

METHODOLOGY OF BASIC AND APPLIED RESEARCH

2nd Edition

Edited by:

A. I. Olayinka, V. O. Taiwo, A. Raji - Oyelade and I. P. Farai

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PREPARING A RESEARCH PROPOSAL

Olayinka, A. I. & Owumi, B.E.

INTRODUCTION

The primary objective in preparing a competitive grant proposal is to produce a proposal that will stand out from so many others that are submitted to funding agencies for funding. This will entail selecting an effective title, developing an effective summary, articulating the study objectives/hypotheses, writing a good introduction, choosing appropriate experimental design/methods, planning for expected/unexpected results and developing a realistic budget. In addition to the fact that funding agencies have their own interests, priorities and dictates, the standards of a good proposal constitute the dilemma of students and researchers who are faced with the task of proposing a study (Bamiro et. al. 2003).

From experience, it is important to note that the art and science of developing a proposal is not an easy task. But it is even more difficult to conduct a study without a proposal development preceding a research quest. The difficulty associated with the development of a proposal lies necessarily with neither the failure of lecturers instructing courses in research methods nor the inadequacy of available texts in the area of methodology. Instead the impediments hover around the inability of some researchers and students to piece together the various techniques and tools which have been learnt over a period of time. The problem is even worse among students who oftentimes conceive of every subject or course in terms of examinations and not internalising what is taught and how it would be applied later in life. Similarly, the variety

of texts available hardly present the character of a proposal or have as a theme proposal writing such that the average reader at the end of the day is left to figure it out himself what a proposal is all about.

It is in the light of the preceding discussion or background that the examination of the various stages necessary for a successful proposal design becomes necessary. In doing this we would attempt to ground the discussion by making each level as empirical as possible by citing concrete examples and as well conceptualizing key terms on which each level hinges upon.

In an attempt to discuss the subject, it is important to begin from the premise of what a proposal means. What is a proposal? Or, put differently, what does a research proposal entail? Put simply, *a proposal is a statement or planning document of intent, which shows how a study would be executed* (Mouton and Marais 1996). In other words, you have to lay-out the details of your plans and as well as a sales document for someone else's review or approval. The approving body or person might be an instructor/lecturer, or a funding agency whose resources (time or money) you intend to spend (Babbie & Mouton 1998). As it is with every rational man or venture, resources have to be judiciously expended on projects that would meet the organization's goal and also benefit or reach the end user of the product. It is in this sense that supervisors or assessors are concerned with how their resources would be utilized and the extent to which the programme being proposed meet their need as well as benefit the end user of the outcome (findings).

It is, therefore, clearly of considerable importance that the proposal should convey a favourable impression of the project and illuminate the researcher's ability to handle the subject.

- Does he know the subject sufficiently well?
- Is the area of study relevant to the contemporary issues of interest or the target of the funding agency?
- Does the plan and use of time convey an impression of the researcher's competence and ability to execute the project successfully?

These, among other issues, determine the quality of the proposal. The next section will briefly model schematically the structure of a grant proposal. The third section of the chapter discusses the format for a thesis research proposal while the final section of the chapter outlines the success and failure indicators of proposals.

COMPETITIVE GRANT PROPOSAL

Project Overview

- *Title*: This should be a short phrase describing the subject of the proposal
- *Proponent*: Provide the name of the research organization, the name of the project leader, and collaborating research organizations.
- *Estimated budget*: Give an estimate of the total cost of the project in national currency. Indicate the current exchange rate of the local currency against the international currency, e.g. the US dollar, the Euro, or the British pound.
- *Estimated duration*: Indicate how many months it will take to complete the entire project, including writing and submitting the final reports.
- *Objectives*: Indicate both the general and specific objectives of the project.
- *Abstract*: Provide a summary of 150 to 300 words of the problem, how it will be studied, and how the findings will be used.

The maximum length of a proposal can be discussed with the Programme Officer. Generally, the total length of the research proposal, excluding appendices, should not exceed 20 single-spaced pages.

Components of Research Proposals

The components of a research proposal can be divided into two broad groups, namely:

- Core components
- Additional components

Core components of research proposals

The core components of a research proposal include the following:

- A description of the research question
- An indication of why the problem is relevant
- A review of relevant literature
- A description of the proposed methodology
- A time frame

In other words,

- What do you want to do?
- Why do you want to do it?
- Why is it important?
- Who has done similar work?
- How are you going to do it?
- How long will it take?

Make sure that these are meaningful and not mechanistic.

