SUMMARY
◆ **Identifies funding sources and describes the proposal review process**
◆ **Provides example criteria and identifies ways to write proposals to meet the needs of its audience of reviewers**

Finding Funding:
Writing Winning Proposals for Research Funds

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Technical communicators in all parts of the field need research. For students and academic professionals, research is the foundation for a continuing career. Outside academia, practitioners rely on the results of research to make good decisions. But research has a cost. The most obvious cost is time: Time spent doing research is time not spent on such other tasks as teaching, writing, editing, designing, or, more generally, earning a living.

In addition, specific research may require Internet or library access, special monitoring equipment or transcription services, and participants or coders, and each of these requirements adds to the cost. With the addition of assistants, equipment, travel, and overhead, the cost of research can climb far above what can be slipped into work time unnoticed. Consequently, almost anyone pursuing research could benefit from additional funding. To obtain such funding requires finding prospective sources, whether internal or external, and writing proposals.

DEFINING COMMON PROPOSAL TERMS

Because funds usually come with strings of requirements attached, it is important to understand the common terminology of proposals. A most important distinction is that between grants and contracts. A *grant* provides funding for work that is intended to meet the proposer's need; the project may also be referred to as *investigator-initiated*. A *contract* is an agreement to fund work to meet the sponsoring agency's or customer's need.

I first learned of this distinction when I worked for a U.S. federal government agency that provided funds to conduct emergency archeological work, which was often being done just ahead of the bulldozers. The agency awarded a group of archeologists a contract to do research that would protect a particular site. As the researchers

prepared to go into the field, they learned of another site in even more imminent danger and went there instead (without notifying the funding agency); thus, they treated the funds as coming from a grant (to meet their needs) rather than a contract (to meet the agency's needs).

When the agency learned that the research group had not done the work for which they had a contract, it barred the individuals and their institution from receiving any other funds. The agency manager commented to me that if the researchers had notified him before changing projects, he could probably have found money to fund both projects, but as it was, they had misappropriated tax dollars and failed to meet the agency's requirements. Mistaking a contract for a grant had serious adverse consequences.

Many, indeed probably most, proposals are written in response to a request for proposal, or **RFP**. The RFP is intended to alert the interested public to a sponsoring organization's plan to spend money on research. Like calls for papers for conferences or special issues of journals, they invite certain kinds of response within a specified time frame. RFPs vary in their length and specificity. If the award is to be a grant, the proposer may have considerable flexibility in the form of the response. If the award is to be a contract, especially with a government agency, the RFP may identify specific questions to be answered, dictate a format, and assign page limits to discussions of particular issues.

Although it can certainly be argued that such requirements do not ensure that the research is any better, to make that argument is to mistake their purpose. The requirements are usually intended to demonstrate that the funds

are being awarded fairly, that the sponsor has leveled the playing field and ensured comparability among the responses, that the awardees have shown their willingness to accommodate the sponsor, and that the responses provide a firm basis for contract enforcement.

Although RFPs have a bad reputation for being inconsistent, they can be a great source of information for the investigator. The RFP generally tells what the sponsor wants and why, identifies the sponsor's primary concerns, and spells out how the decision to award funding will be reached.

Most RFPs include or require a **SOW**, which is variously defined as a scope of work or a statement of work. The SOW identifies what the awardee is to do with the funds. Like the RFP, it may be vague or specific; the danger of a vague SOW is "scope creep" (familiar to freelancers as the client's changing, usually growing, expectations for a project without any change in budget). The more specific the SOW, the better able both the investigator and the sponsor are to tell whether the work has been completed satisfactorily.

Researchers and organizations that write many proposals often resort to using *boilerplate*. Boilerplate is anything that can be reused for multiple proposals. An organization can save a great deal of time by not having to reinvent its corporate accomplishments, redefine its facilities, or renew its history for every proposal, and that is the value of using boilerplate.

However, having saved time and effort by using boilerplate for that much of the proposal, the organization or its proposal writers may be tempted to save even more, by reusing *any* written materials that have worked in the past. To do so is dangerous. In using boilerplate, the proposers are valuing their own convenience over responsiveness to the sponsoring agency. The agency that issues an RFP has specific needs that they want addressed, and those needs are unlikely to coincide exactly with the needs at the last agency. As a result, the reused boilerplate material is apt to be off-target for the new proposal.

