

Section 2.3

**Writing the Proposal
A Proposal Writer's Guide**

Foreword: This guide is intended for faculty and staff members with little or no experience in writing proposals for sponsored activities.

I. Introduction

Writing a proposal for a sponsored activity such as a research project or a curriculum development program is a problem of persuasion. It is well to assume that your reader is a busy, impatient, skeptical person who has no reason to give your proposal special consideration and who is faced with many more requests than he or she can grant, or even read thoroughly. Such a reader wants to find out quickly and easily the answers to these questions.

- What do you want to do, how much will it cost, and how much time will it take?
- How does the proposed project relate to the sponsor's interests?
- What difference will the project make to your university, your students, your discipline, the state, the nation, the world, or whatever the appropriate categories are?
- What has already been done in the area of your project?
- How do you plan to do it?
- How will the results be evaluated?
- Why should you, rather than someone else, do this project?

These questions will be answered in different ways and receive different emphases depending on the nature of the proposed project and on the agency to which the proposal is being submitted. Most agencies provide detailed instructions or guidelines concerning the preparation of proposals (and, in some cases, forms on which proposals are to be typed); obviously, such guidelines should be studied carefully before you begin writing the draft.

Preliminary Steps. You will benefit by consulting three persons at an early stage in the planning of the proposal: your department chair, your dean, and your Chico State Enterprises (CSE) development specialist.

The department chair and college dean, whom you will eventually be asking to approve the proposal and thereby endorse your plans for staff and facility commitments, should be informed of your intentions and especially of any aspect of the proposed project that might affect departmental administration or your departmental duties. Early discussion of potential problems will smooth the way for the proposal later.

CSE development specialists are a general source of help for the whole process of planning and writing the proposal. They can give you the latest agency guidelines, know the deadlines, can explain funding peculiarities that might affect your preparation of the proposal, can sometimes put you in touch with others at the university in similar work or capable of helping you in some way, can judge whether any additional

university officials need to be informed at an early stage about your proposal, can help you work out a detailed budget appropriate to the work you wish to undertake, and in general can raise the pertinent questions that must be resolved before the proposal will be approved for submission by CSE. These questions may concern, for example, human subjects review, the use of animals, potential conflicts of interest, off-campus work, subcontracting, space rental, staff additions, consultants, equipment purchase, biological hazards, proprietary material, cost sharing, and many other matters.

II. The Parts of a Proposal

Proposals for sponsored activities follow generally a similar format, although there are variations depending upon whether the proposer is seeking support for a research grant, a training grant, or a conference or curriculum development project. The following outline and explanation concern chiefly the components of a research proposal. This section concludes with a discussion of certain variations in format required if one is seeking support for other kinds of academic programs.

A. Research Proposals

Typical parts of a research proposal are:

- Title (or Cover) Page
- Abstract/Summary
- Table of Contents
- Project Description
 - Introduction (including Statement of Problem, Purpose of Research, and Significance of Research)
 - Background (including Literature Survey)
 - Description of Proposed Research (including Method or Approach)
 - Description of Relevant Institutional Resources
 - List of References
- Personnel
- Budget and Budget Justification

The Title (or Cover) Page. Most sponsoring agencies specify the format for the title page, and some provide special forms to summarize basic administrative and fiscal data for the project. Generally, the principal investigator, his or her department head, and an official representing Chico State Enterprises sign the title page. In addition, the title page usually includes the university's reference number for the proposal, the name of the agency to which the proposal is being submitted, the title of the proposal, the proposed starting date and budget period, the total funds requested, the name and address of the university unit submitting the proposal, and the date submitted. Some agencies want the title page to specify whether the proposal is for a new or continuing project, and some ask to which other agencies the proposal is being submitted. **Keep in mind that all proposals are submitted by Chico State Enterprises which has sole authority on campus to sign contracts resulting from proposal awards.**

A good title is usually a compromise between conciseness and explicitness. Although titles should be comprehensive enough to indicate the nature of the proposed work, they should also be brief. One good way to cut the length of titles is to avoid words that add nothing to a reader's understanding, such as "Studies on...", "Investigations...", or "Research on Some Problems in..."