Additional components of research proposals

Depending on the project, additional components of a research proposal will include the following:

- A budget
- A description of how the research findings will be disseminated
- An outline of team members' responsibilities
- Capacity development
- Ethical statement
- Possible problems
- Other information required by funders.

Always try to find out exactly what the funder or organization expects in a proposal, and provide it in writing.

Choosing A Topic

Peil (1982) noted that confused thinking at the beginning of a research can cause flaws in all that follows. In some cases,

lack of interest or time by the supervising body or person in case of academic research can exacerbate the confusion. The issue, therefore, is that once an individual has chosen a general area where a topic is not given, for example Human Immune Deficiency/Acquired Immune Deficiency Syndrome (HIV/-AIDS), the researcher must narrow down the topic to a set of specific questions which can be answered in a single study, for instance, "*Poverty and HIV/AIDS Patient Management in Swaziland: A Case Study of Known HIV/AIDS Patients*" (Owumi and Ezeogu 2003). From the general focus, the authors have been able to narrow the subject to "Poverty" and "Known Patient Management". This "zeroing down" came from a perusal of the literature. No subject is new in the same way as all initial conception of topics are also vague; thus, the desirability of literature search in order to sharpen and streamline the research focus. Even in situations where topics are allocated, the researcher has no choice but to seek relevant literature in the area for an adequate understanding of what the subject is all about. Simply, get acquainted with the subject. It also should be noted here that the aims of the study would begin to crystallize from this stage onward. This preliminary work in itself does not constitute an adequate literature review. Babbie and Mouton (1998) actually referred to this exercise as *preliminary scanning of literature*. It must be emphasized here that the currency/relevance of the topic and the supervisor's interest/bias are of tremendous importance in terms of the successful completion of the study at this stage.

Aspects of a Research Proposal

The research question

The first step in developing research proposals involves finding a research question. Researchers get their questions from many different places, including:

- Observation of the world
- Concern with theory
- Previous research
- Practical concerns
- Personal interest

The criteria for choosing a research question include the following:

- Access to information
- Access to resources
- Theoretical background
- Value of research
- Researcher's skills
- Is question big or small enough?
- External requirements
- Overall probability of successful completion
- Interest to researcher

In choosing a research question:

- Remember that a broad research area is NOT a research question
- Formulate a number of possible questions, and weigh up the pros and cons
- The proposal must reflect that the issues have been thought through.

Problem and Justification

Usually, this section of the study should be very concise and straight to the subject of interest. Since the proposal is a sales document as it were, emphasis should be on illuminating the subject and creating an understanding of the existing situation, as in the case of our Poverty and HIV/AIDS study referred to above. A brief background of HIV/AIDS and Poverty is inevitable. What is the relationship between these variables? What is the situation of the pandemic either globally or locally? What is the status of those afflicted? Gradually, as these questions are addressed, the persistence of the problems at stake would begin to emerge and how the gaps would be filled becomes manifest. The problems in our example of HIV/AIDS study is, high incidence, nature of management of the ailment and status of patients with the ailment, In an attempt to unravel the riddle surrounding the high incidence rate and especially among the poor in the society, you are filling an identified gap, which is the problem. The problem therefore leads you logically to the aims of the study, which is what you

hope to achieve, as in our earlier example. The study attempts to find out the relationship between "Poverty" and "HIV/AIDS". It also attempts to examine the status of the identified patients and the sources of resources for their hospitalization and its impact on their welfare.

This section should normally make up between one quarter and one half of the proposal. It should describe the problem that is to be investigated and the questions that will guide the research process. Note that proper justification of the importance of the research questions to be addressed requires some sense of the likely contribution to knowledge that the research will make and its place in current debate or technological advance. Often, this can be presented in the form of research hypotheses to be tested. The section should provide a brief overview of the literature and research done in the field related to the problem and of the gaps that the proposed research is intended to fill.

To show the importance of the problem, this section may discuss such points as:

- How the research relates to the development priorities of the country or countries concerned;
- The scientific importance of the problem;
- The magnitude of the problem and how the research results will contribute to its solution;
- The special importance of the project for vulnerable social groups; and
- The need to build up research capacity in the proposed area of research.

Proposals should be explicit about the capacity building needs that the project will address. If the proposal is for the second phase of a project or if the applicant has received funding in the past for similar work, describe the results of the previous work and indicate why additional work is required.

Objectives

The objectives section of a proposal is typically very brief, usually a half page at most. This is because the rationale for each

objective will already have been established in the previous section, while the ways of achieving the objectives should be explained in the methodology section.

