying to the first stage of another two-stage granting program. However, after these initial discussions, team members decided to delay this stage because they did not feel that they had been able to finalize the research direction sufficiently. Further, specific team membership remained fluid.

Interested individuals continued exploring potential research questions and methodology. In the following year in late winter, these individuals met for a second weekend to continue their discussion on proposed research questions and methodologies, as well as the potential involvement of interested individuals. These efforts were supported by a week-long symposium held the following summer. During this week, potential team members presented their research interests. The end result was a more refined research question and methodologies, and a more fixed team membership. Later that fall, the research team gathered for another weekend where the research question, methodologies, and team membership were finalized. In addition, the team discussed rules for interaction and collaboration and proposed a team charter. The end result of this meeting was a commitment for a subset of the team to write the application for the first stage of the granting program. This writing exercise took place electronically and was completed by the end of the year. This subset of the larger team became the core administrative group for the project.

In the early summer of the fourth year, the team was invited to the second stage of the granting program. The timeline for this was very tight as a full application had to be completed in only six weeks. The team worked in both electronic and physical spaces, with the majority of the writing being accomplished in a one week period, with assistance of a consultant/facilitator. Besides finalizing the research questions, objectives and methodologies, this team also proposed a joint work plan and resource allocation across research areas, individual researchers, and institutions, which included funds, student research assistants and post-doctoral researchers.

Finally, that fall, the administrative team participated in an interview with the grant adjudication committee. To prepare for this, the team developed an interview package, which included the full grant application, grant reviewer comments, funding program objectives and sample questions and answers, and held a mock interview the day before the official one. Through the almost five years to that point, the research team reinforced face-to-face communications with a listserve, wiki, and regular conference calls. The research team was not successful in this round of grant funding, which was not unusual. Most research applications to this granting program are successful on their second attempt. The research team was encouraged to reapply and to continue to develop both their research objectives and methodology while deepening their collaboration. By building on their foundation from the first attempt, the team was ultimately successful. It must also be noted that the team members were collaborating on other projects not related to this specific one during this time. A summary of the timeline is represented in Table 1.

Table 1. *Research Team Development Time Line*

Year	Activity
1	Initial team meeting to propose a possible collaborative research question
1	Team membership enlarged and team applies for grant to support efforts
2 – winter	Team meeting to discuss proposed research question – decision to defer the application to the first stage of a two stage granting process
3 – winter	Team meeting to continue discussion of proposed research question and team membership
3 – early summer	One week symposium where potential research team members present their research interests. The research question and team membership is becoming more fixed
3 – fall	Team meeting where research question, methodologies, and team membership are finalized. Team norms are discussed and codified. A core administrative group is identified.
3 – fall	The administrative group collectively writes the application for the first stage of the grant process
4 – early summer	The research team is invited to complete the final application. The team writes the grant
4 – fall	The core administrative team participates in an interview with the grant adjudication committee
5 – early winter	The research team learns that it is not successful in securing the grant; however, it is invited to reapply
6 – winter	The research team reapplies to the grant
6 – summer	The research team is invited to complete the final application. The team writes the grant
6 – fall	The core administrative team participates in an interview with the grant adjudication committee
6 – early winter	The research team learns it is successful
7 – spring	The research team starts the research project

Some clarification of the research team within this context must be provided. To some extent, three teams are operating within the project, as seen in Figure 1. The inner layer is the administrative team, which includes the lead researcher as well as six additional members. The second layer is comprised of the various researchers involved in the actual research project. The outer circle represents partner organizations, which provide further support to the project. The final full research team across the three circles represented 35 active researchers across several universities and institutions and three countries, representing

over 90 different academic disciplines and sub-disciplines, primarily within the humanities, a community which has traditionally valued an individual's contribution more highly than that of a team's. The following discussion focuses primarily on the inner circle, the administrative team, with some reference to the other two.