Even worse, a careless writer using boilerplate may neglect to update the names and places to represent the current sponsor. A particular business problem resulting from such careless reuse is that the material being used as boilerplate may commit the investigator to specific requirements of the original agency that the current sponsor nei-

ther needs nor wants; this error can make the cost of the work unnecessarily high. (Incidentally, careless use of boilerplate is a major contributor to the inconsistency of many RFPs themselves.) Boilerplate is a useful starting point for a proposal, but no proposal should be made up entirely of boilerplate.

MANY SOURCES FOR FUNDING OR INFORMATION

A large number of agencies may fund research, including technical communication research. In its guides for 2002, The Foundation Center (2002a, 2002b) listed 20,000 broadly focused private and community foundations that granted more than $50,000 USD for all kinds of research. There are even more agencies that are narrowly focused and award smaller grants. For some funding sources, such as the National Science Foundation (NSF), providing funds for research is the reason for their existence. Others may have a one-time need for research of a particular kind. Your problem as an investigator seeking funds is to identify the sponsor whose interests and resources come closest to matching your needs.

A few of the largest potential sources of funding for technical communication research are listed in Table 1. These agencies award grants, and competition can be fierce. You can identify more specialized opportunities for research grants or contracts from the clearinghouses listed in Table 2. Some of these clearinghouses are supported by professional societies; others are supported by individual or institutional subscription.

For still more suggestions, see the books by Bauer (1993) and Ries and Leukefeld (1998), and articles by Speck (1997a) and Munger (2001).

LIMITED FUNDS MEANS COMPETITIVE DECISIONS

Even though thousands of organizations fund research, there are even more researchers who need funds. What is more, not even Bill Gates could afford to pay for every research project that researchers would like to undertake. Funds are *always* limited. Because no researcher has enough funds to do all of the work he or she might like, researchers compete for the limited funds available. And since no sponsor has enough money to pay for all potentially valuable research, agencies must find ways to select among potential recipients of their funds.

There are various ways they can do this—the choice is based on the sponsor's values. Although some agencies may buy low-bid research, that approach is rare. Decisions based on cost alone are usually limited to projects with no unknowns, a situation much more usual for commodities than for research. More often, the decision is based on the quality of the proposal and the reputation of the investigators.

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TABLE 1: POTENTIAL SOURCES OF GRANT FUNDING

Source	Where to learn more	Mission	Likely categories for technical communication research◆
National Science Foundation (NSF)	www.nsf.gov	To promote progress of science; to advance the national health, prosperity, and welfare by supporting research and education in all fields of science and engineering	Computer, information sciences Education Social, behavioral, economic sciences
National Institutes of Health (NIH)	www.nih.gov	To support basic, applied, and clinical and health services research to understand the processes underlying human health and to acquire new knowledge to help prevent, diagnose, and treat human diseases and disabilities	Social and demographic studies Telehealth technologies development AIDS international training and research Knowledge integration
Office of Justice	www.ojp.usdoj.gov/fundopps.htm	Multiple agencies represented; Fiscal Year 2003 funding uncertain	Testing whether programs are working
Natural Sciences and Engineering Research Council (NSERC)	www.nserc.ca	To make investments in people, discovery, and innovation for the benefit of all Canadians	Collaborative health research Industrial research Management of technological change Design engineering
National Center for Education Research (NCER)	www.ed.gov/about/offices/list/ies/ncer	To support rigorous research that contributes to the solution of significant education problems in the United States	Twelve national research and development centers each focus on specific issues, such as evaluation and testing or adult learning
Society for Technical Communication (STC)	www.stc.org/research_grants.asp	To help bridge the gap between those who create ideas and those who use them	Currently soliciting proposals in response to an RFP, as well as considering unsolicited proposals
National Council of Teachers of English (NCTE)	www.ncte.org	To fund research in the teaching of English	Funding for the Research Foundation has been suspended for two fiscal years; as of December 2003, no information about grants was available