The general objectives provide a short statement of the development goal being pursued by the research.

The specific objectives are operational in nature. They may indicate specific types of knowledge to be produced, certain audiences or publics to be reached, and certain forms of capacity to be reinforced. These are the objectives against which the success of the project will be judged. It is important to distinguish the specific objectives from the means of achieving them, such as pursuing fieldwork, organizing a network or a workshop, or publishing a book.

Hypothesis

It should be stated clearly here that hypotheses are not a must in all studies but where the data generated is large and statistical in nature, hypotheses become inevitable. An hypothesis is the unexpected but unconfirmed relationship between two or more variables (Singleton & Straits 1999). It is actually a proposition that posits a relationship between one observation or variable and another. For example, "Poor people are more likely to die earlier from HIV/AIDS than rich people". Hypotheses are usually not statements of belief; instead, they should state a relationship that is precise and easily observable or measurable.

Literature Review

As already noted earlier, literature review actually commences as soon as a topic is conceived. The rationale for this is clear as noted earlier. At this current stage of the study, the need for detailed review of relevant material on the subject is paramount for the researcher to know what other scholars have done and how or where they were done or executed. It would also assist the researcher to know how, if any, the current study would be different from earlier ones. It must be pointed out however, that a literature review is meant to facilitate a critical analysis of the data emanating from the study. Information of other or earlier researchers is necessary to buttress or jettison the data from the field. In this way, the reviewed works benefits

the research conducted.

Similarly, an appropriate and relevant theory to guide the study is inevitable. Put differently and in simple terms, no one builds a house without a plan. This is essentially the role a theory plays in research. It directs or patterns the trend of discussion and thus makes our argument non-amorphous. What is expected of the researcher is to identify a relevant and appropriate theory and discuss in details the theme and how it would be applied in the study. This also helps in the selection of the research method to be adopted in the course of the research.

Purposes of Literature Review A review of the literature serves the following purposes:

- Provides a conceptual framework for the research;
- Provides an integrated overview of the field of study;
- Helps establish a need for the research;
- May help clarify the research problem;
- Helps to demonstrate the researcher's familiarity with the area under consideration (theory and/or methods).

Skills Involved in Producing a Literature Review

A good literature review generally contains an argument; its production entails:

- Surveying a comprehensive range of existing material and sources in the general areas of your study;
- Selecting those that will be most relevant and significant for your particular project;
- Understanding and analysing the central findings and arguments;
- Synthesizing the findings and integrating them into the research proposal.

Sometimes the literature review includes progress on what has been known/done on the research topic from the time interest started to the present time. For example, gender issues became topical in the 1970s but interest has greatly expanded what was known then to present time.

How to Write a Literature Review

In writing a literature review:

- Indicate the ways in which the authors you are reviewing will be relevant to your research (information; theory; methodology). Undertake an unbiased citation of papers with contrary views
- Demonstrate that you understand the similarities between these works and paradigms. Where do they stand in relation to each other? Where does your research stand in relation to them?
- The works that you refer to should reflect recent scholarship as well as those considered of seminal importance. If possible, cite papers less than 10 years old
- If the study is cross-disciplinary or comparative, you need to describe how the different areas of research can be drawn together in a meaningful way.
- Cite your previous work but show moderation.
- Cite only papers you have actually read.
- Seldomly cite unpublished, non-peer reviewed material.

The following questions will help you in compiling a literature review:

- What are the broad bodies of literature that have relevance for your research topic (local and international)?
- What theoretical model(s) relate to your research topic?
- What theories, methods and results have previous researchers in your field produced? What is the history of your area of study?
- What are the most recent findings in your area of study?
- What gaps or contradictions exist among these findings?

- What new research questions do these findings suggest?
- What structure suits my literature review best?
- What should I leave out?

The literature review is NOT:

- Part of the research project. Although there may be an ongoing review of literature throughout the project, funders expect a solid preliminary review to have been carried out before a proposal is submitted.
- A bibliography.
- A series of descriptions of pieces of previous research with no apparent connection to each other or your project.

Methodology

The proposed research may be exploratory or highly structured, quantitative or qualitative. However, the methodology section should begin, in all cases, by defining the conceptual framework and theoretical frame of reference that will guide the research. The main explanatory and dependent variables should be identified and related one to another. What does the methodology section do?