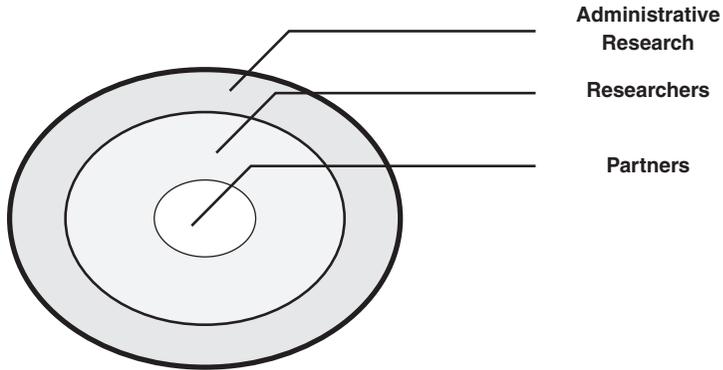


Figure 1. *Research team layers.*

Discussion: Creating a Team

Given this focus on team building exercises, the first question is whether this diverse group of researchers actually became a team. Did the members create a shared sense of the research question and methodologies, a team identity and a common understanding of ways of interaction? Did the process of developing the grant application facilitate team development? The short answer is yes, though this process took several years.

Development of a Shared Mental Model

Through each successive face-to-face team meeting and electronic communications in between, this research team, particularly the administrative group, reached a shared mental model, as outlined by Salas, et al. (2005). Due to their diverse academic backgrounds and institutional affiliations, this process took time as members created a common vocabulary and defined and then refined the research question, appropriate methodologies, and associated tasks. By the end of the time period, the core research group had become a team with a common mental model as evidenced in the final grant application.

An important step in this process was team member selection. Criteria for membership included research interests and key skills, as well as suitability and fit with the rest of the team. Many professional and personal relationships among the various team members were already in place and facilitated this process. Members had worked together in various configurations on other projects. Several potential team members who were involved in early stages of the project did not meet the “fit” criterion and, as a result, did not continue in key capacities within the final application. The team identity was crystallized by the end of the process such that the team was reluctant to include people who had not been previously involved in the final stages of the grant application process.

Team identity and interrelationships were further articulated and strengthened through a project charter. As seen in Appendix 1, this document included items such as publication intentions, deadline expectations and communication standards. Use of this charter also became a key learning moment, as discussed below.

Key Team Building Activities

The next question then focused on the steps and activities that were undertaken to reach this shared knowledge. What specific team building activities did they employ? As seen below, key activities included face-to-face meetings, regular communication through a variety of channels, and the grant application writing itself, including preparation for an interview with grant adjudication panel.

Face-to-Face Meetings

As outlined in Table 1, over the five years, the team assembled several times for face-to-face meetings, ranging from a weekend to longer periods of time. These gatherings were a combination of formal planning sessions with discussions of research interests and areas of possible collaboration, as well as informal ones over meals (Bagshaw, et al., 2007). Through these formal face-to-face encounters, the team was able to narrow its research question and outline appropriate methodologies, tasks, and resource allocations while determining the role that each individual researcher would play within the overall research objectives. In addition, these meetings served to identify members of the team, much like a “courtship” where people get to know each other (Martins, Gilson, & Maynard, 2004, p 816). They also facilitated the discussions that are often difficult to conduct through electronic means. The sense of team can often be reinforced more easily when people can see and hear each other clearly. In these settings, the potential for misunderstanding is reduced and tensions can be diffused (Finholt, Sproull, & Kiesler, 1990; Galegher & Kraut, 1990; Poole & Zhang, 2005). For example, through the face-to-face discussions, this team discovered the often conflicting range of understanding associated with research expectations and outputs that were held by individual members. By reaching this common understanding of the team and associated tasks, this group met one of the most important factors for success within an academic multi-disciplinary team (Massey, et al., 2006).

Perhaps more importantly and at times certainly more fun, the members also engaged in informal activities, which included meals and drinks. These more informal settings allowed individuals to get to know each other on a personal, rather than strictly professional, level (Kraut & Galegher, 1990). These more casual discussions also served to build on the knowledge that team members already had of each other from other projects and contexts.

As discussed above, this process took time. In this specific case, various members of the research team had been working together on framing the broad research question, objectives and tasks for almost five years. For any research project, but particularly for one with a budget in the millions of dollars and a research time line of almost a decade, a team cannot be created instantaneously. There needs to be a process of back and forth among group members, both in person and electronically (Bagshaw, et al., 2007). Though no team is without its challenges, additional complications can result if people are hastily

formed into a “team,” when there is little opportunity to work towards common values and understandings of the research questions and approaches (Massey, et al., 2006). Intensive discussions at the early stages can minimize the misunderstandings that can occur when the actual work is undertaken. This team, in fact, realized in the second year of its involvement that it was not ready to move towards the first stage of the grant application. Instead, they identified that they needed more time to develop both the research approach and the team. In fact, some researchers argue that longer start-up phases should be built into projects to ensure that trust and understanding are developed among team members before the “real” work is undertaken (Bracken & Oughton, 2006).

