Abstract
Fundamental to many projects, a research grant application outlines a research question to be explored as well as its importance and scholarly contribution. This article's aim is to explore this transition from the grant application to the actual funded research work by examining the experience of INKE, a large interdisciplinary research team. After more than five years of planning and funding success, the research team needed to develop more specific procedures and policies that would facilitate their collaboration than had been outlined in the grant application. Issues under consideration included governance documents, intellectual property policies, leave/exit policies, planning processes, and the inclusion of new researchers and partners. This article will conclude with recommendations on transition and process planning for research teams to ensure effective research collaboration.

Keywords
Process planning; INKE; Grant application; Research; Project management; Academic collaboration

The INKE Research Group comprises over 35 researchers (and their research assistants and postdoctoral fellows) at more than 20 universities in Canada, England, the United States, and Ireland, and across 20 partners in the public and private sectors. INKE is a large-scale, long-term, interdisciplinary project to study the future of books and reading, supported by the Social Sciences and Humanities Research Council of Canada as well as contributions from participating universities and partners, and bringing together activities associated with book history and textual scholarship; user experience studies; interface design; and prototyping of digital reading environments.

Lynne Siemens is Assistant Professor in the School of Public Administration at the University of Victoria, 3800 Finnerty Road, Victoria, BC, Canada V8N 1M5
Email: siemensl@uvic.ca
Introduction
The grant application is fundamental to many research projects. It outlines the research question along with methodology, team members, key tasks, associated budget, and the importance and contribution of the research. Given its role in advance of project funding, the application serves as a high level document that leaves, by design, some important aspects of the research process unarticulated until such time as the grant is successful. However, before the research can commence, a research team must address these issues. But what are these? And what processes can be used to explore and document them?

A better understanding of the manner in which academic research teams operate is being gained through reflection by the teams themselves (See, for example: Bracken and Oughton, 2006; Bryan, Negretti, Christensen, & Stokes, 2002; Lawrence, 2006; Ruecker & Radzikowska, 2008). Generally, though, these reflections focus on the actual research work with little discussion of the transition from grant writing to the work funded by the grant.

This article’s aim is to add to this knowledge by exploring the transition from the grant application to the actual funded research work by examining the experience of one large multidisciplinary research team. By drawing on documents and “participant observation” by the author, it will answer questions such as: what happens as a team moves from envisioning the research to actually working together? What are the key factors which must be negotiated? And how is this done? It will conclude with discussion on this transition and processes which will be of interest to other research teams striving to ensure effective research collaboration.

Context
Implementing New Knowledge Environments (INKE) is a large multidisciplinary research project with a budget of approximately $13 million in money and in-kind contributions and 35 active researchers across four countries. This project took over five years to discuss, plan, and write the grant application before it was successful.

In the initial grant application, the team envisioned an integrated program of research with a supporting administrative structure as shown in Figure 1. This structure included an executive committee operating as trustee of the project’s research direction and budget, an advisory board providing outside expert perspectives and advice on the research, a partners committee representing stakeholding research partners, a sub-area research administrative structure, comprising of a committee of the leaders of each of the four sub-area research programs who provide administrative oversight to their respective sub-areas, and finally the individual researchers. The core administrative body is the Research Area Group committee.

Upon receiving news of funding success, the research team began the transition process from planning the work to actually carrying it out. The core administrative team led the process to enlarge the original project charter to include new issues that would need to be articulated in order to create an effective working relationship for the research. Much of this work was undertaken before the project was publically announced.
Transition Process

As part of the transition process, the core administrative team, supported by a management advisor and a project manager, met every one to two weeks by Skype in order to develop administrative governance documents to underpin the working relationship. The original charter and grant application were the starting point for these discussions. As can be seen in an agenda from an early meeting, the administrative team asked themselves key questions about their own role and that of the international advisory board:

- **Admin group**
  - 3.2 How do we build on what we have already articulated, and practised, to describe what our role as a group is? How about what each of the research area team leaders does? And how everyone works together?
  - 3.3 Who will write up the first draft of this description?”

