Maximizing Grant Proposal Writing for Success Using "The Baseline Logic Model"

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Seminar Goals

The goal of this presentation is to

• Give instruction on a successful proposal development tool, the “Baseline Logic Model”

• Allow participants a chance to use this approach and share their writing

• Discuss how this approach may be tailored to their institutions
Proposal Development Process

Good Ideas → Fundable Idea → Find Funder(s) → Pre-Proposal → Baseline Logic
Need Statement → Write Proposal → Drafts → Peer Review → Edit → Revise

Marketing

Funder → Submit → Rejected → Accepted AND Funded
Fundable Idea
How do you develop good ideas?

- Be knowledgeable, thoughtful, creative, open
- Think in Question/Experiment/Hypothesis format
- Keep an ongoing log of your ideas
- Let the ideas incubate and try the process again
- Seek constructive criticism of your idea
From a Good Idea, Develop a Fundable Idea

- What is the problem (or need) and why is it important?
- How is existing knowledge or practice inadequate?
- How is your idea new, unique, different?
- How will it advance your field?
- What are the broader impacts?
- Who will benefit?
Baseline Logic
Baseline Logic

Baseline Logic is the foundation for a clear understanding of a proposal developed from a fundable idea.

What is the problem you are addressing? $S_1$  
What does the project produce: insight, a product, and/or new knowledge that address the problem? $S_2$

Benefits are the good outcomes after the desired result is achieved.

90% of proposals have serious flaws in their baseline logic.
Baseline Logic Example
Cyber Security Graduates

<table>
<thead>
<tr>
<th>Lack of cybersecurity graduates</th>
<th>Current Situation</th>
<th>Desired Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>S₁</td>
<td></td>
<td>S₂</td>
</tr>
<tr>
<td><strong>Benefits</strong></td>
<td></td>
<td><strong>B</strong></td>
</tr>
<tr>
<td>Increased number of cybersecurity graduates</td>
<td></td>
<td>Cybersecurity jobs filled by qualified cybersecurity graduates</td>
</tr>
</tbody>
</table>
Benefits

Current Situation

S1

Desired Result

S2

B

Benefits

A variety of mechanical systems are needed but cannot be built because their design and engineering is too difficult

Using origami-based compliant mechanisms, create systems that can perform sophisticated mechanical tasks

Innovative and cost-effective devices that integrate functions, eliminate interfaces between parts and accomplish sophisticated mechanical tasks

A variety of mechanical systems are needed but cannot be built because their design and engineering is too difficult

Using origami-based compliant mechanisms, create systems that can perform sophisticated mechanical tasks

Innovative and cost-effective devices that integrate functions, eliminate interfaces between parts and accomplish sophisticated mechanical tasks
The small size and self-contained components make microfluidic “Lab-on-a-Chip” devices highly attractive for point-of-care applications. However, these capabilities have not yet been developed because microfluidic devices are difficult to fabricate.

**Current Situation**

- $S_1$

**Desired Result**

- $S_2$

**Benefits**

- B

Use 3-D printing to make very small, highly sophisticated lab-on-a-chip (microfluidic) devices.

Biomedical innovation in many medical applications including drug discovery, tissue engineering, cancer screening, point-of-care diagnostics, and pathogen detection.
Baseline Logic Includes Deliverables

Deliverables
- The outputs produced during the transition from $S_1$ to $S_2$
- Include progress reports, methodologies, simulations, materials/capabilities created, etc.
Exercise – Write the baseline logic for your proposal
Need Statement
The Need Statement

• A description of the problem and support needed to solve it
  *No problem, no interest, no funding*

• **Should be succinct and persuasive** – often the first thing a funder reads

• It is embedded in the proposal

• Can use it to create a white paper, Letter of Intent, other types of pre-proposal documents
The Need Statement has 4 parts:

1. **Description of the problem**
   *Expanded S₁*

2. **Plan for solving the problem**
   *Derived from S₁/S₂*

3. **Benefits**

4. **Request for support**
Need Statement – Problem Description

• **Context of the problem**
  o Define the problem so that other people can understand
  o Be specific about a larger societal problem (if relevant)

• **Justification for addressing the problem**
  o **Scope**: How large is the problem? How many people affected by it?
  o **Justification**: Why do we need to spend the money and resources to solve this problem now? (Urgency)

• **Specific aspect of problem being addressed**
  o If you are working on trying to solve a complex societal problem, you will not try and solve the entire problem, but rather an aspect of the problem

• **Use narrative form**
  o Include statistics, anecdotes, real-life examples
Example of a Problem Description

According to the Children’s Report card, approximately 10,753 were physically, mentally, or sexually abused. Children of color, especially Hispanics, are at considerably greater risk of being abused. According to the Department of Health and Human Services, Hispanic children are four times more likely to become victims of child abuse than Caucasian children.

- Description of the context of the problem, the justification and scope

Certain aspects of Hispanic culture may create risk factors. Many Hispanic people leave their home countries to improve their quality of life, yet in the United States encounter poor education, unemployment and lack of affordable housing. While parents are working, relatives or friends who also live in the household often care for the children. Circumstances like these often leave Hispanic children more prone to abuse. Therefore, programs and interventions tailored specifically for Hispanics are needed to help prevent child abuse and successfully identify and refer victims to treatment.

