Learning Objectives

The goal of this module is to: Explore the components and format of a full research proposal.

Upon successful completion of this module, you will be able to:

- Explore features and supporting documentation of successful proposals
- Explore the components of work plan development
- Select sample population
- Explore the elements of project evaluation
- Prepare a GANTT chart for work plan monitoring
- Prepare a proposal budget
Understanding the Requirements and Formats of Proposals

As an applied research assistant, you may be responsible for assisting with drafting requests for proposals, letters of support, quotes or other information to assist in the proposal writing phase. It is important that you understand the various components of research proposals and recognize appropriate formats for submission.
Some funding agencies request that researchers send a letter of intent before a full application for funding is required.
The Proposal

Research proposals typically include the following:

Title Page
- Title of Project
- Principal Investigator (include credentials)
- Co-Investigator (Include credentials)
- Date
- Project Start and End Dates
- Summary/Abstract (should be one paragraph long – approx. 100 words)
- Overall budget

Objectives
- Describe the main goal of the research project
- List secondary goals (if appropriate)
The Proposal

Protocol

- Background and Rationale
- Review of the Literature (relevance/significance, impact on proposed research project)
- Research questions/hypotheses
- Sample/population used (sampling method, size)
- Design and Timeline - Workplan
- Requirements of research participants (step by step listing of what participants are required to do)
- Instrumentation, interview guides, and/or protocol
The Proposal

Results and Benefits

- Anticipated results
- Benefits for industry partner, province, country
- Benefits for college or institution
- Evaluation methodology
- Dissemination methodology and instruments
The Proposal

Attachments

- Budget
- Research Team Profiles
- Research Instruments (questionnaires, surveys, ethics application forms)
- GANTT chart (optional)
- Evaluation chart (optional)
- Letters of support

Signatures

- Principal Investigator/Project Lead
- Co-Investigator(s)
Establish a work plan for your research project.

Research Project Workplan

Project Title:
Principal Investigator:
Co-Investigator(s):

<table>
<thead>
<tr>
<th>Phase/Component</th>
<th>Tasks</th>
<th>Who</th>
<th>Time</th>
<th>Outcomes/Results</th>
<th>Status</th>
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Gantt Charts

A Gantt chart is very popular in project management and is a scheduling tool used to display the status of a project’s tasks. A Gantt chart shows each task’s duration as a horizontal line. The ends of the lines correspond to the task’s start and end dates.

http://www.conceptdraw.com/products/img/ScreenShots/project/gantt_chart_chart_presentation.png
# GANTT Chart

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Selecting a Sample

A Sample is a representative group from a population. If the entire population is sampled, it is called a census.

Sampling Techniques:

A: Probability Sampling (every member of the sample population has an equal chance of being selected)

- Simple Random
- Stratified random
Sampling Techniques

- **Simple Random Sample**: Random selection of a sampling “frame” or all the people within a certain “population” — e.g. all people who belong to an organization (pull out of the hat technique, or assignment of random numbers — e.g. every 6th person)

- **Stratified Random Sample**: Random selection of sub-categories of people — e.g. people who belong to a wine club
B: Non-Probability Sampling (people are selected accidentally or due to convenience. The sample can be non-representative or biased)

- **Volunteer Sample**: Sample is selected by convenience or accident – e.g. People who happen to come into a shopping mall

- **Quota Sample**: Sample is selected by sub-groups, and then by convenience or accident

- **Expert Sample**: Sample targets individuals who are considered knowledgeable about the subject
Evaluation Methodologies

The most comprehensive evaluation methodology is the Logic Model. The Logic Model template includes:

- Area of Measurement (impact area)
- Inputs (resources, contributions, partnerships)
- Activities (events, actions)
- Outputs (products, processes, services)
- Outcomes (results, changes in people, organizations, systems – short term)
- Impacts (social, environmental, economic changes over time)
## Logic Model Template

<table>
<thead>
<tr>
<th>Component</th>
<th>Inputs</th>
<th>Activities</th>
<th>Outputs</th>
<th>Outcomes</th>
<th>Impact</th>
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<td>College resources</td>
<td>• Complete literature search plan</td>
<td>Literature Report</td>
<td>Identification of gaps in literature</td>
<td>Identification of longer term literature needs</td>
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<td></td>
<td>Internet Interview</td>
<td>• Conduct search</td>
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<td>• Complete literature report</td>
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</tbody>
</table>

### Literature Search Activities:
- Complete literature search plan
- Conduct search
- Complete literature report

### Literature Report:
- Identification of gaps in literature

### Impact:
- Identification of longer term literature needs
Budget

Budgets are normally organized by category and by time (annually or by quarter/3 months).

Components of budgets include:

- Salaries and benefits
- Consulting costs
- Equipment
- Supplies and consumables
- Travel
- Dissemination costs
- Overhead (a percentage of direct costs)
## Budget Table

<table>
<thead>
<tr>
<th>Item</th>
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<td>Equipment</td>
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Budget

Using a table format, prepare a draft budget for your proposed research project.