Regular Communication Through a Variety of Channels

Besides the face-to-face meetings with their formal and informal interactions, the research team also ensured regular communication through a variety of channels. A listserv was established for the larger research team, including partners to which regular progress reports and discussion items were posted. This listserv accomplished two objectives. First, it served to reinforce team membership and identity because only team members could be part of the listserv; second, it also continued discussion and decision making from the face-to-face meetings. For example, the project charter was discussed at one meeting and then revised and posted to the listserv for approval from the larger research team. These two communication channels reinforced each other.

The administrative team also held regular conference calls and used email and a listserv for themselves. The listserv was very important to ensure openness and transparency. All team members received all messages; there was little opportunity for people to not be informed, thus minimizing confusion and misunderstandings. This type of communication becomes particularly important among virtual teams, of which this is one example, given the team’s geographical distribution across three countries and eight time zones (Poole & Zhang, 2005). In this context, scheduling regular conference calls can be difficult. Asynchronous communication becomes one way to manage this geographical dispersion.

The Actual Grant Writing Process

The actual grant writing process itself was a key team building exercise. While the administrative team had six weeks to write the full application, the majority of the work took place over a single week’s time when members met in one location to write collectively. This intensive activity was an opportunity for team members to evaluate each other’s strengths and weaknesses and use that information to assign tasks and responsibilities within the grant writing and beyond to the actual research work. This intensive time together was also valuable for confirming the research questions, methodologies, tasks and resource allocation. The members also affirmed at several points their desire to collaborate and to be accountable to each other and the larger research project team.

As part of this writing process, the administrative team used an electronic project planning space, which accomplished several objectives. First, it served to reinforce team membership and identity, a key task as argued by Poole et al. (2005). As is the case with the listserv for the larger research team, only members of the administrative team had

password access. The space also created a repository of documents, project plans, timelines and milestones, and housed a collaborative writing environment. From this common planning space, the team had multiple opportunities to ensure that they as a team were on track. This reinforced the shared mental model and further developed an open and trusting environment, which can ultimately maximize a team's performance (Salas, et al., 2005).

The final team building activity was the preparation for and participation in an interview with the grant adjudication team. By meeting together for a final time, the day before the interview, the members confirmed their working relationship, trust, and commitment to the research project as a whole as well as to each other. This meeting was the final shared experience. Through these conversations, the team members clearly confirmed their collective understanding of success as being both receiving the grant and creating productive team work relationships.

Key Learning Moments in Team Development

As the research team developed, several key moments were important for solidifying the group.

Team Development Takes Time

First, it was notable that the team did not apply to the first stage of the granting process in the second year. Instead, by focusing on developing the team slowly and deliberately, the members could concentrate on selecting the right set of people for the project as well as learning about each other at several levels. The team could slowly build up the patterns of collaboration as well as create successes upon which it could build without time and deadline pressure. By waiting and allowing for further dialogue among themselves, team members were able to move beyond their disciplinary research perspectives to the larger, overarching research questions and objectives.

Value of Project Charter

The project charter proved to be useful by outlining the team's patterns for interaction. Certain clauses were exercised fairly early after adoption to remove a member from the administrative team due to non performance. This action built trust and accountability among the team and reinforced the ways in which they would work together. As a result, the project charter became a living document that was tested and adapted as circumstances required. As the team discovered, establishing these types of norms can prevent misunderstandings and reinforce productive work relationships (McGinn, Shields, Manley-Casimir, Grundy, & Fenton, 2005; Poole & Zhang, 2005).

Learning Opportunities in Grant Writing

The grant writing process itself in the fourth year was important for team development. The administrative team showed that they could work under tight time constraints and still be able to enjoy each other's company at the end of a very long and intensive week. As a result, they reaffirmed their commitment to the project and the team as a

whole. The experience also reinforced that this activity cannot be easily accomplished through purely electronic means. Face-to-face discussions are needed to write a grant of a large size and scope. Also, by working so closely in physical proximity, the team members were able to develop a clear understanding of their complementary skills and knowledge. Through this long process, culminating with the writing of the grant, the administrative team developed the ability to discuss the research direction and processes in a collegial manner. Potentially sensitive topics could be raised, discussed, and resolved without harming the sense of the team. This will prove valuable as they undertake the research, since they have secured grant funds. The joint writing activities also created shared knowledge which benefited the team during the interview when representatives were able to answer questions outside of their home discipline.