The Abstract/Summary. Every proposal, even very brief ones, should have an abstract. Some readers read only the abstract, and most readers rely on it initially to give them a quick overview of the proposal and later

to refresh their memory of its main points. Agencies often use the abstract alone in their compilations of research projects funded or in disseminating information about successful projects.

Though it appears first, the abstract should be written last, as a concise summary (approximately 200 words) of the proposal. It should appear on a page by itself numbered with a small Roman numeral if the proposal has a table of contents and with an Arabic number if it does not.

To present the essential meaning of the proposal, the abstract should summarize or at least suggest the answers to all the questions mentioned in the Introduction above, except the one about cost (which is excluded on the grounds that the abstract is subject to a wider public distribution than the rest of the proposal). Certainly the major objectives of the project and the procedures to be followed in meeting these objectives should be mentioned.

The abstract speaks for the proposal when it is separated from it, provides readers their first impression of the request, and, by acting as a summary, frequently provides them also with their last. Thus it is the most important single element in the proposal.

The Table of Contents. Very brief proposals with few sections ordinarily do not need a table of contents; the guiding consideration is the reader's convenience. Long and detailed proposals may require, in addition to a table of contents, a list of illustrations (or figures) and a list of tables. If all of these are included, they should follow the order mentioned, and each should be numbered with lower-case Roman numerals. If they are brief, more than one can be put on a single page.

The table of contents should list all major parts and divisions (including the abstract, even though it precedes the table of contents). Subdivisions usually need not be listed. Again, reader convenience should be the guiding consideration.

The Introduction. The introduction of a proposal should begin with a capsule statement of what is being proposed and then should proceed to introduce the subject to a stranger. You should not assume that your reader is familiar with your subject. Administrators and program officers in sponsoring agencies want to get a general idea of the proposed work before passing the proposal to reviewers who can judge its technical merit. Thus the introduction should be comprehensible to an informed layman. It should give enough background to enable a reader to place your particular research problem in a context of common knowledge and should show how its solution will advance the field or be important for some other work. Be careful not to overstate, but do not neglect to state very specifically what the importance of your research is.

In introducing the research problem, it is sometimes helpful to say what it is not, especially, if it could easily be confused with related work. You may also need to explain the underlying assumption of your research or the hypotheses you will be using.

If the detailed exposition of the proposed research will be long or complex, the introduction may well end by specifying the order and arrangement of the sections. Such a preview helps a reviewer begin his reading with an orderly impression of the proposal and the assurance that he can get from it what he needs to know.

The general tone of the introduction should reflect a sober, but enthusiastic, self-confidence. Your enthusiasm is very important, but extravagant promises are anathema to most reviewers.

The Background Section. This section may not be necessary if the proposal is relatively simple and if the introduction can present the relevant background in a few sentences. If previous or related work must be

discussed in some detail, however, or if the literature of the subject must be reviewed, a background or literature review section is desirable.

A background discussion of your own previous work usually can be less detailed than the customary "progress report." Here you should not attempt to account for time and money spent on previous grants but rather point your discussion to the proposed new (or continuing) research. Sufficient details should be given in this discussion (1) to make clear what the research problem is and exactly what has been accomplished; (2) to give evidence of your own competence in the field; and (3) to show why the previous work needs to be continued. Some sponsors want to know also who has funded the previous work.

Literature reviews should be selective and critical. Reviewers do not want to read through a voluminous working bibliography; they want to know the especially pertinent works and your evaluation of them. A list of works with no clear evidence that you have studied them and have opinions about them contributes almost nothing to the proposal.

Discussions of work done by others should therefore lead the reader to a clear impression of how you will be building upon what has already been done and how your work differs from theirs. It is important to establish what is original in your approach, what circumstances have changed since related work was done, or what is unique about the time and place of the proposed research.

