Writing a Research Grant Proposal

Primer for Students

Office of the Associate Vice-President, Research & Innovation

DISCOVER · ACHIEVE · BELONG

Selecting a Grant

- Will obtaining the grant aid your studies/career?

- Do you have time to allot to requirements?

- Do you meet the criteria?

- Is it feasible to finish the application prior to the deadline?

- Is there a necessary output? Is that achievable?

General Tips

- Know the culture of the funder
- Follow the instructions
- Know the assessment criteria
- Treat the application like an argument and present it with confidence
- Use the appropriate disciplinary concepts and methods

Writing a Research Proposal

Purpose of A Proposal

- To show you have a worthwhile research project to undertake

- To demonstrate that YOU have the competence to complete it

- To discuss all relevant aspects of the research process

- To enable others to evaluate whether enough information exists to want to support the proposed study
  - As a supervisor (e.g. a thesis)
  - As a grant (e.g. internal, provincial, federal/Tri-Council)
  - As a funder (e.g. industry)

- It can provide a stepping stone to new opportunities

Background

- General Idea Selection
  - Turn to the literature that pertains to your area of interest
  - Ideas from courses attended and research discussed
  - Ideas from media – news, science magazines, etc.

- Once You Have a Topic
  - Glean from courses taken in writing, research methods
  - Develop a strategy for addressing all relevant components
  - Title – concise yet sufficiently descriptive
  - Abstract – e.g. 400 words summarizing the research project
  - Introduction
    - Background content, Rationale, Research Qs.
    - Frame the research problem!
    - Develop your hypotheses

Introduction

Study Title

- "From Annette Funicello to Justin Timberlake: The History of the Mickey Mouse Club"

Context

- Literature Review

Objective

- A goal, what you are aiming to achieve

Literature Review

- Literature Searching
  - Are your ideas novel?
  - Sources: academic literature, grey literature
  - Where are the research gaps? Be a critical thinker!
  - Show you can integrate and synthesize the existing literature
  - Nothing is perfect - illustrate some potential issues you may encounter and how you will deal with them (e.g. small N)

- Writing
  - 4 "Cs" in Diamonds, 3 "Cs" in Research Writing
    - Clear, Coherent, and Compelling (as Competitive)!
  - Macro over Micro-details
    - Don't get caught up in the little details; keep a "big picture" view
  - Write and cite and cite and cite!
    - Plagiarism is a serious academic offense
  - Set some parameters!
    - e.g. Geographic: Canada-wide versus Winnipeg's North End

"Research Q"(s)

- WHAT do you wish to accomplish?
- As with goals, is the question S.M.A.R.T.?
  - Specific, Measurable, Achievable, Relevant and Time-Bound
  - Is it a feasible question (scope, time, budget)?
  - Beware of "scope creep"!

Research Q Example:

- Do socioeconomic factors (income, education, employment) play a role in non-fatal traffic injury incidence and severity?

Research Qs

WEAK Research Qs

- *Rsrch Q: Will holding workshops reduce school violence?*

- *Rsrch Q: Can high school suspension rates be changed?*

- *Rsrch Q: Can identity be determined by carbon dating?*

STRONG Research Qs

- *Rsrch Q: Will one hour hands-on car seat training sessions reduce child motor vehicle injuries in Winnipeg?*

Methodology

- HOW will you answer your research question?
  - Five 'W's & H': Who, What, When, Where, Why, and How
- Methods must be well thought out and comprehensive
- Research Design
  - Qualitative or Quantitative or Mixed-Methods?
  - Cross-sectional or longitudinal surveys?
  - Primary or secondary data analysis?
    - If primary - Tool validation: pilot studies, validity statistics?
- Procedures: X → Y → Z, be logical and sequential
- Inclusion/exclusion vs. leave to "assume"
- Participants – communities, individuals, groups?
- Materials Used: Tools, instruments, equipment
- Key Question: Could someone ELSE carry out this entire project?

Anticipated Findings and their Significance

- A key factor in any research endeavour is the anticipated results

- How will this project contribute to science, knowledge, or innovation?

- Why will your proposal be chosen over others for funding?

- IMPACT.

KT, KD & KM

Knowledge Translation (KT)
- A dynamic process that involves synthesis, dissemination, exchange and ethical use of knowledge to improve the lives of Canadians
- Develop handouts, factsheets, doing presentations - at level of audience

Knowledge Dissemination (KD)
- Transferring knowledge within and across settings, with the expectation that the knowledge will be "used" such as for learning, or attitude/ behaviour change
- Conduct workshops, create a website, transfer knowledge to end-users

- Possible Outcomes
  - Increased awareness;
  - Greater capacity for informed decision making
  - Further information exchange

Knowledge Mobilization (KMb)
- "The specific activities and tools that facilitate the multi-directional flow and exchange of research knowledge"

Proposed Budget and Timeline

Proposed Budget

- All-inclusive!
- Research how much all supplies, materials, R.A.s cost
- For personnel you must factor in benefits, vacation time
- "No padding" - Evaluators are aware of what things cost
- Can include student charges/hires, supplies, travel costs

Proposed Timeline

- Determine how much time must be allotted
- Batch the different tasks to complete overall
- Break them down further
- A Gantt Chart is a very good tool!

Reviewing a Research Proposal

Reviewing

- Meets criteria
- Within scope
- Rigor of endeavour
- Importance to career path/relevance
- Research background
  - High G.P.A.
  - Awards/Scholarships/Fellowships
  - Experience/Publications/Conferences
- Tools can be helpful

Closing Remarks

- DREAM…

- Innovate…

- Create…

- Disseminate…

- Think outside the mid-size box (topic scope)

- Cover all components

- Be meticulous (cross all "t"s, dot all "i"s)
  - Proof-read, errors, non-sensical sentences etc.

- Be passionate about YOUR research!

Contact Information

UWinnipeg Research Office

researchoffice@uwinnipeg.ca