- The methodology section shows the reader how you are going to set about looking for answers to the research question (including, if appropriate, materials and methods to be used).
- It must include enough detail to demonstrate that you are competent and the project is feasible.
- The proposed methods must be appropriate to the type of research.

The methodology should consist of the following:

- Hypothesis
- Research design
- Sampling
- Measurement instruments
- Data collection procedure
- Data analysis

Method of Data Collection

Proposals should indicate what approaches and methods will be used to collect primary and secondary data and information. Provide details on available sources of secondary data or the methods to be used for the collection of primary data, such as questionnaires and group discussions. Outline the procedures for the development, pre-testing and administering of any research instruments.

If survey work is involved, give detailed information on the study area. If the research is related to human populations, information on the study population should also be provided. Include a description of the procedures for selecting the population sample and the sample size. The survey sample should reflect ethical considerations to protect confidentiality and gender balance, in appropriate cases, among surveyors or those surveyed.

If biological samples are to be collected, provide information on the number and type of samples, the method of collection, who will perform the collection, and how the samples will be transported, stored and analysed.

If laboratory procedures are involved, standardized procedures and protocols must be stipulated (quote relevant references). Describe new or unique procedures in detail and specify the quality assurance procedures that will be followed.

In the social sciences, there are a variety of methods of data collection open to the researcher to choose from. The choice of method is influenced by a number of factors including the choice of topic, respondents, and the type of study (be it exploratory, descriptive, explanatory or experimental). Whatever choice we make, we must bear in mind whether the method would answer the questions set out earlier. Is it in agreement with the theory? Will different methods be required for robust data to be gathered? If yes, then *Triangulation* is recommended. Triangulation is encouraged because no singular method may furnish the researcher with the required data (Frankfort-Nachmias & Nachmas 1996). In the Poverty-HIV/AIDS study referred to above, Structured Interview and observation methods were adopted. Efforts should be made to detail fully the sample size and how samples would be chosen in case of survey, in the same way as when informants are required

for structured interview.

It is best to organize the methodology to explain how each specific objective will be achieved. The proposal should provide enough detail to enable an independent scientific assessment of the proposal. Assuming that the research questions and research hypotheses to be addressed by the project have been clearly identified in the "problem and justification" section, the purpose of the methodology section is to show how these questions will be answered in the most rigorous way possible.

The methodology section deserves greater emphasis than applicants typically give to it. Proposals need to be clear about what activities are envisaged in pursuit of each objective, and this must be done before funding is approved. Indeed, it is impossible to define the budgetary needs of the project in the absence of a solid methodology section.

Data Analysis

The data from the field is useless if not analysed. Here, the researcher must state whether the data would be analysed qualitatively or quantitatively. In making this choice, the researcher must take into cognizance the methods used in the data collection process and the size of the data to be analysed. Once these facts have been taken into consideration, a reliable result is envisaged at the end of the study.

Finally, describe what types of data analysis or modelling exercises will be carried out. Describe the procedures for processing and analysing the data, including the project's needs for computer facilities.

Gender Considerations

State whether gender considerations constitute an important dimension of the project in defining the important relationships of the problem or in data collection and show explicitly how the methodology will address them.

Ethical Considerations

Projects that involve research on human subjects, the collection of private or personal information, or the participation of individuals in experiments must be designed in ways that protect the

privacy, dignity and integrity of those who are the subjects of research.

For projects involving research on human subjects which raise ethical issues, funding agencies often require that an independent ethical review committee, whether in the recipient institution or in the host country, must approve ethical protocols. This applies most often in health research. In such a case, please attach a document certifying that ethical approval has been given. The proposal should also provide detailed information on the ethical dimensions of the research and how these are being handled.

For projects involving the collection of corporate or personal information, the proposal should provide details on how informed consent will be obtained and how the information will be kept confidential.

For projects that involve participating in an experiment (such as farmers testing a new farming practice or community members responding to group questioning), provide information on the free consent of participants and how it will be obtained. Outline how research findings will be reported back to the people concerned.

Training

Identify how the project might contribute to the training of staff and whether it would be necessary for certain staff to undergo training prior to or during the project. What kinds of training would be most appropriate (e.g. formal graduate training, non-formal skills upgrading course, visits or missions, etc.), and how will it be organised?

Organizational matters

For larger projects, or networked initiatives, organizational elements are an essential part of the methodology, and may constitute an important part of the methodology section.

Collaborative arrangements with other country-based institutions

In the case of collaborative projects with institutions based in other countries, provide the reasons for the collaboration with the schol-

ars. How will the cooperation between researchers from different locations be organized? What will be the division of labour?