The Description of Proposed Research. The comprehensive explanation of the proposed research is addressed not to laymen but to other specialists in your field. This section, which may need several subsections, is, of course, the heart of the proposal and is the primary concern of the technical reviewers. Research design is a large subject and cannot be covered here, but a few reminders concerning frequently mishandled aspects of proposals may be helpful.

1. Be realistic in designing the program of work. Overly optimistic notions of what the project can accomplish in one, two, or three years or of its effects on the world will only detract from the proposal's chances of being approved. Probably the comment most frequently made by reviewers is that the research plans should be scaled down to a more specific and more manageable project that will permit the approach to be evaluated and that, if successful, will form a sound basis for further work. In other words, your proposal should distinguish clearly between long-range research goals and the short-range objectives for which funding is being sought. Often it is best to begin this section with a short series of explicit statements listing each objective, in quantitative terms if possible.
2. If your first year must be spent developing an analytical method or laying groundwork, spell that out as Phase 1. Then at the end of the year you will be able to report that you have accomplished something and are ready to undertake Phase 2.
3. Be explicit about any assumptions or hypotheses the research method rests upon.
4. Be clear about the focus of the research. In defining the limits of the project, especially in exploratory or experimental work, it is helpful to pose the specific question or questions the project is intended to answer.
5. Be as detailed as possible about the schedule of the proposed work. When will the first step be completed? When can subsequent steps be started? What must be done before what else, and what can be done at the same time? For complex projects, a calendar detailing the projected sequence and interrelationship of events often gives the sponsor assurance that the investigator is capable of careful step-by-step planning.
6. Be specific about the means of evaluating the data or the conclusions. Try to imagine the questions or objections of a hostile critic and show that the research plan anticipates them.

7. Be certain that the connection between the research objectives and the research method is evident. If a reviewer fails to see this connection, he or she will probably not give your proposal any further consideration. It is better here to risk stating the obvious than to risk the charge that you have not thought carefully enough about what your particular methods or approach can be expected to demonstrate.

The Description of Relevant Institutional Resources. The nature of this section depends on your project, of course, but in general this section details the resources available to the proposed project and, if possible, shows why the sponsor should wish to choose this university and this investigator for this particular research. Some relevant points may be the institution's demonstrated competence in the pertinent research area, its abundance of experts in related areas that may indirectly benefit the project, its supportive services that will directly benefit the project, and its unique or unusual research facilities or instruments available to the project.

The List of References. This list is desirable only if the proposal contains six or more references. Otherwise, the references can be inserted in the text within parentheses, like this (A. N. Author, "An Article," *A Professional Journal*, XX [1987], pp. 45-50). (Note that brackets, not parentheses, are used within parentheses.)

If a list of references is to be included, it is placed at the end of the text proper and before the sections on personnel and budget. The items should be numbered and should be in the order in which they are first referred to in the text. In contrast to an alphabetical bibliography, authors' names in a list of references should not be reversed.

In the text, references to the list can be made in various ways; a simple way is to use a raised number at the appropriate place, like this.¹ Such numbers should be placed outside any contiguous marks of punctuation.

The style of the bibliographical item itself depends on the disciplinary field. The main consideration is consistency; whatever style is chosen should be followed scrupulously throughout.

The Personnel Section. This section usually consists of two parts: an explanation of the proposed personnel arrangements and the biographical data sheets for each of the main contributors to the project. The explanation should specify how many persons at what percentage of time and in what academic categories will be participating in the project. If the program is complex and involves people from other departments or colleges, make sure the organization of the staff and the lines of responsibility are clear.

Any student participation, paid or unpaid, should be mentioned, and the nature of the proposed contribution detailed. If any persons must be hired for the project, say so, and explain why, unless the need for persons not already available within the university is self-evident.

The biographical data sheets should follow immediately after the explanatory text of the "personnel" section, unless the agency guidelines specify a different format. For extremely large program proposals with eight or more participants, the data sheets may be given separately in an appendix. All biographical data sheets within the proposal should be in a common format. A convenient, easily read format is illustrated in the sample following this item. These sheets should be confined to relevant information. Data on marital status, children, hobbies, civic activities, etc., should not be included unless the sponsor's instructions call for them. The list of publications can be selected either for their pertinence to the proposed work or for their intrinsic worth. All books written and a selection of recent or important journal articles written may well be listed, but there is no need to fill several pages with a bibliography. The list can be labeled "Selected Publications," "Recent Publications," or "Pertinent Publications," whichever best fits the facts.