◆ *As of December 2003 Web postings.*

TABLE 2: SOURCES FOR IDENTIFYING FUNDING OPPORTUNITIES

Source	Where to learn more	Notes
Association of Teachers of Technical Writing (ATTW)	www.attw.org	Information for society members
BidNet	www.bidnet.com	Commercial clearinghouse (subscription)
Community of Science	www.cos.com	Clearinghouse (subscription by institution, including weekly e-mail notification service)
Foundation Center	www.fdncenter.org	Clearinghouse (subscription directory)
GrantsNet	www.grantsnet.org/	Search engine supported by Howard Hughes Medical Institute and American Association for the Advancement of Science
IRIS Database	carousel.lis.uiuc.edu/~iris/search.html	Clearinghouse
National Council of University Research Administrators (NCURA)	www.ncura.edu/resources/	Clearinghouse for a variety of resources
Pacific Bell Knowledge Network	www.kn.pacbell.com/wired/grants	Clearinghouse
TRAM	tram.east.asu.edu/	Search engine
	Annual register of grant support	Book available at university libraries
	Foundation directory (The Foundation Center 2002a, 2002b)	Books identify largest grant-making organizations in the U.S.

HOW DO YOU COMPETE?

Competing for funding is much like competing in sports. Basic skill alone is not enough. You need to know how the game is played.

Being skilled

Successful research proposals embody skills in two areas: research and proposals. Research skills are many and varied, according to the kind of research, and so they extend far beyond the scope of this paper. Proposal skills can be gained from many articles and books (such as White 1983; Anonymous 1988, 1990; Safford 1989; Hill and Whalen 1993; Reier 1993; Golden 1997; Speck 1997b; Peterson 1998; Ries and Leukefeld 1998; Frey 1999; Harris and Elizabeth 1999; Klein 1999; Shannon 2001; Johnson-Sheehan 2002; Reimold and Reimold 2003; others are cited by Wahlstrom 2002). Hundreds—if not thousands—more are available over the Internet. In addition, many courses offer "hands-on" experience, both internal courses at academic institutions and commercial courses.

At its simplest, the guidance available advises people writing proposals to
- Know about the opportunity in advance (preferably by assisting in writing the RFP)
- Say specifically what you want
- Summarize often
- Present general concepts first, then details
- Use short, familiar words
- Use short sentences

◆ Use short paragraphs
◆ Write in the active voice
◆ Write in the first-person plural
◆ Fine-tune the first sentence

Given that this advice is available to everyone who might submit a proposal, it would be nice to have another edge. As a technical communicator, you have such an edge. Throughout your technical communication training and experience, you have been told, almost as a mantra, "Know your audience." Proposal guidance is now increasingly emphasizing the audience (for example, Munger 2002; Wreden 2002). The RFP provides many clues about your audience, their interests in this project, and their concerns. Consequently, the guidance listed above is overridden by an even more important rule, "Write in response to the RFP."

How the game is played: The process of selecting projects for funding

Most technical communication researchers are familiar with the grants process only from the standpoint of the seekers of funds. To win, it helps to know more.

Before the proposal is written Agencies that award grants generally have a clear process for doing so. Although the first thing that investigators may see is the RFP, the sponsor has gone through a series of steps before issuing it. First, they identify a need—their own in the case of a contract, or a more general or societal one in the case of a grant opportunity. They then obtain a budget; draft an RFP for legal, contractual, and technical reviews; revise the RFP as necessary; and publish it. If they have not already done so, they then identify a committee of proposal reviewers, who may or may not be the people who wrote the RFP.

Regardless of the sponsoring agency, the review committee is usually intended to represent the primary (relevant) concerns of the sponsor's stakeholders. Individual committee members are usually chosen to ensure a diversity of points of view, either by personal interest or by task assignment. Reviewers are likely to be technical communicators only when the sponsoring agency or RFP is technical communication-specific. In other cases, professionals in a variety of social sciences are likely to make up the review committee. Some reviewers may be inclined to qualitative research and others to quantitative; some reviewers may be concerned with theory, others with method. Some reviewers may focus on cost.

As proposals arrive Once proposals are received, the review process begins. The first step for most agencies is an administrative review. At this point, the issues are simple, such as whether the proposal met the deadline and

whether all pieces and required signatures are present, and perhaps whether the budget meets guidelines for cost or overhead rates. Such a review may be conducted by a clerk who has no further interest in the project, and proposals either pass or fail. A proposal that fails receives no further consideration; a proposal that passes is forwarded to the review committee.