Time Frame

Be realistic. Inexperienced researchers tend to underestimate how long the stages of research will take.

Budget

The primary reason for submitting a grant to a funding agency is to secure funding. The investigator should, therefore,

- include a detailed budget breakdown if required;
- follow the requirements of the organization to which you are submitting the proposal.

Indicate the time needed to carry out each phase of the project, as well as the project's total duration. Remember to take into account the time required for staff recruitment and equipment purchases. Indicate possible constraints in adhering to the timetable. Estimate the project's total costs, indicating the yearly contributions to be made by each institution or agency involved. Allow for inflation and indicate the level of inflation used in the estimate. All budget items must be quoted in national currencies.

The budget should be divided into two categories, the funder's contribution and the local (recipient) contribution. The local contribution can be an estimate of "in kind" resources such as salaries, equipment etc. The budget estimates should be computed on an annual basis.

In any given study, finance is a major component, although this is not often stressed in academic research for students pursuing a course of study. Of necessity, there is the need to state how much would be needed to complete the study, how it would be spent at every stage of the study, how long it would take to complete the study, and what would be done at every stage should also be clearly stated.

References

It should be noted and emphasized that the list of consulted/relevant texts must be included at the end of the proposal. This aspect of the proposal gives the assessor an impression of how familiar the researcher is with the subject. References indicate the works cited in the body of the proposal while Bibliography refers to all relevant texts/materials to the subject of investigation but not all cited in the body of the proposal.

Significance of the research

The research must be of value. This may include:

- Practical value in solving problems;
- Value to policy development;
- Contribution to theory;
- Contribution to body of knowledge within discipline;
- Funders often specify the nature of "value" they are looking for in research.

Report Writing and Outlet

DISSEMINATION OF FINDINGS

If funders want to support a valuable research, they also want to see that the research results will be disseminated. If research is intended to assist a community, it is of little use to publish it only as an internal research report. Usually, the study is meaningless if the final product is not written. The analysed data must be presented in writing to show whether the money spent has been well expended or to indicate what contribution has been made to knowledge. In doing this, caution must be taken in the design of the structure, and the targeted audience for the adoption of suitable medium of communication.

Similarly, how the outcome of the study would be disseminated is also of importance to the quality of the proposal, especially in studies that are funded by some agencies. Findings could be disseminated through posters, symposia, seminars, to mention a few. Begin by defining the major outputs expected from the projects, while outlining plans for disseminating or implementing the findings of the proposed research. Examples of outputs include workshops and conferences, re-

ports and publications, new methodologies or technologies, improved research skills, and institutional reinforcement. Show how research results will be communicated to users and decision-makers.

Discuss how research results are likely to be used. Identify the immediate or intermediate users of the results and show how they will be given access to the research results. Who will ultimately benefit if the project results are appropriately used?

The expected impact of research results can be discussed in reference to some or all of the following:

- Their potential use in other settings;
- Their contribution to existing technical and scientific knowledge;
- Policy formulation and implementation;
- Development processes at the local, national and regional levels; and
- The needs of specific target populations.

Discuss any possible obstacles to the execution of the research and to the eventual use of the results. These may include possibilities of political or economic instability, expected difficulties in securing access to data, the difficulty of coming to categorical conclusions, and the partial nature of the results for addressing specific development problems.

Intellectual Property

Research inevitably leads to the creation of intellectual property. Quite often, the funder's policy may be that written materials and documentation are owned by their creator, who also holds copyright. However, the funder may seek the right to disseminate the information so that the benefits of the research will be circulated as widely as possible. If a technology is developed during a project, funder's main objective may be to ensure its dissemination and utilization. Where relevant, the recipient will be asked to sign a Memorandum of Understanding which sets out the ownership and royalty regimes that will govern the project. Typically, the funder's role is to help secure appropriate protection for intellectual property

rights internationally, with the recipient having full licensing rights in all countries. Apart from recouping any costs of patenting, the funder will receive a share of any profit only in those cases where significant revenues may be generated. It could be the funder's policy to recoup any grant given to a private sector company if the technology it develops is successful.

Institutions and Personnel

Institutions

Briefly describe the research institution, including its history and objectives. Similarly, provide information on collaborating agencies and those institutions or agencies that have been involved in planning the research, that will be involved in carrying it out, and that will be asked for funds. Highlight the particular strengths or past achievements of the institution.

Describe previous or on-going support to the person, unit or institution in the field of research related to the proposal. How might the proposed research complement the institution's existing programme?