Sample Biographical Data for Project Director

Faculty, Martha W.
Associate Professor of
Mechanical Engineering

Education:

B.S. (Mech. Engr.), Princeton University, 1980 M.S. (Appl. Mech.), Illinois Institute of Technology, 1982
Ph.D. (Mech. Engr.), University of Michigan, 1985

Teaching Experience:

Lecturer, Mechanical Engineering, University of Michigan, 1983-1985 Assistant Professor, Mechanical Engineering, University of Michigan, 1985-1990 Associate Professor, Mechanical Engineering, University of Michigan, 1990-present

Other Relevant Experience:

U.S. Navy Engineering Officer, 1973-1979 Engineering Sales, Northrup, Inc., Detroit, 1979-1980
Consultant, Power Tools, Inc., Detroit, 1983-1985

Professional Membership:

ASME (Current Chair, Systems Commission); ASTM; I. Mech. Engr. (Fellow)

Honors and Awards:

Sigma Xi (Past President); Phi Beta Kappa; ASME Distinguished Service Award (1989); Listed in American Men and Women of Science and Who's Who in American Education

Selected Publications:

Systems Engineering: A New Approach in Planning. New York: McGraw Hill, 1988.

"Environmental Systems," Engineering Review, VI (April 1988) 121-140.

"Measurements in Systems Engineering," Proceedings of the Fourth International Symposium on Systems Engineering, Denver Research Institute, 1989, pp. 41-64.

And thirteen other publications in mechanics, heat transfer, and cavitation.

The Budget Section. The budget should be worked out with the appropriate Chico State Enterprises development specialist. Sponsors customarily specify how budgets should be presented and what costs are allowable. Along with the sponsor's budget, Chico State Enterprises requires a detailed "internal" budget showing more specifically how figures were derived. To help you estimate your costs and complete the internal budget, a template (see hard copy in your binder pocket) and a budgeting guide titled *Creating Auditable Budgets: A Guidebook* are available at <http://www.csuchico.edu/cse>. The overview given here is for preliminary guidance only.

Note: A separate budget must be created for each year of anticipated project funding. Typical divisions of the budget and some details about each of them are as follows:

PERSONNEL.

A. Salaries and Wages

Salaries and wages for faculty PIs, coPIs and other faculty can be stated in various ways including reimbursed time, academic year overload, and additional compensation (summer salary and pay for work done during the fall, winter and spring breaks). University staff are also occasionally released from their duties to work on funded projects and have their time reimbursed from project funding. Following are some general rules governing each type of payment.

1. Reimbursed time.

General rules governing reimbursed-time faculty and staff buy-outs:

- Faculty and staff buy-out pay is calculated at or below university (state) pay rates. If a lesser replacement rate is used, the dean of the college or supervisor/ administrative home must approve the rate.
- When creating multiple year budgets for faculty and staff, add funds to the Year 1 budget to allow for COLA's, promotions, and merit increases. Check with your DS for current rates of increase.
- The information below shows how teaching units convert to percentages of time and hours for one-semester buy-outs.

1 Unit	= 7% (2.8 hrs./week)
2 Units	= 13% (5.2 hrs./week)
3 Units	= 20% (8 hrs./usually 1 class)
4 Units	= 27% (10.8 hrs./week)
6 Units	= 40% (16 hrs./week)
9 Units	= 60% (24 hrs./week)
12 Units	= 80% (32 hrs./week)
12 Units + committee work	= 100% (40 hrs.)