There are several reasons for the administrative review.
1. It eliminates proposers who blatantly ignore sponsor requirements.
2. It supports the documented fairness of the award.
3. It reduces the number of proposals that must be reviewed in detail.

Members of the committee are likely to have other responsibilities; rarely does anyone have the luxury of being assigned purely to the review of proposals. Even an individual whose sole job is review would be confronted by a large number of proposals at the same time. In either case, the time that reviewers have for individual reviews is short.

Different agencies and different committees handle their reviews in different ways. For some, every reviewer reads every proposal from start to finish. For others, each reviewer is assigned to review specific areas, such as budget or management. In that case, it is possible that no one will ever read the proposal from start to finish, as a unified whole. As a result, inconsistency in proposals is less noticeable during proposal reviews than inconsistency in other types of documents. However, ultimately the awardee must be guided by the proposal and should expect to be held to every apparent commitment. Thus, attention to consistency improves the viability of the project.

Members of the review committee usually have some flexibility in how they do their reviews. Among those reviewers in technical communication and other fields with whom I have informally discussed the question, it is common to start with whichever proposal they received first (the top of the pile), unless they had additional responsibilities for a specific proposal and were concerned that they might need extra time to give it their full attention. This fact suggests an advantage of prompt submittal: the early proposal shapes the reviews that follow.

Each committee member reads the proposal or assigned parts, making notes as to its good and bad points. Committees often use a standard form to focus their review and identify their scoring criteria. Munger (2002) provides an illustration, and example criteria are discussed later in this article. The RFP also usually carries an indication of the review criteria and their weighting.

Decision time When all reviews are complete, the committee meets (in person, by phone, or online) to reach

a decision. Sometimes the decision is obvious, if all reviewers harshly criticize a proposal or all have glowing comments. Such unanimity is rare; negotiation is usually necessary. In negotiating the decision, committee members rely on their notes about the proposal and their knowledge of the proposer (history of success or failure, attitude of cooperation in prior contacts or other contexts, and so on).

The outcome of the committee negotiations varies by review cycle as well as by sponsor. Reviewers often ask proposers for clarifications at this point. They may also set conditions for acceptance. However, review committees usually make their decisions in the form of a recommendation to a higher authority, whose primary responsibility may be disbursements, or to the head of the organization they represent. Depending on the sponsor, the review committee's recommendation may be pro forma only, or it may be only a major factor in the final decision-maker's consideration.

The award When the proposal and proposer have passed through all of these reviews, clarifications, and conditions, a contract is written between the sponsor and the proposing organization (even in the case of a grant). This contract is intended as a legally binding means to ensure that the money is spent exactly as described in the proposal, and to provide for a number of milestones or checkpoints at which the investigator will show progress and receive interim payments. If the investigator fails to reach the milestones, funding is terminated.

WHAT REVIEWERS LOOK FOR

When an RFP identifies criteria, they are usually at a high level rather than in detail. The review committee will necessarily develop a more specific set of expectations. For the purpose of demonstration, I will discuss the criteria used by the Society for Technical Communication's Research Grants committee from 1998 to 2001. Examples of research proposals funded by STC that were selected using these criteria include recent studies published by Albers and Kim (2002), Winn and Beck (2002), Ramey (2000), Thrush (2001), Zimmerman and Schultz (2000), and Campbell (1999). The major categories were as follow:

- ◆ Literature review (15 points)
- ◆ Strength of design (25 points)
- ◆ Proposal presentation (10 points)
- ◆ Budget (10 points)
- ◆ Personnel (10 points)
- ◆ Benefits to society (30 points)

These categories and point assignments indicated the Society's priorities: any effort sponsored by the Society must benefit the Society and its members, and the research design must offer convincing support that the investigator

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will succeed in the research. Within the review categories, reviewers had further expectations, as described below.

Literature review

- ◆ Has the applicant demonstrated a clear sense of having researched the previous, relevant, and/or related studies? (10 points maximum)
- ◆ Does the literature review convince you that the applicant has discovered the major trends in the field? (5 points maximum)

Too often, researchers skimp on the literature review, treating it as a hurdle to be jumped rather than as a tool to develop better research. As a graduate student, I believed the purpose of the literature review to be proving that you had read the standard literature, or at least the literature your committee required. After dull hours in the library reading other people's dissertations, I learned to flip past that chapter to get to the meat of the research. It was not until I had acquired wider experience that I realized that the primary purpose of the literature review is to demonstrate that you are aware of alternative ideas and methods so that you can choose the best and most appropriate for your own work.