Personnel

List the personnel who will be involved in carrying out the project, their roles and their time commitments. Describe their qualifications, experience or any other relevant information. Include the resumes of the principal professional staff.

User Participation

The participatory aspects of the project are often important. Indicate whether the ultimate users of the research results were involved in the design of the project and what role they will play in executing the project or in implementing the results.

Evaluation

Certain projects benefit from more extensive evaluation than that corresponding to normal management and monitoring. Such cases include projects that are particularly innovative or risky, those from which significant lessons can be learned, and those that require a very high level of accountability. Indicate if the project will include an explicit evaluation component. A description of the evaluation component should

- identify who will use the evaluation findings and for what purpose(s),
- focus on a few specific issues that are well defined and relate directly to the project's objectives and activities,
- specify the methods by which data will be collected, and
- identify the resources necessary for the evaluation.

THESIS RESEARCH PROPOSAL

A thesis research proposal is a proposal submitted to an academic institution for the purpose of a higher degree. It is expected to show your examiners that you can do good research for your thesis. It must be a well-written document (like an extended paper or a thesis) containing a thorough study of your research topic.

The principal aim of this type of proposal is to provide information about the intended research project in terms of content and methodology so that a Department, Institute or Faculty could assess

- the feasibility of the project,
- the suitability of the candidate being registered for a research degree (Master or Doctorate), and
- who is the most suitable member of the academic staff to serve as supervisor to the candidate.

The proposal should normally be developed in consultation with a member of staff, and should not exceed 5000 words. It is generally understood that the student may need to deviate from the proposed outline as the actual research degree unfolds.

The features of a thesis proposal bear similarities to those of the final dissertation/thesis (Olayinka et. al. 2004) and a paper in a learned journal. These will be highlighted in Chapter 11 of this book. *A good proposal should provide the outline of the first three chapters of the dissertation/thesis.* It should begin with a statement of the problem/background information (typically Chapter 1 of the dissertation/thesis), then move

on to a review of the literature (Chapter 2), and conclude with a defining of the research methodology (Chapter 3). Obviously, it should be written in a future tense since it is a proposal. To turn a good proposal into the first three chapters of the dissertation/thesis consists of changing the tense from future tense to past tense (from "This is what I would like to do" to "This is what I did") and making any changes based on the way you actually carried out the research when compared to how you initially proposed to do it. Often the intentions we state in our proposal turn out differently in reality and we then have to make appropriate editorial changes to move it from proposal to dissertation.

When should the Proposal be Written?

To answer the question of when the proposal should be written, the following points have to be considered:

- A research proposal (particularly at the postgraduate level) is an interactive process.
- A substantial amount of work has to be done before a proposal can be written.
- Some institutions assume that a research proposal will be written over six or even nine months.
- Seek advice on your draft from supervisors and peers.

Format for Preparing a Research Proposal for an MSc/Phd Thesis

The proposal would normally include the following components, depending on the nature of the project:

(A) Topic and problematic

The research topic formulates a problem that is worthy of research. The topic should

- be stated clearly and succinctly in one or two sentences;
- be determined after consultation with potential supervisors.

The topic is usually framed as a "problem" or question in need of an answer. The topic statement will invite your reader to

ask why it is significant and “worth doing”. A good research proposal identifies in the research topic a “problematic” to be investigated. Your statement of this will result from discussion of your area of interest with potential supervisors, mentors and others.

Framing the question is not always easy, and you need to ask yourself whether your proposed “problem” or “research question” is really the question to be asked and answered. The framing of the problematic is crucial in setting up the research, though it is common for researchers to revise and reformulate this as the research progresses.

- What is the relevance of and the rationale for choosing this area of enquiry?
- Why is the research question posed in the way it is?
- Does the candidate have any particular motivation for posing this question or does he/she possess any expertise in this area?

(B) Background and context

Your research topic needs to be located in its context and background. In sketching this background, you need to show how and why the topic came to be important and why it is worth researching. This means:

- Contextualising the research problem – how does it arise?
- Outlining its significance – what will be the outcomes, and for whom?
- Referring to key issues that are associated with the topic.

Background can be provided in several ways. Your theoretical interests or concerns may have generated the research, and its justification is to be found in a theoretical development or related literature. Where professional practice is the focus, you may want to describe and analyse the context of policy or organisational changes.

In any case, you should summarize the influences which come

into play to shape your research. The analysis should lead you to interrogate your own assumptions about why the problem is significant. You need to ask what interests are driving the research and from whose point of view the problem is “significant”.