2. Faculty and Staff Overload.

Faculty members performing work over and above their assigned university appointments during the academic year are paid overload on Foundation payroll. Foundation timesheets are completed and submitted for overload pay twice monthly. General rules governing faculty overload:

- Faculty may work up to 25% overload during the 17 weeks in a semester. Twenty-five percent of 40 hours is 10 hours per week or a total of 170 hours per semester, a good guide for the faculty during the academic year.
- All faculty are exempt employees and do not earn overtime. In order to conform to their state exempt status, overload compensation must be stated as a daily rate.

Two additional categories of personnel qualify for overload pay:

- Exempt staff and 12-month faculty: University staff and faculty in exempt positions can work up to 125%.
- Non-exempt staff: University staff in non-exempt positions can work up to 125% but must be paid at an overtime rate (time and a half) for any hours in excess of 8 hours per day or 40 hours per week.

3. Faculty Additional Compensation

Faculty will be paid as Chico State Enterprises employees, on payroll for summer, intersession and breaks when working on funded projects. Foundation timesheets are completed and submitted twice monthly. The following table shows the numbers of weeks in each period.

- Summer – 12 weeks
- Intersession/Winter Holiday – 4 weeks
- Fall Break – 1 week
- Spring Break – 1 week

4. Other Employees—Chico State Enterprises Employees and Student Assistants.

General rules governing Chico State Enterprises and Student Employees:

- Fully-benefited positions to which a person is not named in the budget must be advertised and recruited. Therefore, recruitment costs must be included in the budget for these positions.
- Pay rates for personnel working on funded projects must be reasonable for the work of the position and the educational level of the employee.
- For multi-year projects, pay raises should be provided where project funds allow.
- Students are always paid on an hourly basis.
- In most cases, the university and Chico State Enterprises limit full-time students to 20 hours of work per week during the academic year.
- Anyone working as an hourly employee, including a student, is considered non-exempt and must be paid time and one half for hours exceeding 8 per day or 40 per week.

5. **Fringe Benefits**

Fringe benefits, including payroll taxes, are paid in varying rates for all employees working on funded projects with the exception of work-study students. Payroll tax rates vary by position and change periodically. For current rates, contact your development specialist.

GENERAL OPERATING EXPENSES

This category covers such items as supplies, materials, postage, telephone, and printing which will be secured from a vendor rather than an independent contractor or subcontractor. Three competitive bids are required on all purchases totaling over \$1,000 (excluding tax and shipping) from a single vendor.

- Power equipment costing less than \$5,000 should be listed separately under Operating Expenses/Supplies for inventory purposes.
- Software and scientific and computer equipment should be listed separately in the space provided on the template in order for RESP to code them as equipment for inventory purposes.

TRAVEL

When calculating travel costs, refer to the Office of Research and Sponsored Programs' travel policy at www.csuchico.edu/gisp/sp. Include in your calculations per diem, hotel rates, airfare, mileage, rental car, conference registration and other costs.

CONTRACTUAL: CONSULTANTS AND SUBCONTRACTORS

These terms refer to individuals or businesses with expertise required to provide services that directly meet project objectives. General rules concerning these categories:

- Individuals or companies having the required expertise should be named in the budget.
- No CSU system faculty or staff nor anyone on university or Research Foundation payroll qualifies as these categories and none should be paid as such.
- Consultant or subcontractor fees should be based on a daily rate.
- All consultant costs including travel, supplies and materials should be placed in the subcontractor category, not in travel or supplies.

EQUIPMENT

Equipment means tangible, nonexpendable property, charged directly to the funded project, having a useful life of more than one year and an acquisition cost of \$5,000 or more per unit. General rules governing Equipment Expenses:

- When budgeting for equipment, list each item separately on the template. Tax, shipping and set-up fees should be included in the equipment cost if appropriate.
- Only equipment purchased specifically for and used exclusively on a funded project can be used as cost share for the project.

MISCELLANEOUS COSTS

This category includes costs that don't fit under other categories such as space rental or refreshments required to host a workshop.

INDIRECT COSTS

CSU, Chico's federally-negotiated indirect cost rates are:

Federal on-campus:	42% of salaries and wages
Federal off-campus:	18.5% of salaries and wages
All others:	20% of total direct costs
Agency rate:	Varies; see RFP for rate

The university and Research Foundation policy is to use the maximum rate allowed by the funding agency. To use a reduced rate or to have indirect costs waived, approval must be obtained from the Director of the Office of Research and Sponsored Programs.