Proposal reviewers recognize that prospective investigators have missed an opportunity to improve their research when a literature review is shallow (for example, when nothing more than two years old is cited) or narrow (when all citations come from only one or two journals). They also recognize a skimpy review when the investigator clumps the citations and stereotypes their contents without considering them individually.

Concerned students sometimes ask whether they have done too much literature review. My answer is that there is no such thing as too much. More information simply ensures a more solid foundation and justification for the investigator's decisions. However, the investigator will in time reach a point of diminishing returns, beyond which each new source merely confirms what the others have shown. When you reach this point, having stretched beyond the mainstream journals and the most recent issues, you may consider yourself to have enough—at least until you know more.

A secondary purpose of the literature review is to demonstrate that you have made sure that you are not accidentally repeating what someone else has already done. Because technical communication intersects so many other disciplines, the same research question may have been addressed (and even resolved) in another field. For instance,

testing the use of Web-based communication tools for distance learning must take into account not only the tools, but also what is known about learning by other means.

For further guidance   The literature review is usually mentioned only briefly in proposal-writing guidance and has rarely been given much attention even in research methods guidance (see for example, Booth and colleagues 1995; Becker 1998). I found discussions by Becker (1986, pp. 135–149) and Barrass (1978, pp. 125, 142) to be particularly useful.

Strength of design

- ◆ Is there a clear link between previous research endeavors about the topic and the research plan? In other words, is the plan motivated by an understanding of the current dialog about the issue? (5 points maximum)
- ◆ Can the proposed methods answer the research questions? (10 points maximum)
- ◆ Is the research plan reasonable? Is it presented in sufficient detail? Can it succeed? (10 points maximum)

It may come as a surprise to learn that proposals often do not indicate what questions the investigator is interested in asking. Immature students may believe (and admit) that the purpose of their research is to give them a thesis, but it would be rare to find anyone not related by blood who is interested in paying for such research. The basis for research must be for the investigator to find something out, to answer some question.

The literature review has shown that the answer is not already available, and the research design indicates how the investigator plans to find the answer. If the reviewers do not see a link between the research plan and prior work, if they see that the investigator plans to do what someone else has already done and either succeeded or failed at, they must question whether this project will provide any new information.

If the research question is important but the proposed methods cannot answer it, the reviewers are likely to award the money to a project with more chance of success, even if the question might be less interesting.

Finally, and perhaps most importantly, if the reviewers cannot tell from the proposal just what the investigator intends to do, they must doubt that the investigators know clearly what they want to do, making the project's chance of answering the question slim.

One area in which technical communication researchers should take particular care is in justifying their sampling choices. Our field is now sufficiently mature that conforming to statistical methods is common. Unfortunately, many investigators still propose convenience sampling—for instance, interviewing only their own students or institution.

Although convenience sampling can be appropriate, particularly in exploratory research, once parameters have been identified, more robust sampling is expected.

For instance, you may be interested in determining how readily offshore IT staffers understand the compound sentences in corporate technical documents. You may have easy access to a pool of students whose first language is not English, but students whose native languages are Spanish, Vietnamese, and Hindi are unlikely to share all the same difficulties. Furthermore, university students educated extensively in the United States can be expected to have a consistently easier time with the language, though perhaps a harder time with its technical detail, than speakers of English as a second language whose education has been entirely offshore. Thus, the students would poorly represent an offshore target audience.

For further guidance   Several special issues of the *IEEE transactions on professional communication* (vol. 40, no. 3) and *Technical communication* (vol. 46, no. 4) offer help on writing a better research design. Research courses and texts for other social sciences (such as psychology) abound and are highly applicable to technical communication research.

Proposal presentation

- ◆ Is the proposal statement clear, concise, and well-presented? (5 points maximum)
- ◆ Can you determine the organization of the project and its major components from the proposal? (5 points maximum)

Technical communicators are subject to high expectations; we have all heard that a technical communicator who submits a job application with even one typo will lose the job. A proposal review is not quite so strict, but it does reflect the expectations that clear thinking is linked to clear communication, and that someone who truly understands his or her subject can explain it to someone else. Thus, if reviewers cannot identify the organization of the project, they conclude that the investigator has not actually worked out those details.