- This paragraph gives the aspect of the problem being solved

CENTRO believes that there is a need to educate the Hispanic community about child abuse in order to prevent abuse and identify and treat victims. CENTRO understands the cultural needs of the Hispanic community and has been serving the twin cities for 28 years.

- Justification for why this organization is qualified to solve this aspect of the
Need Statement – Plan for Solving the Problem

• **Approach to solving the problem**
  o What questions must be answered to solve the problem or realize the opportunity? (derived from deliverables and from themes)
  o Show how one step will lead to another until your solution is effected, or you can use analogies or precedent (i.e. how other similar research proposals have been successful elsewhere)

• **Activities**
  o Specific aims, intellectual merit, high level tasks
Need Statement – Benefits

• **Benefits to your field**
  - How does it move your discipline forward?
  - These are the benefits or value of achieving our objectives

• **Benefits outside your field**
  - Broader impacts and outreach

• **Benefits to the funder**
Need Statement – Request for Support

• **Actions you want the sponsor to take immediately**

• **Resources you want the sponsor to commit**
  - Strengthens budget request and narrative
  - Could include non-monetary resources like people, equipment, facilities
CENTRO seeks to empower and support the Hispanic community by eliminating barriers to self-sufficiency. CENTRO believes that cultivating strong and healthy children who are free of abuse is one step to cultural self-sufficiency. For these reasons, we are undertaking a program to train parents and teachers to recognize the signs of abuse and refer abused children to treatment.

This training program will involve developing training materials and training trainers in the community to conduct free training sessions. We are seeking funding to develop a training video which will be used to train parents and teachers to recognize the signs of abuse and how to access treatment. Therefore, we are requesting $6,700 in support from your organization.

Funding CENTRO’s training program will result in parents and teachers who are able to recognize signs of child abuse in Latino/a children and refer abused children to treatment. This type of training program will lead to fewer abused Hispanic children and a more self-sufficient Hispanic community.
# Exercise - Identify Need Statements from examples, then write a Need Statement

## Summary of Need Statement Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Story (Problem)/S₁</strong></td>
<td>What is the history, the factors, events that caused the problem? What is the problem or opportunity? What are its effects? What has been done to try and solve the problem and have those efforts been successful? Describe the problem: (1) context of the problem, (2) justification for addressing the problem, (3) specific aspect of problem being addressed. (Causes and Effects) Statistics: your own data, info from external sources Examples: anecdotes, real-life, quotes</td>
</tr>
<tr>
<td><strong>Plan for solving (Problem)/S₁ S₂</strong></td>
<td>What questions must be answered to solve the problem or realize the opportunity? (Derived from deliverables and from themes)</td>
</tr>
<tr>
<td><strong>Request for support and Benefits</strong></td>
<td>State the actions you want the sponsor to take immediately and resources you want the sponsor to commit Briefly state the benefits</td>
</tr>
</tbody>
</table>
Develop a Proposal from a Need Statement
The Need Statement Content is Incorporated into Proposal Elements

- **Need Statement Components**
  1. Story (Problem)
  2. Plan for solving (Problem)
  3. Benefits
  4. Request for support

- The Need Statement thoroughly develops and describes the problem you are addressing including context and justification ... develops the *Situation* description of a proposal

- **Describes Methods at a high level; informs Qualifications and Benefits**

- **Provides the basis for the Budget you need**
The proposal elements created from the need statement map directly to a funder’s proposal sections.

“Generic” Proposal Elements

**Situation**: This is our understanding of the problem.

**Objectives**: Given that problem, these are our objectives for solving (or realizing) it.

**Methods**: Given those objectives, these are the methods we will use to achieve them.

**Qualifications**: Given those methods, these are our qualifications for performing them.

**Budget**: Given those qualifications and methods, this is how much the project will cost.

**Benefits**: Given our efforts and funders support, these are the benefits or value you will receive.

Typical Proposal Sections

- Introduction/Background/Justification and Scope
- Introduction/Background/Justification and Scope/Specific Aims
- Work Plan/Methods/Approach/Data Management Plans
- Qualifications
- Budget/Budget Justification/Project Costs
- Benefits/Significance

Content Supports

- Titles/Abstract/Summary/Intellectual Merit/Broader Impacts/Previous Work/Biosketches
- CVs/Other Resources and Support
Baseline Logic and Program Logic Models

• **Baseline Logic** provides the foundation of a well written proposal that is clear and compelling with a narrative and logic that are easy to follow

• **Logic models** “…are intended to be a tool and a process to visually understand and clarify the relationships between actions and expected results for a program (Knowlton & Phillips, 2013 The Logic Model Guidebook)…and are used for program planning”¹

Thus the Logic Model of the **program** expands on the Baseline Logic of the **proposal**

Wrap Up

- Create fundable ideas from good ideas
- Develop baseline logic for your fundable idea proposal
- Expand baseline logic elements into a need statement
- Develop proposal elements from baseline logic and the need statement
- Use baseline logic to create program logic for your funded project