(For a full explanation of F&A Costs, see Section 4.)

COST SHARE AND MATCH

Cost-share and matching funds are resources contributed to a sponsored project over and above the support provided by the external sponsor of that project. Mandatory cost share/match is required of the Research Foundation by the sponsor as a condition of the award, to match the sponsor's support.

Only mandatory cost share should be included in project budgets.

General rules governing Cost Share/Match:

- Appropriate cost-share/match budget items include salaries and wages, fringe benefits, travel, and equipment purchased specifically for and used only on the proposed project.

- All cost-sharing, even voluntary, must be tracked and accounted for in the Foundation's accounting records. Institutions are only allowed to offer goods and services as cost share when they are able to verify the value from their records.
- Project directors are responsible for seeing that appropriate and adequate cost share/match documentation is secured from the funding agency. These documents must show how the value(s) placed on the cost share or match amounts reported to the funding agency were derived and must be retained in the Foundation project files for audit purposes.

NOTE: It is very important to consult with your development specialist regarding project costs. He or she can help ensure that (1) the budget has not omitted appropriate costs, such as page charges for publication in professional journals or service charges for the use of certain university facilities; (2) any estimates for construction, alterations, or equipment installation have been properly obtained and recorded; (3) costs are not duplicated between the direct and indirect cost categories; (4) the budget complies with any cost-sharing requirements of the sponsor; (5) provisions are made for cost increases (i.e., salary increases) as may be appropriate; and (6) costs in all categories are realistically estimated.

The Appendices. Some writers are prone to append peripheral documents of various kinds to their proposals on the theory that the bulk will buttress their case. Reviewers almost never read such appendices and may resent the padding. The best rule of thumb is: When in doubt, leave it out.

Appendices to proposals are occasionally used for letters of endorsement or promises of participation, biographical data sheets (when there are too many--say, eight or more--to be conveniently placed in the "personnel" section), and reprints of relevant articles. If two or more appendices are included in a proposal, they should be designated Appendix A, Appendix B, etc.

B. Proposals for Academic Programs

It may be that your need is not for a research grant, but for outside sponsorship of an academic program involving a new curriculum, a conference, a summer seminar, or a training activity. If so, once again your best guide in proposal preparation is to consult any guidelines that the sponsoring agency provides. In the event that none is available, however, the following outline may be followed.

The **Introduction**, including a clear statement of need, and the **Background** section, describing the local situation and developmental activities to date, should begin the request. These should be followed by a section titled **Planning**. This section details the activities that will occur after the grant is received and before the institution of the new courses, training activities, or seminar. A **Program Description** should come next. This section lists the courses or instructional sessions to be offered, the interrelationship of parts, and the program leading to certification or a degree. It discusses the students or participants to be selected and served by the program, as well as plans for faculty retreats, negotiation with cooperating institutions, release time to write instructional materials, and so on.

Before concluding with the **Institutional Resources**, **Personnel**, and **Budget** sections, special attention should be given to a section entitled **Institutional Commitment**. Here the agreements made by various departments and cooperating institutions are clarified, and the willingness of the home institution to carry on the program once it has proven itself is certified. This section is crucial to the success of curriculum development programs because, in contrast to research programs, they have a profound impact on the host institution. Funding agencies need to be reassured that their funds will not be wasted by an institution that has responded to a funding opportunity without reflecting soberly upon the long-range commitments implied.

III. Inquiries to Private Foundations

Proposals to foundations have a better chance of succeeding if they are preceded by an informal contact. This contact is usually a brief (not more than two pages) letter outlining the proposed project, suggesting why the foundation should be interested in it, and requesting an appointment to discuss it in further detail. Such a letter permits an investigator to make inquiries to several foundations at once and gives an interested foundation the chance to offer suggestions before receiving the formal proposal.