Value in Grant Facilitation

A further learning point focused on the use of the consultant who facilitated the grant writing process. This consultant both planned the tasks and milestones associated with the grant writing as well as ensured that the team met the milestones. In addition, the presence of a neutral third party at times helped focused the group's frustrations and stress away from the lead researcher. This meant that the leader could then continue efforts to develop the team, research question and grant application, without expending energy "nagging" team members. This echoes Hackman's (1998) argument that coaching can be very effective at the beginning stages of team development, before the actual work is undertaken.

Various Roles of Lead Researcher

Finally, the lead researcher also played an important role building consensus and buy-in among the team members. The leader stepped forward and back as situations required and encouraged the team to determine its way forward, rather than dictating both the process and end result. This corresponds with the suggestion made by Salas, et al. (2005) that an effective team leader facilitates the group towards consensus, rather than dictating the process. The team leader also played a role in establishing clear and regular communication while ensuring that communication stayed open and transparent, an important role highlighted by Poole, et al. (2005). As a result, the team at all levels respects this researcher's ability to lead the project and is committed to the collaboration.

Discussion: Creating a Team

Drawing upon this case study, several recommendations can be made towards successful research team building, both for the individual research teams and the research offices which support these efforts.

Recommendations for Research Teams

First, the process of developing a research team takes time, especially in those cases when multiple disciplines are represented. As academics are aware, each individual discipline has its own particular method for defining and exploring research problems. Some researchers suggest that as the number of involved disciplines grows, the potential for conflict around problem definition, methodology, academic credit, team members' roles, and

other issues increases, as does the time required to develop the team (Birnbaum, Newell, & Saxberg, 1979; Jarvenpaa & Leidner, 1999). As a result, discussions necessary to resolve the conflict should be undertaken well in advance of the grant money being in place and the work being carried out (Bruhn, 1995). These discussions should also take place in-person (Cramton, 2001). In addition, these efforts increase the chances that the collaboration will be successful over the long term (Salas, et al., 2005). These are not one-time events, but efforts that need to be continually reinforced.

Second, as individuals consider potential collaborators, they should evaluate themselves and each other as team members, not just as content experts. The question to consider is whether an individual is prepared to commit to work as a team, rather than individually (Siemens, 2009). "Good" team members are open to differences in cognitive frameworks, professional identities and values, and able to compromise (Bruhn, 1995; Gold & Gold, 1985). One cannot assume that people know how to work together just because they are "professionals," especially given the individualistic training that academics receive (Bagshaw, et al., 2007; Cuneo, 2003). Having said this, research teams must be prepared to "un-invite" people who are unable to work within a team environment.

Third, as is seen in this case study, research teams need to employ multiple communication channels, including face-to-face meetings, electronic media (email, listserves, electronic project spaces), and conference calls. Besides facilitating decision making and information sharing, these acts of communication serve to reinforce the sense of a team and create and sustain commitment to each other within the team (Siemens, 2008, 2009).

Finally, research teams should consider developing a team charter that outlines roles, responsibilities and consequences. Through this process, teams can ensure common understanding of the research questions, tasks and interrelationships between people, and roles and responsibilities. The charter can also be the vehicle to clarify the issues that can create conflict in academic research teams, such as authorship, credit, research quality and other issues (Bagshaw, et al., 2007; Cech & Rubin, 2004; Kraut, et al., 1987-1988; Russell, 1985). The charter provides an avenue for teams to deal with non-performers without necessarily disrupting the entire team dynamic.

Recommendations for Research Offices

This case study also provides recommendations for research offices that support these research teams. First, research offices can provide facilitation support to teams in their early stages of planning. In particular, research offices might guide discussions around differences in disciplines, status, and associated issues such as authorship, credit, publication venues, and other issues. They can also encourage teams to start this process early, well in advance of the grant deadlines and funding announcements. Further, research offices can provide examples of project charters to facilitate these discussions (For example: McGinn, et al., 2005; Ruecker & Radzikowska, 2008).

Second, research offices can further support these efforts by providing money and space for research teams to meet face-to-face, particularly in those cases where team members are located across different institutions. These kinds of meetings are fundamental to resolving ambiguity and potential conflicts. In addition, research offices could advocate with granting agencies for increased funding for these activities.

Finally, alongside workshops on grantsmanship, research offices might consider offering seminars on project management, project leadership, facilitation, conflict resolution, team development theory, and other key areas. These are all skills required for team work, but are not often gained in traditional academic training.

