

PROPOSAL PREPARATION FOR WOMEN IN ENGINEERING

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The purpose of this paper is to provide guidelines to individuals preparing proposals for Women in Engineering Programs. Certain sections of this guide may not be pertinent to your organization or project. If you find this to be the case, simply use those sections that apply. There are no hard-and-fast rules for proposal writing, but this guide covers the basics.

I. COVER LETTER

- A. Remind funding officials of previous contacts with them.
- B. Outline the need; cite one or two statistics.
- C. Describe your project in one paragraph; include funding request.
- D. Present your credentials.

II. TITLE PAGE

- A. Project title
- B. Organization address & telephone number
- C. Your name and position
- D. Project Duration
- E. Amount requested
- F. Agency/Organization from whom you are requesting funds
- G. Date of application

III. ABSTRACT OR EXECUTIVE SUMMARY (ONE OR TWO PARAGRAPHS)

- A. State your goal; include cost estimate.
- B. Describe the national, as well as, local need.
- C. Specify the objectives.
- D. Describe the procedures/methodology.
- E. Describe the evaluation design.
- F. Describe the dissemination plan.
- G. Demonstrate the project's relationship to the granting agency's priorities.
- H. Summarize the benefits to the national & local audiences.

IV. CAPABILITIES

- A. Describe your credentials, current responsibilities, and track record.
- B. Explain how & why the organization was started.
- C. Describe the organization's goals.
- D. Describe the organization's accomplishments to date.
- E. Describe the organizational structure, boards and staffing.
- F. Describe the scholastic & professional background of your boards & staff.
- G. List the local & national support (money, time, facilities, services).
- H. Explain the relationship between the project & the organization's goals.
- I. Describe facilities, equipment, and/or staff uniquely suited to this project.

V. NEED STATEMENT

- A. Describe the need or problem the project will address.
- B. Establish the national significance of the problem/need.
- C. Describe the relationship of the project to the larger set of problems.
- D. Provide a literature review of related research; cite ongoing studies, including:
 - 1. Expert opinions (including quotations)
 - 2. Statements of community & national leaders
 - 3. Survey results
 - 4. Government documents

- E. Describe the smaller portion of the larger problem the project addresses.
- F. Demonstrate how the project is unique.
- G. Demonstrate how the project fits into the organization's long-range plans.
- H. Transition to the next part of the proposal.
- I. Give a brief preview of your plan to solve the problem.

VI GOALS AND OBJECTIVES

- A. State your overall goal(s); e.g., to increase retention rates.
- B. Outline your specific objectives and timeline; e.g., to increase the retention rate of female engineering students from 3% to 10% by 1995.
- C. Demonstrate that the objectives are:
 - 1. Realistic in terms of time, money & community support.
 - 2. Cost-effective, i.e., worth the investment.
- D. State the objectives in a way they can be evaluated.
- E. Justify that the project's outcomes are manageable & feasible.

VII PROCEDURES/METHODOLOGY

- A. Describe the procedures/methodology for each objective.
- B. Describe the project's subjects & the selection process.
- C. Describe how the project will be implemented, including:
 - 1. Outline the sequence of steps;
 - 2. Describe who will implement each objective;
 - 3. Make a chart indicating name, title and background for each objective.
- D. Discuss how unanticipated problems will be addressed.
- E. Describe any data to be gathered, instruments to be used, timetables, and procedures for collection, analysis, reporting, and utilization.
- F. Show how the methodology is suitable to the stated objectives.
- G. Describe the methodology so the reviewers will understand what is being done during the project duration.

VIII. EVALUATION

- A. Delineate the specific, measurable criteria for success.
- B. Provide a general organizational plan for the evaluation, including data collection, instrument design and project monitoring.
- C. Describe the information needed to complete the evaluation, the potential sources for the information, & the data collection instruments.
- D. Demonstrate the scope of the evaluation is appropriate to the project.
- E. Identify and justify procedures for analysis, reporting, and utilization.
- F. Describe the reporting procedures, format & content of reports.
- G. Describe the credentials and expertise of any external evaluation consultants.

IX. FUTURE FUNDING PLANS

- A. Describe the future budget needs for the project.
- B. Describe the future plan for securing funds.
- C. Discuss methods to raise money, amounts to be raised, and the sources of potential funds; remember the goal of most funding agencies is for the project to become self-sustaining.

X. DISSEMINATION PLANS

- A. Include a feasible and appropriate plan for dissemination.
- B. Provide sufficient detail on the proposed dissemination procedures to justify the budget request.
- C. Describe products resulting from the project that will be disseminated.
- D. Describe publicity planned for the project, giving the funding agency recognition.

XI. ANTICIPATED RESULTS AND IMPACT

- A. Summarize the intended results, benefits & anticipated products.
- B. Establish the national significance of the outcomes of this project.
- C. Discuss the potential generalizability and contribution of the project.

XII. BUDGET

- A. Personnel
 - 1. Wages and Salaries
 - 2. Fringe Benefits
- B. Consultants and Subcontracts
- C. Equipment
- D. Materials and supplies
- E. Travel
- F. Communications: telephone, faxes, etc.
- G. Other Costs
- H. Indirect costs (specified by the University)
- I. Be prepared to justify in writing each line item.

XIII. APPENDICES

- A. Resumes of key personnel
- B. Endorsement letters
- C. List of board members & officers with titles
- D. Publications
- E. Donors/Supporters
- F. Background/Annual Reports of the Organization
- H. Other items, as appropriate.

In closing, there are a few general tips to keep in mind while writing the proposal. They include:

1. Use language and an editorial style that is appropriate to the funding agency.
2. Use clear and concise statements, intelligible to the non-specialist.
3. Use transitions between thoughts, paragraphs and sections.
4. Highlight the most significant points with underlining, bolding, use of different fonts, spacing or titles.
5. Include sufficient citations to prior work, research and related literature.
6. Address the review criteria of the funding agency.
7. Use diagrams, charts, graphs, and other illustrations.
8. Provide all of the information requested by the funding source in the required format.

Finally, the crucial task is to present your plan in an organized, clear, well-documented, rhetoric-free, thorough but concise form that conveys the excitement and urgency you feel for your project. Although a perfectly executed proposal will not save a weak project, a bad one can send a worthy project straight to the circular file. Consult everyone you can. Enjoy the process of writing the proposal!