Most foundations have specific areas of interest for which they award funds. It is essential that the grant seeker identify those foundations whose interests match the proposed project. Seldom will a foundation fund a project outside of its stated field of interest. RESP has resources to help investigators identify the appropriate foundations.

The initial **letter of inquiry** should demonstrate that the investigator is acquainted with the work and purposes of the particular foundation being approached and should point out a clear connection between these and the proposed project.

A letter so generally phrased that it could be a form letter is almost certain to be disregarded. An effective letter will discuss the significance or uniqueness of the project: Who will benefit? Who cares about the results? What difference will it make if the project is not funded? It will give enough indication of step-by-step planning to show that the project has been thought through and that pitfalls have been anticipated. It will demonstrate the writer's grasp of the subject and his or her credentials to undertake the project. It will emphasize at the same time that this is a preliminary inquiry, not a formal proposal, and that the investigator will send further details if the foundation wishes, or, better yet, will visit the foundation to discuss the project in depth. It is unnecessary in the preliminary inquiry to include a detailed budget, although an overall cost estimate should be mentioned.

A good letter, then, might begin something like the following: "Because of the interest the _____ Foundation has shown in _____, I am writing to solicit its support for a project that will _____." This should be followed by a sentence describing the program, the institution, and another one or two concerning the need for and uniqueness of the project.

The body of the letter should consist of three or four paragraphs giving the context or background of the project, its scope and methodology, the time required for its completion, the institutional commitments, and any special capabilities that will ensure the project's success. A separate paragraph might be given to some of the major categories of the proposed budget, including a rounded total direct cost estimate, and mention of any matching fund or cost-sharing arrangements, either in dollars or in-kind contributions.

The last paragraph could be patterned along these lines: "If the _____ Foundation is interested in learning more about this program, I will be happy to travel to _____ to discuss it in detail, or to submit a full proposal outlining my plans. My phone number in _____ is (____) _____ at work, and (____) _____ at home. I look forward to hearing from you soon."

In directories and other general sources of information, foundations often indicate their areas of interests in such broad terms (e.g., higher education or social welfare) that investigators cannot tell with any confidence whether their projects will be likely to interest a particular foundation. More detailed guidance can be gleaned, however, from the foundation's annual reports and from the list of projects that the foundation has actually supported. In general, foundations are interested in innovative projects that are (1) relevant to pressing national or regional problems, (2) relevant to new methods in education, (3) capable of serving as a model or stimulus for further or related work in its general area, (4) capable of being continued after the end of the funding period without further assistance from the foundation, and (5) not eligible for funding by governmental agencies or the investigator's own institution. The letter of inquiry should highlight whichever of these characteristics best fit the project at hand.

IV. Dealing with Short Deadlines

Having the time and leisure to follow the foregoing outline methodically is something of an ideal. It is far more common to discover that a proposal deadline is only a week and a half away, your co-workers are out of town, and you're left with their classes to teach, a whole proposal to write, and a hint of the flu. If you find yourself in this situation, several niceties of orderly procedure can be slighted, but the following steps are of paramount importance.

First, start (don't finish) with the sponsor's guidelines. Make an appointment to go over the guidelines with your CSE Development Specialist. Mark them as you study, noting such things as deadline (for mailing or arrival?), number of copies, where to mail, and so on. Look for such requirements as the collection of institutional data which, were it left to last, could not be gathered. (Remember that RESP can provide you with copying, mailing and institutional data.)

The guidelines will also probably specify certain topics or questions that must be addressed. If you can reasonably say anything at all on these topics, you should use the sponsor's exact phrases as your headings. You may even wish to borrow some of the language of the guidelines if it fits naturally into the framework of your proposal. If the sponsor is looking for "transdisciplinary" approaches to the problem, you would do well to use that term rather than say, "interdisciplinary" or "interdepartmental" to describe the same activities.

Second, after you have studied the guidelines, if there are sections that are either too vague or too specific for comfort or convenience, check with RESP development specialist to see if she or he has a clarification. If not, he or she may call the appropriate program officer at the agency for you or give you the number of the person to call. In either event, two ends will be served: the private foundation's program officer will be alerted to your intentions to submit, and the information you receive will help focus further the task of preparing a rush proposal.