Among the embarrassing errors I have seen is an investigator's relying on spell check to such an extent that the name of her home town was "corrected" inappropriately. That kind of error suggests that the investigator relies on analytical tools without checking that they operate correctly, and so may accept false or misleading results. In short, it suggests carelessness that could undermine the value of the study.

For further guidance   Many articles, books, and courses offer additional guidance on presenting your proposal (such as Anonymous 1988, 1990; Safford 1989; Hill and Whalen 1993; Reier 1993; Speck 1997b; Peterson 1998;

Frey 1999; Harris and Elizabeth 1999; Klein 1999; Shannon 2001; Pugh 2002).

Budget

◆ Does the budget seem reasonable? Is there any additional support (in-kind, matching, and so forth)? (10 points maximum)

The budget may attract more scrutiny than any other section of the proposal, because it must demonstrate that the agency spends its money wisely. Particular attention to its credibility is therefore critical (Munger 2002).

Too often, investigators write proposals aimed at meeting the sponsor's price cap rather than carefully considering the actual cost of their specific research. They instead create "top-down" prices, determining rates and hours so that they multiply out to equal the available funds. For research, the "bottom-up" costing approach, calculating the cost by multiplying the number of hours the project is realistically expected to take by the real cost of staff, almost inevitably reveals a higher price.

Reviewers recognize that an investigator's chances of success are greater if the principal investigator has realistic expectations and is not requiring staff to work 90 hours per week for 10 months straight. If the bottom-up cost of the research exceeds the agency's price cap, the proposer has several options:

◆ Pay the excess cost personally—for example, working the 90-hour shifts.
◆ Use less expensive methods.
◆ Find additional funding sources.
◆ Reduce the scope of the research.

Even though your research may be intended to take you into the unknown, consider what you expect to find and plan for what you might need to get there. In particular, for applications of standard methods, you should know how long the methods take per unit (that is, throughput) and the number of units expected, and from that calculate what applying the methods should cost.

Investigators preparing proposals are expected to think through all of the costs of the project, even those that are not obvious, such as university-supplied Internet access. By recognizing that such services have value, investigators gain respect for their careful planning. By showing that they have found other ways to support their research, investigators demonstrate that they are not asking one funding organization to bear the full burden of their work or to suffer the full risk.

Institutional overhead is an important consideration. Agencies frequently set caps to the overhead rates they will pay, for example, 10%. Institutions, on the other hand, must cover all their costs. Practitioners are familiar with seeing their billing rates be more than double their pay rates, to cover the costs of benefits as well as administrative

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overhead.

One way around the dilemma of an agency cap and an institutional minimum is to identify as budget line items those specific services covered by the overhead. This approach assigns costs where they are spent, rather than applying them blindly to all projects. Beware that the institution must recognize this breakdown, or some administrator may attempt to apply the too-high overhead rate to the now-higher direct costs.

In preparing the budget, consider what it appears that you are seeking money for. For instance, I have read a proposal in which investigators requested money to fund summer travel to 20 or so national parks. Regardless of the validity of the research, to most reviewers this would look like asking the public to pay for the investigators' summer vacations. To overcome that impression, the investigators could have presented a strong and clear justification for the travel, split the travel among several funding agencies (so that each sponsor paid for perhaps five trips and received the benefit of 20), or reworked the budget to cover time but not travel. In the age of the Internet, requests for travel are likely to be scrutinized ever more carefully.

Trips to visit libraries require more justification than they did even 10 years ago. If travel is necessary, consider how the trips are arranged. Can the same need be met with one three-week or two 10-day trips to a destination rather than 10 two-day trips? If it cannot, make sure that the reasons are clear to the reviewers.

Another budget item that is likely to cause particular concern is the purchase of equipment. The issue is not whether the equipment is necessary to ensure valid research, but rather who owns the equipment. Some agencies, such as the U.S. Department of Energy, insist that they have title and require that the equipment be turned over to them at the end of the project. Other agencies, because they do not wish to take ownership but cannot justify losing potential assets, simply refuse to pay for capital equipment.