(C) *Conceptual framework and related literature*

A conceptual framework, as described in Chapter 2, elaborates the research problematic in relation to relevant literature. This should include a brief critical review of the literature relevant to the research question. What are the main texts and trends informing the thinking which has led to the formation of this research question? It should deal with such matters as

- existing research and its relevance for your topic
- relevant theoretical perspective(s)
- key ideas or constructs in your approach
- possible lines of inquiry you might pursue.

Your proposal needs to show how the proposed research relates to a body of related studies, or literature. The orthodox way to do this is to write a brief version of the literature review on a traditional science model. This is not always possible, especially if there is little related past research. Another is to outline the kinds of theoretical sources that will inform your research – the available research perspective.

Though not all proposals need to include an elaborate conceptual framework, a well-developed proposal will do so.

(D) *Research design and methodology*

- How are the main hypotheses going to be investigated or researched?
- An outline of the methodology, research design and procedure should be given.

This section typically might

- refer to an accepted method or approach;
- highlight problems in developing a suitable approach (methodological issues);
- describe how data will be generated, analysed and reported.

(E) Pilot and ethical issues

In proposals for empirical research, details will need to be provided of the proposed pilot work, the sequence of the various investigations and the research instruments which are intended to be used. In addition, the relevant methods of analysing the data will need to be discussed. Candidates whose researches involve human-subject research should bear in mind that approval by an ethics research committee will be required before any collection of data.

(F) Research plan and timeline

An outline of the approximate timetable of the various stages of the proposed research, from conception to completion, should be given. Your plan should specify what tasks you will complete at each stage – literature review, research framework, description of method, writing up of findings and conclusions and so on. These tasks should specify what writing tasks will be accomplished and when. It is helpful to:

- Map out the research as a semester by semester timeline;
- State semester writing objectives for each semester;
- State other outcomes at every given stage, such as seminars or conference papers;
- Allow a semester for revising the thesis.

You do not have an indefinite amount of time and other resources to complete the degree. Plan to complete in the minimum time, and plan how you will achieve this.

Thesis preparation is a challenging writing task. It will be

helpful for you to specify what writing outcomes there will be at each stage. Students are encouraged to understand their research in terms of scholarly writing, whether or not field research is involved. Early completion is more likely if the thesis develops through specific writing commitments including short papers which may be presented at seminars and conferences.

Table 4.1 illustrates how a research degree thesis might be planned over six semesters

Time	Research stage	Writing/Report
Semester 1	<ul style="list-style-type: none"> • Proposal developed 	<ul style="list-style-type: none"> • Proposal • Paper on the thesis argument • Thesis outline
Semester 2	<ul style="list-style-type: none"> • Reading of literature • Negotiate access field 	<ul style="list-style-type: none"> • Short papers on: rationale and conceptual framework • review of literature
Semester 3	<ul style="list-style-type: none"> • Field research: develop and pilot procedures • Database development 	<ul style="list-style-type: none"> • Draft methodology chapter • Trial write-up of selected material. • Rework conceptual chapter
Semester 4	<ul style="list-style-type: none"> • Field research • Finalize procedures and complete 	<ul style="list-style-type: none"> • Short papers on field research • Write up research procedures
Semester 5	<ul style="list-style-type: none"> • Analysis 	<ul style="list-style-type: none"> • Draft analysis chapter • Prepare conference paper
Semester 6	<ul style="list-style-type: none"> • Revision of thesis 	<ul style="list-style-type: none"> • Draft conclusions • Final chapter • Revise and refine thesis structure • Seminar on conference paper
Semester 7	<ul style="list-style-type: none"> • Submission and examination 	<ul style="list-style-type: none"> Final revisions Journal article

The research proposal which is submitted with an application is used primarily for making a decision about admission. It is not expected that this will be definitive or final. After commencing a research degree, it is normal for a research proposal to be modified as a result of further study and investigation, sometimes in substantial ways.

Evaluation of thesis research proposal

Those who will evaluate a thesis research proposal include the following:

- Higher degree committees
- Review panels
- Individual reviewers
- Specialists
- Generalists
- A mixture of experts in the field and reviewers from cognate disciplines

Evaluation criteria

The essence of a successful research proposal is the idea underlying it. How can we evaluate whether our idea is a good idea, the definition of a good idea being one with the potential to be funded? Our scientific idea must be important, that is, it must address a significant, non-trivial problem. The idea must be conceptually sound and doable, that is, capable of being investigated rigorously by the investigator using the resources available at his/her institution (see table 4.2).