Conclusion

This research team described in this case study was able to use the grant application process to form an effective team, albeit over several years. Through the various team building activities, the group was able to create a shared understanding of research questions, methodologies, associated tasks, and resource allocation, and write a grant application that reflects these understandings. While the team was ultimately successful in its application, prior to learning the results, the members had reaffirmed their desire to collaborate on other projects. This is one measure of success within a team context (Galegher & Kraut, 1990; Kraut & Galegher, 1990). Their experiences also provide lessons from which other academic teams and research offices can learn, and apply not only to research team development, but the many other collaborative activities that occur at academic institutions.

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Appendix 1
Research Team Project Charter
 PROJECT NAME: Research Team¹
 Research Project Charter

Principle	Policy
<p>We are interested in disseminating the results of this project as widely as possible, with credit to us for doing it.</p>	<p>Project members may use any of it as examples in presentations, papers, interviews, and other media opportunities. They may post any of it to their web sites. Wherever possible, they should mention the names of the other project members who were directly involved, as well as the research team.</p> <p>We will also maintain a collaborative project web site, which will contain links to all the presentations and publications of the group.</p> <p>For presentations or papers where this work is the main topic, all team members should be co-authors. We will adopt the convention of listing the team itself, so that typically the third or fourth author will be listed as “Research Team,” while the actual named authors will be those most responsible for the paper. The individual names of members of the Research Team should be listed in a footnote. Any member can elect at any time not to be listed, but may not veto publication.</p> <p>For presentations or papers that spin off from this work, only those members directly involved need to be listed as co-authors. The others should be mentioned if possible in the acknowledgments, credits, or article citations.</p>
<p>We intend this work to move forward at a steady pace, given due awareness of the vagaries of life.</p>	<p>Project members will make every effort to attend meetings as arranged and to keep in regular contact by email or other electronic means. Frequent absence may result in being warned, then cautioned, then asked to leave the team.</p> <p>Project members will jointly establish and attempt to meet self-imposed deadlines, in part through providing the project administrator with lists of commitments, so that reminders will be sent out as a matter of routine.</p> <p>In the event the task is overdue by a considerable amount of time (for instance, whichever is lesser—two months, or double the original timeframe), other members may at their discretion notify the project administrator, who will in turn warn the offender that the task will be re-assigned, without prejudice to the constitution of the team or the public credit of any member.</p> <p>Project phases will be arranged so as to minimize the need for sequential completion of one phase before another can begin: wherever possible, phases will run in parallel, with communication occurring between teams as they work on each phase, rather than waiting to communicate until the end. The project administrator will help keep communication flowing by producing periodic reports for the whole group on the progress of each team.</p>
<p>We would prefer for this work to be funded.</p>	<p>Project members will watch for and notify each other of funding opportunities and participate wherever possible in the writing of appropriate grant proposals.</p>

¹ The name of the research team has been removed.

<p>We understand that the work we do on this project may have future phases. Modifications and additions may be made to further the project by other members.</p>	<p>In addition to PDFs or other formats for presentation, project members will keep safe and distribute regularly all native files generated for the project: Photoshop, Illustrator, Flash, InDesign, and any other data files or source files. These files will be unflattened and editable. Where copyright restrictions do not apply, fonts should also be included in shared files.</p> <p>As projects progress to new phases, each team member will have the right of first choice over whether or not to continue with the project.</p> <p>Insofar as ethics clearances allow, data backup will be provided through central project servers. Local projects should also make provisions for regular backup of all project files, including versions of files in progress.</p>
<p>We wish to communicate in such a way as to preserve professional dignity.</p>	<p>We will strive to maintain a tone of mutual respect whenever we write or meet, and to forgive lapses if they occur.</p> <p>We will attempt to keep communications transparent, for example, by copying everyone involved in any given discussion, and by directly addressing with each other any questions or concerns that may arise.</p>
<p>We would like to foster goodwill among all the participants.</p>	<p>In making financial decisions, we will attempt to allocate resources in ways that indicate commitment to each of the people on the team.</p> <p>Members will also watch for and notify each other of opportunities for commercialization and licensing. Any commercial agreements or plans will be made so as to include and equally benefit all members of the group.</p> <p>We will strive to be a group working toward different parts of a larger, coherent and important whole – one that promises to exceed the sum of its parts.</p>

Signed this day at LOCATION

_____ NAME1

_____ NAME2

_____ NAME3

_____ NAME4