For further guidance   To get help on budgeting for research, you can consult the same sources as freelance practitioners (for example, Lasecke 1996). Newman (2001) provides specific guidance on presenting cost

information as well as strategies for determining the prices of projects.

Personnel
- Does the proposer have a history of activity as a Society member? (5 points maximum)
- Does this person have the qualifications necessary to successfully complete the project? (5 points maximum)

Although STC does not require that investigators be members to receive funding, the Society does have an obligation to serve first the people who make up its membership and pay its bills. Hence, an investigator who has proven commitment to the Society, by participation on its committees and publication in its journal, as well as simple membership, has an advantage over others.

An investigator who is known to and respected by the reviewers also has an advantage, in that people who have succeeded in the past are expected to succeed in the future. Investigators who have disappointed in the past by failing to complete projects, by refusing to disclose methods or persisting in using inadequate methods, or by failing to publish results must overcome serious reviewer doubts.

Degrees alone do not ensure the ability to do research. Indeed, some advanced degrees do not entail any research component. Furthermore, the kind of research conducted in the past should relate to the kind of research proposed; expertise in linguistic analysis may not be much help in testing usability, for instance. However, the principal investigator need not embody all qualifications. A team can provide both depth and breadth of experience. If a team is proposed, it is essential to define the responsibilities and relationships among team members, making it clear that the collaboration extends beyond obtaining funds.

For further guidance   To improve your stature, make yourself known by being active at conferences, by writing articles and reviews for journals, and by collaborating with other technical communicators.

Benefits to society
- Will the study further the goals of the Society, as described in the STC Research Grants Committee Guidelines and the current Society research agenda? (15 points maximum)
- Will the study benefit the profession? (15 points maximum)

Any organization inevitably owes its first obligation to those who fund it. A professional society, however, also takes a broader view, seeking to improve the field for the future. Consequently, the research question must be one that is of interest to more than just the investigator. As one of my colleagues asked, "Why should anyone pay me to do what I want to do?" Investigators must demonstrate that their work benefits a broader group to improve their chances of receiving funding.

To make the benefits of your research clearer, start by making them clear in your own mind. Put yourself in the position of the external reviewer and ask yourself how your project will help achieve their goals. Review your proposal against the RFP to ensure that you have addressed all of the sponsor's needs and goals. Recognize that making you as an individual, or even your institution, better is not likely to be their concern.

For further guidance   Much the same considerations apply to obtaining funding from other agencies as to internal corporate funding. Driscoll and Hynes (2002) describe how to make specific business cases and show project benefits. Reimold and Reimold (2002) offer additional suggestions.

CONCLUSION
Technical communication researchers benefit from their practical training in audience analysis. By writing to their audience, they will create a proposal that represents their strengths while supporting the sponsor's interests. The RFP identifies the selection process, from administrative review to technical review to contracting. In proposing research, you can capitalize on addressing the process by respecting the client sponsor. Meet their deadlines rather than asking for special extensions. Provide all required materials immediately, so that you will pass the administrative review. Avoid wasting reviewers' time: Give them what they need and want, in a form they recognize and appreciate. Focus on meeting the criteria by which they will make a decision, and the quality of your research will shine through. T**C**

REFERENCES
Albers, Michael, and Loel Kim. 2002. "Web design issues when searching for information using handheld interfaces." *Technical communication* 49, no. 3:314–329.

Anonymous. 1988. "These tips lead to better proposals." *The Pryor report* (February):8.

Anonymous. 1990. "Ten ways to improve proposals." *The editorial eye* (April):3.

Barrass, Robert. 1978. *Scientists must write.* London, UK: Chapman and Hall.

Bauer, David G. 1993. *The "how to" grants manual.* 2nd ed. Phoenix, AZ: American Council on Education, Oryx Press.

Becker, Howard S. 1986. *Writing for social scientists.* Chicago, IL: University of Chicago Press.

Becker, Howard S. 1998. *Tricks of the trade: How to think about research while you're doing it.* Chicago, IL: University of Chicago Press.

Booth, Wayne C., Gregory G. Colomb, and Joseph M. Williams. 1995. *The craft of research.* Chicago, IL: University of Chicago Press.