Table 4.2 Evaluation Criteria

No	Criteria	Expectation
1	Significance	Does the study address an important problem?
2	Approach	Are the design and methods appropriate to address the aims?
3	Innovation	Does the project employ novel concepts, approaches, or methods?
4	Investigator	Is the investigator appropriately trained to carry out the study?
5	Environment	Will the scientific environment contribute to the probability of success?

Your major supervisor and co-supervisors are your allies. When you go to them for reactions to your proposal, make sure your major supervisor is fully supportive of you. Spend time with him/her before the meeting so that your plans are clear and you know you have full support. The proposal meeting should be seen as an opportunity for you and your major supervisor to seek the advice of the committee. Don't ever go into the proposal meeting with the feeling that it is you against them.

Provide the committee members with a well-written proposal well in advance of the meeting. Make sure they have ample time to read the proposal.

Plan the proposal meeting well. Graphic presentations of maps and other illustrations are likely to be necessary to help the committee with understandings so make sure you prepare them so they look good. You can also scan some of the diagrams and prepare for a PowerPoint presentation using multimedia facilities. A well planned meeting will help your committee understand that you are prepared to move forward with a well-planned research. Your presentation style at the meeting should not belittle your committee members (make it sound like you know they have read your proposal) but you should not assume too much (go through each of the details with an assumption that may be one of the members skipped that section).

Points to note in preparing a thesis proposal

- Don't be too quick to run away from using a quantitative methodology because you fear the use of statistics. A qualitative approach to research can yield new and exciting results, but it should not be undertaken because of a fear of quantitative research. A well designed quantitative research study can often be accomplished in very clear and direct ways. A similar study of a qualitative nature usually requires considerably more time and a tremendous burden to create new paths for analysis where previously no path had existed.
- Sometimes a combined methodology makes the most

sense. You can combine a qualitative preliminary study with a quantitative main study to yield a research project that works well.

- You may have the opportunity for conducting your research in conjunction with another agency or project that is working in related areas. Should you do it? Sometimes this works well, but most often the thesis researcher gives up valuable freedom to conduct the research project in conjunction with something else. Make sure the trade-offs are in your favour. It can be disastrous to have other project suddenly get off on schedule and to find your own research project temporarily delayed. Or, you had tripled the size of your sample since the agency was willing to pay the cost of fieldwork. They paid for the fieldwork but they are now unwilling to pay for the analyses. What happens to your research? You have to think twice before altering your project to accommodate someone else. Enjoy the power and the freedom to make your own decisions (and mistakes) – this is the way we learn.
- Keep back-up copies of your draft proposals.
- Remember the importance of good writing style- not only substance but also good use of English, task of typographical errors, etc- will improve evaluation.
- Theme should be some personal interest in topic- personal commitment is transparent.

SUCCESS AND FAILURE INDICATORS FOR PROPOSALS

The success indicators in a research proposal include the following:

- Clearly defined research question;
- Appropriate literature which provides a background to the problem;
- Use of other sources to identify/support the problem
- Objectives clearly specified;
- Conceptual framework and theoretical assumptions clearly stated;
- Appropriate design and methodology;

- Promotes further research;
- Preliminary data/pilot study;
- Necessary resources available.

On the other hand, the following can be identified as failure indicators:

- Too long
- Poor structure, language use
- Inappropriate use of technical terms
- Research too ambitious
- No literature review
- No integration of theory in literature review
- Literature review copied
- No theoretical foundation
- Budget not linked to methodology
- Unrealistic costing
- Methods not clear
- Methods inappropriate
- No references or bibliography

In concluding, it should be noted that there is no rigid chronological scheme in the development of a proposal, in the same way as there are no clues to perfect procedures to a successful proposal. This is due to the fact that the tenets and the hallmark of a good proposal are dynamic and institutionally determined.

The bias in this chapter has been on research-oriented proposals. However, it should be pointed out that proposals for funding can be a mixture of research, capacity-building, awareness raising, technology development and/or advocacy. At times, research in such a proposal might just be a means to an end, rather than an end itself. In other words, a research study in a funded proposal might only serve the purpose of providing information for planning an effective intervention or provide a database for future evaluation of the project's impact.

FURTHER READING

How to write a seminar paper, a research proposal and a thesis. Retrieved 3 September 2004 from <http://www.jgsee.kmutt.ac.th/exell/General/PaperThesis.html>

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