How to write a good research grant application
Content, Structure, How to Write and How to Get Ready

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Overview

- Content of a good case for support.
    - The case for support must make four propositions.
    - How the case for support makes the four propositions
- Structure of a good case for support
    - The Case for Support must have four properties.
        - How to Make the Case for Support Speed Readable
        - How to Make the Case for Support Easy to Read Quickly
        - How to Make the Case for Support Easy to Remember
        - How to Make the Case for Support Easy to Reconstruct.
- How to write the case for support.
    - How to write the Description of the Project
    - Write the background subsection by subsection
    - Write the Introduction, using sentences you wrote earlier.
- How to get ready to write a grant application.
- Writing Resources

The case for support must make four propositions.

- ▶ The Grant Application makes the case that a project deserves investment because it will solve an important problem.
- ▶ Typically the case consists of four propositions.
  - ▶ IMPORTANCE: The research problem is important to the funder, as defined by their remit.
  - ▶ SUCCESS: The project offers a realistic promise of a solution
    - ▶ Research Design
    - ▶ Dissemination
  - ▶ VALUE: The resources requested are:-
    - ▶ Necessary
    - ▶ Sufficient
    - ▶ Appropriate to the scale of the problem
  - ▶ COMPETENCE: PI, team and institution are capable of carrying out the project.
- ▶ The Case for Support must contain evidence to support these four propositions.
- ▶ The propositions dictate the content of the case for support.

How the case for support makes the four propositions

IMPORTANCE Explain the research question
- ▸ Give evidence that it is important.

SUCCESS Describe the research project
- ▸ Explain methods.
- ▸ Show that the project answers the question.
- ▸ Explain what will be done with the answer.

VALUE Describe how resources are used in the project.
- ▸ Show you need what you are asking for.
- ▸ Show you have everything else.

COMPETENCE Describe your contribution to the question.
- ▸ Cite your papers that use the research methods.
- ▸ Some funders require a separate description of the team & their achievements.
- ▸ Application form may require a CV for each team member.

The Case for Support must have four properties.

The properties are dictated by the decision-making process.

- The Grants Committee make the decision
  - They will know much less than you do about your research.
  - They will have Very Limited Time
  - They will have many other applications to consider
  - The case for support must be speed-readable.
- Referees have more expertise, but no more time.
  - They will be able to assess the evidence in more detail
  - The case for support must be easy to read quickly.
- Designated members present application & recommend score
  - Committee discusses & scores: applications are ranked by score
  - The case for support must be easy to remember
  - And easy to reconstruct
- The properties dictate the structure and style of the case for support.

How to Make the Case for Support Speed Readable

- ▶ Front-load each paragraph with its message (ASSERT then JUSTIFY)
  - ▶ First sentence of para ASSERTS (message sentence)
  - ▶ Remainder of para JUSTIFIES
    - ▶ This is where you cite literature
    - ▶ This is how you avoid citing too much literature.
- ▶ Use simple, consistent structure
  - ▶ Question (background) has same structure as answer (project)
    - ▶ This also helps the SUCCESS proposition
  - ▶ Summary has same structure as case for support.
- ▶ Clear, consistent layout
  - ▶ Headings & Subheadings convey structure
  - ▶ Consistent terminology

How to Make the Case for Support Easy to Read Quickly

- ▶ Front-load the document.
  - ▶ Introduction makes the whole case very briefly
  - ▶ Pre-uses message sentences from later sections
  - ▶ Uses exactly the same words and phrases
  - ▶ Sentences are in the same order

- ▶ Use simple language
  - ▶ Short sentences (short paragraphs; short words)
  - ▶ Consistent terminology and phrasing
  - ▶ No synonyms
  - ▶ No abbreviations

- ▶ Use simple, consistent structure
  - ▶ Question (background) has same structure as answer (methods/project)
  - ▶ Introduction sets out structure
  - ▶ Summary has same structure as case for support
  - ▶ And pre-uses message sentences

How to Make the Case for Support Easy to Remember

- Repetition
  - Important things should be said several times
  - Always use same words if possible
    - Repeat main message sentences 3 times
    - Embed tag phrases in message sentences
- Lists of no more than 4 items
  - Always use same list order when you repeat the lists
- Signposts & links
  - Link announces next list element
  - Signpost points to corresponding element in subsequent list
- Label list elements
  - Use tag phrases in labels
  - Use labels to link related elements in different parts
    - We need to know + tag phrase + signpost
    - This will tell us + tag phrase
- Create the Summary from the Case for Support
  - Re-use message sentences
  - Keep the order consistent

How to Make the Case for Support Easy to Reconstruct.