Campbell, Kim Sydow. 1999. "Collecting information: Qualitative research methods for solving workplace problems." *Technical communication* 46, no. 4:532–545.

Driscoll, Margaret, and Colin Hynes. 2002. "Back to fundamentals: The business realities of funding for performance support projects." *Technical communication* 49, no. 4:458–466.

Frey, Robert S. 1999. *Successful proposal strategies for small businesses: Winning government, private sector, and international contracts.* 2nd ed. Boston, MA: Artech House.

Golden, Susan L. 1997. *Secrets of successful grantsmanship: A guerrilla guide to raising money.* San Francisco, CA: Jossey-Bass Publishers.

Harris, Dawn, and Ann M. Elizabeth. 1999. "Secrets of successful proposals." Workshop at STC Annual Conference, Cincinnati, OH.

Hill, James W., and Timothy Whalen, ed. 1993. *How to create and present successful government proposals.* New York, NY: IEEE Press.

Johnson-Sheehan, Richard. 2002. *Writing proposals for managing change.* Boston, MA: Allyn & Bacon.

Klein, Karen Potvin. 1999. *Editing grant proposals.* Guidelines 3. Reston, VA: Council of Biology Editors.

Lasecke, Joyce. 1996. "Stop guesstimating, start estimating." *Intercom* (November):4–7.

Munger, Roger H. 2001. "Finding proposal money for nonprofits." *Intercom* (June):28–30.

Munger, Roger. 2002. "Seeing your proposal through the reviewer's eyes." *EMS: The journal of emergency care, rescue and transportation* (June):79–84.

Newman, Larry. 2001. "Developing and presenting cost and price data." *Proposal management* (Spring):16–28.

Peterson, Tracy A. 1998. "Tips for winning proposals." *Intercom* (September/October):7–9.

Pugh, David G. 2002. "Golden rules for winning work." *Proposal management* (Spring/Summer):30–38.

Ramey, Judith. 2000. "Guidelines for web data collection: Understanding and interacting with your users." *Technical communication* 47, no. 3:397–410.

Reier, Alison. 1993. "Some editors make proposals an offeror can't refuse." *The editorial eye*, 16, no. 5:5–6.

Reimold, Peter, and Cheryl Reimold. 2002. "How to write readable reports and winning proposals, part 4." *PCS newsletter* 46, no. 6:14, 16.

Reimold, Peter, and Cheryl Reimold. 2003. "How to write readable reports and winning proposals, part 5." *PCS newsletter* 47, no. 1:8.

Ries, Joanne B., and Carl G. Leukefeld. 1998. *The research funding guidebook: Getting it, managing it & renewing it.* Thousand Oaks, CA: Sage Publications.

Safford, Dan. 1989. *How to write a proposal.* CommuGuide 4. Piscataway, NJ: IEEE Professional Communication Society.

Shannon, Rebecca L. 2001. *Government proposals: Cutting through the chaos.* Vienna, VA: Management Concepts.

Speck, Bruce W. 1997a. "Strategies and resources in pinpointing nonprofit grant patrons." *Intercom* (January):9–11.

Speck, Bruce W. 1997b. "Writing a successful grant proposal." *Intercom* (March/April):19–21.

The Foundation Center, compiler. 2002a. *The foundation directory, 2002 edition.* New York, NY: The Foundation Center.

The Foundation Center, compiler. 2002b. *The foundation directory part 2, 2002 edition and supplement.* New York, NY: The Foundation Center.

Thrush, Emily A. 2001. "Plain English? A study of plain English vocabulary and international audiences." *Technical communication* 48, no. 3:289–296.

Wahlstrom, Ralph. 2002. "Teaching the proposal in the professional writing course." *Technical communication* 49, no. 1:81–88.

White, Virginia, ed. 1983. *Grant proposals that succeeded.* New York, NY: Plenum Press.

Winn, Wendy, and Kati Beck. 2002. "The persuasive power of design elements on an e-commerce Web site." *Technical communication* 49, no. 1:17–35.

Wreden, Nick. 2002. "Making your proposal come out on top." *Harvard management communication letter* 5, no. 7:1–4.

Zimmerman, Beverly B., and Jessica R. Schultz. 2000. "A study of the effectiveness of information design principles applied to clinical research questionnaires." *Technical communication* 47, no. 2:177–194.

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