- **International Advisory Board**
  - 5.2 Who do we plan to invite as chair? What qualities should they have? What is the ideal role of the chair?
5.3 How do we build on what we have already articulated, to define the role of the chair and the board? How does the board work with the rest of our structure?

5.4 Who will write up the first draft?

This exercise was repeated for the other parts of the administrative structure articulated within the grant.

Building on these questions, the administrative team developed documents to guide the working relationships between the various levels within the grant, including researcher, sub-area research groups, research area group committee, executive committee, partners committee, and international advisory board. The team engaged in co-writing by having each research area lead write a particular section which was then commented on by the other team members. The management advisor also provided feedback and often posed questions and likely scenarios that the team might encounter over the grant's life so that the team could determine appropriate ways to work together in advance of any problems. The group also consulted with outside stakeholders, such as research offices, for appropriate language for particular sections. Eventually, these parts were compiled into a single document. Through this writing process, the administrative team worked to create a balance between optimism (“everything will work out with no problems”) to pessimism (“there will be horrible problems and we will write a bunch of ‘thou shall nots’”). As a result, they paid particular attention to crafting the document in positive language while recognizing the potential for problems.

The specific topics for inclusion came from the team members themselves and matched their particular interests that they might have or issues they had encountered in other projects. The document also reflected the fact that the larger research team represented diverse disciplinary backgrounds which meant certain conventions, such as authorship, had to be negotiated in advance.

The process of document writing took about two months and culminated with each administrative team member committing to the articulated working relationship by signing the document. Ultimately, all active researchers on the grant signed a similar agreement in advance of resources being released for their part of the research. All drafts and signed documents were posted to an online project workspace. The full document can be seen in Appendix 1.

The topics covered in the administrative documents were varied. They focused on articulating a framework for a positive relationship while anticipating potential problems and/or changes. These issues included:

- a process for the inclusion of new partners and researchers;
- an authorship convention which included the listing of individual authors along with “INKE Research Group” to reflect the team nature of the project;
- an intellectual property (IP) clause which outlines the flow of IP in to and out of the INKE funded research;
- a processes for planning and resource allocation, decision-making and quorum, dispute resolution, and succession planning;
• protocols for data and document storage, communication and reporting, and leaves;
• an articulation of a clear relationship between planning, agency, and accountability; and
• a refined project charter to express the “spirit” of the relationship while the administrative governance document as a whole outlined more specific guidelines.

Since the documents were developed, the administrative team has had the opportunity for small scale testing. Through this testing, the team has reaffirmed that they have written documents that provide a process for making decisions, regardless of a particular issue. Further, refinements have already been made to the document based on lessons learned thus far.

A final point of the transition relates to the timing and purposes of meetings. As the administrative team moves from the short-term time framework of grant writing to the longer-term time framework of grant working, they have moved to monthly minuted meetings which are intended to be the primary forum for decision making. The team is resisting using email for this purpose.

Discussion

Only time will tell how effective this transition has been to develop a lasting positive work relationship within the larger INKE team. However, in the short term, some lessons can be drawn from this examination of the transition.

First, the administrative team has deepened their collaboration and work relationships by co-developing the governance documents and processes. During the process, this team probably felt that it might have been easier to let the project director develop these himself. However, the process that they undertook created buy-in and commitment to the project and each other, albeit with a great deal of time and effort that drew the researchers away from what they are trained to do (and perhaps like to do more). The team members have also learned more about each other and their relative strengths and weaknesses. It may be fair to say that this investment of time and effort to articulate an effective working relationship is an act of faith that all of the time and effort will actually pay dividends down the road. As McGinn, Shields, Manley-Casimir, Grundy, and Fenton (2005) argue, in their reflection on their own similar process to develop working principles, the articulation of principles was important in order to reduce as much as possible any conflicts about issues that might arise later. It was also an opportunity to “get to know each other and to build trust” (p. 564). Further, Kaufman and Sauve (2009) echo this need for upfront documentation in their reflection on developing a truly bilingual research team in Canada. Digital Humanities and Digital Libraries teams are also finding formal documentation is necessary for effective team research. As one participant in an earlier study stated:

formal documents sound cheesy, but in a multi-ethnic, multi-lingual, multi-generational, multi-talented work group (as every work group is) they are essential for setting a baseline of understanding of what the project is and who is supposed to do what. (Siemens, Duff, Warwick, & Cunningham, 2009, n.p.)
However, this is not to say that these will be static documents. Instead, the administrative team has committed to revisiting these on a yearly basis and determine if changes are appropriate. In that light, some refinements have already been made. Second, besides providing guidance on working relationships, the governance documents play an important role with the larger stakeholder community. Several administrative team members expressed concern with the “invisible” nature of administrative work, especially during research start up. These documents begin to make this work more visible by clearly articulating the ways that the team will work together as it undertakes the research. To this end, the administrative team has discussed the possibility of publishing the documents to further increase this visibility.

Third, this process highlights the new issues that must be negotiated in order to undertake stated research. As the example of the agenda item above suggests, grant applications provide a framework for the research undertaking but which needs further development before undertaking the work. The administrative team has set processes for decision-making, conflict resolution, intellectual properties, authorship, changes to researchers and partners, and other issues. The most appropriate time for these discussions is after granting success rather than earlier where it may complicate work on research directions. The shift in the purpose and timings of meetings also fits within the transition process. A research team must undergo a mind-shift and begin thinking longer term in the context of the research, rather than reacting within the tight time frame of grant writing. To draw on a sports analogy, the administrative team is moving from sprinting to marathons, which entail a different discipline in training.

Finally, the transition from writing to working the grant also highlights the need for document and data control and storage. The development of the governance documents was an iterative process where administrative team members commented on various drafts within an online project planning space, minimizing the number of emails and overlapping comments. The final version was subsequently posted to the site. At the same time, agendas were set and minutes taken at each meeting, which are also stored in the central online space. In the short term, this has already proven effective as the team has had opportunity to consult past decisions, specific understandings of issues, and the processes by which to resolve situations. This will become even more important as the research project progresses through the seven year timeframe.

On a more general level, this paper contributes to efforts to understand the nature of academic collaboration and the factors that contribute to its success while minimizing the potential difficulties (Amabile, Patterson, Mueller, Wojcik, Odomirok, Marsh, & Kramer, 2001; Kishchuk, 2005; Salas, Sims, & Burke, 2005). The administrative team has focused on the issues that might create the greatest potential for conflict given the fact that the larger research team is comprised of multiple disciplines with their differing academic languages, research methodology, and authorship conventions (Choi & Pak, 2007; Newell & Swan, 2000; Northcraft & Neale, 1993). An argument can be made that it is important to negotiate this in advance to avoid disputes, a situation common to many research teams (Bagshaw, Lepp, & Zorn, 2007; Smith & Liu, 2008). A negotiated authorship convention that fits the needs of a particular team can also signal the nature of that working relationship. In the case of this team, the authorship convention of individual authors with “INKE Research Group” becomes a
visible manifestation of that collaboration. Any published work and data represent the collaboration of the whole team, past and present, not the work of any sole researcher.

The process inherent in transition can serve a larger purpose of forming a collaborative mindset. Team members are exposed to different perspectives and are subsequently forced to work through similarities and differences to find common ground and develop commitment. When working with different disciplines, a research team does not necessarily have to follow “tradition”, but can rather determine new ways to work together that are appropriate to their specific team. At the same time, a research team does need to be prepared to explain the reasons for doing something differently. In this case, the INKE authorship convention implies a model that has more in common with the sciences rather than humanities with its focus on the sole author. The administrative team has worked with the INKE researchers to ensure that they understand that the convention is appropriate given the nature of this collaboration.

As this large research project has found, a transition between writing a grant and actually undertaking the work exists. This stage requires teams to develop fuller working relationships and processes that are suited to the new stage of work. New issues, such as authorship, intellectual property, decision-making structures, and others must be negotiated by a team. While each academic research team must develop their own specific framework (McGinn, Shields, Manley-Casimir, Grundy, & Fenton, 2005), this examination of the INKE experience suggests issues to be considered as well as processes to use during the transition.

References