Third, break the proposal up into small and simple subsections--especially if more than one person will be writing. Give each subsection headings and subheadings (referring again to the guidelines), and write slavishly to this outline. Using subheadings liberally will not only help you organize your material but will also guide reviewers through your perhaps not altogether flawlessly organized narrative....

Fourth, compare your budget and your text to insure that for every cost figure a corresponding activity is mentioned and justified in the text.

Fifth, pay special attention to the abstract. Having rushed through the narrative, you will find that careful construction of the abstract will serve both as a summary of what you intend to do and as a check on whether you have omitted any essential topics.

Sixth, keep in mind that Chico State Enterprises will provide as much help as possible, but that other proposals might be coming in at the same time. In that case, the office operates on a first-come, first-served basis. While making every effort to get your proposal out by the deadline, CSE cannot guarantee the timely delivery of proposals received later than five working days before their deadlines.

V. Why Proposals are Rejected

Assuming that funds are available, that geographical distribution is not a criterion, and that political considerations are not present, the success of a proposal will depend both on the quality of the project itself and the quality of its presentation in the proposal. Different reviewers, of course, will weigh merits and defects differently, but the following list of short-comings of 605 proposals rejected by the National Institutes of Health is worth pondering. The list is derived from an article by Dr. Ernest M. Allen (Chief of

the Division of Research Grants, National Institutes of Health) that appeared in Science, Vol. 132 (November 25, 1960), 1532-34. (The percentages given total more than 100 because more than one item may have been cited for a particular proposal.)

A. Problem (58 percent)

1. The problem is not of sufficient importance or is unlikely to produce any new or useful information.-----33.1
2. The proposed research is based on a hypothesis that rests on insufficient evidence, is doubtful, or is unsound.-----8.9
3. The problem is more complex than the investigator appears to realize.-----8.1
4. The problem has only local significance, or is one of production or control, or otherwise fails to fall sufficiently clearly within the general field of health-related research.-----4.8
5. The problem is scientifically premature and warrants, at most, only a pilot study.-----3.1
6. The research as proposed is overly involved, with too many elements under simultaneous investigation.-----3.0
7. The description of the nature of the research and of its significance leaves the proposal nebulous and diffuse and without a clear research aim.-----2.6

B. Approach (73 percent)

1. The proposed tests, or methods, or scientific procedures are unsuited to the stated objective.-----34.7
2. The description of the approach is too nebulous, diffuse, and lacking in clarity to permit adequate evaluation.-----28.8
3. The overall design of the study has not been carefully thought out.-----14.7
4. The statistical aspects of the approach have not been given sufficient consideration.-----8.1
5. The approach lacks scientific imagination.-----7.4
6. Controls are either inadequately conceived or inadequately described.-----6.8
7. The material the investigator proposes to use is unsuited to the objective of the study or is difficult to obtain.-----3.8
8. The number of observations is unsuitable.-----2.5
9. The equipment contemplated is outmoded or otherwise unsuitable.-----1.0

C. Investigator (55 percent)

1. The investigator does not have adequate experience or training for this research.-----32.6
2. The investigator appears to be unfamiliar with recent pertinent literature or methods.-----13.7
3. The investigator's previously published work in this field does not inspire confidence.-----12.6
4. The investigator proposes to rely too heavily on insufficiently experienced associates. -----5.0
5. The investigator is spreading himself too thin; he will be more productive if he concentrates on fewer projects.-----3.8
6. The investigator needs more liaison with colleagues in this field or in collateral fields.-----1.7

D. Other (16 percent)

1. The requirements for equipment or personnel are unrealistic.-----10.1
 2. It appears that other responsibilities would prevent devotion of sufficient time and attention to this research.-----3.0
 3. The institutional setting is unfavorable.-----2.3
 4. Research grants to the investigator, now in force, are adequate in scope and amount to cover the proposed research.-----1.5
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*This guide is adapted from the University of Michigan's *A Proposal Writing Guide*.