1. Introduction 'Foot in the Door'
   - Gets attention & sets out the whole proposal in brief
   - Question - in the 1st sentence - and its importance
   - Split question into (about 4) subquestions (Aims).
   - List sub-projects that answer the subquestions (Objectives).
   - Say how findings will be disseminated.

2. Background 'We Have a Problem'
   - States the question and gives evidence that it is important.
   - Breaks it down into about 4 sub-questions
   - Explains why we need to know the answer to each subquestion

3. Description of the Project 'The Solution'
   - General research approach/methods
   - Sub-projects that answer the sub-questions in order
     - What will be done, how, when, by whom, with what resources
     - Which resources will be provided by the grant
     - What this will tell us and how findings will be derived
   - How findings will be disseminated

- ▶ Which section do you write first?
- ▶ How do you write each section?

- ▶ Introduction?

- ▶ Background?

- ▶ Description of the project?

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- Introduction?
    - No: the introduction introduces the background and the description of the project
- Background?
    - No: the background is about the importance of the project.
- Description of the project?

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Which section do you write first?

- Introduction?
  - No: the introduction introduces the background and the description of the project
- Background?
  - No: the background is about the importance of the project.
- Description of the project?
  - Yes: until this is written, you cannot write the background or the introduction.
- Other reasons to start by writing the description of the project
  - You can't tell whether the project is do-able until you have described it.
  - You can't tell whether the project is affordable until you have described it.
  - You can design the project by writing and testing the description.
  - You can start working on costings more quickly.

How to write the Description of the Project

1. Describe a piece of research you want to do (a sub-project) and check that the description includes
   - What will be done, how, when, by whom, with what resources.
   - What will be discovered by this sub-project
   - How the discovery will be derived and disseminated
   - See bit.ly/UYRCuR for a checklist
2. Maintain lists of resources (applied for and existing), of research techniques, and of discoveries.
3. Check the project for completeness, coherence, feasibility, cost
4. Repeat steps 1–4 until you have a list of about 4 sub-projects.
5. Add a general methods intro and a tailpiece about dissemination
6. See researchfundingtoolkit.org/?p=340 for more detail.
7. This section should be at least 50% of the case for support.

Write the background subsection by subsection

- Write a subsection that corresponds to each of the sub-projects.
  - It should explain why we need to know what the sub-project will discover.
  - It should justify the explanation by citing literature
  - It can refer forward to the sub-project that will discover the answer
  - They should be in the same order as the sub projects that answer them

- Write an introductory sub-section that explains that the aim of the project is to answer an overall question that encompasses all of the sub-questions

- Explain, referring to literature, why the overall question is important.

- See researchfundingtoolkit.org/?p=384 for more detail.

- This section should be less than 30% of the case for support.

Write the Introduction, using sentences you wrote earlier.

- Ensure that the Background and Project Description sections are in 'assert then justify' style.
  - Find the 'message sentence in each paragraph
  - Move it to the beginning
  - Edit the paragraph so it makes sense
  - See researchfundingtoolkit.org/?p=423 for more detail.
- Copy message sentences verbatim into the Introduction
- Edit for readability
- It should be less than 20% of the total case for support.
- Most of it can be re-used in the summary.
- See researchfundingtoolkit.org/?p=428 for more detail.

How to get ready to write a grant application.

- The first step in writing a grant application is to describe four sub-projects.
  1. Describe a piece of research you want to do (a sub-project) and check that the description includes
     - What will be done, how, when, by whom, with what resources.
     - What will be discovered by this sub-project
     - How the discovery will be derived and disseminated
     - See bit.ly/UYRCuR for a checklist
- Get used to thinking about your research in these terms.
- Build yourself a library of possible sub-projects.
  - Think about the resources that you have
  - And about the resources that you will need
    - And learn which funders like to provide those resources.
  - And about the techniques you need
    - And get potential collaborators with those technques.

- ▶ Book: The Research Funding Toolkit, by Jacqueline Aldridge and Andrew Derrington, Sage 2012
- ▶ Blog: researchfundingtoolkit.org/gfol/
- ▶ These slides are available on the resources page researchfundingtoolkit.org/resources/
- ▶ Case for Support Checklist bit.ly/10Nr9FK
- ▶ SubProject Checklist bit.ly/UYRCuR
- ▶ Project Description Checklist bit.ly/R8xVoV