

## THE REVIEW PROCESS

What happens after the proposal is submitted for federal funding? It is helpful to understand the review process while preparing the proposal, since accommodation to the judging process is an important goal of proposal preparation. Further, one feels more comfortable engaging in an activity if one understands all the parts of it.

Your proposal will probably be received by an office such as the National Science Foundation's Office of Applicant Management and Organization, which accepts proposals, certifies when they were received, and keeps track of their processing. Such offices came into being to ensure that deadlines were fairly and uniformly observed.

**Screening.** The initial screening ascertains that the necessary information has been included. If the agency supplies a checklist and it has been followed, the proposal will pass this screening. The next screen ensures that the proposal falls within the scope of what the agency is authorized to fund and is appropriate for the program or competition in which it is entered. A surprisingly large number of proposals fail these

two screens owing either to carelessness in assembling the proposal or to not having adequate information about the program. Proposers rejected at this level often receive no word that they have been screened out early, being notified along with all the other proposers when judging is completed.

**Types of reviews.** The technical review of the proposal can be conducted entirely by the staff of the agency, by external reviewers, or by some combination of these two. Agencies with a strong sense of mission--they know exactly what it is they wish to support--are more likely to opt for internal review, possibly using staff from other programs to assist them. These are more likely to be programs funding demonstrations of particular ideas or seeking other tightly specified goals.

"Peer review" systems prevail where the goals are more open-ended, as they are in most research programs. Usually this means using nongovernment personnel who have special expertise and are close to the research process. Government staff may have expertise but typically have not actually done research recently. External reviews may be done by individual reviewers, by panels especially established for the competition, by standing panels or committees, or by some combination of these.

An external reviewer will usually be sent only one proposal at a time, although she may review several over the course of a year. When all reviews have been returned, the government staff must synthesize the recommendations and prioritize the proposals for funding. Standing committees usually meet to discuss their evaluations and then give a final rating to the project. Staff may, for good reasons, recommend action contrary to the reviewers. Since their recommendation is subject to scrutiny by their superiors, they document defense of their decision clearly. As Cavin (1984) notes, "What may appear an innovative and novel idea to a reviewer who reads a handful of proposals in a year may not be new at all in the experience of a program director who reads hundreds of proposals annually" (p. 8).

The staff recommendations may go to a standing advisory group for approval or to more senior agency officials. As noted earlier, such officials rarely have time to read the full proposal, so the abstract, perhaps together with the work plan and budget, must convey the project's essence. Before it is forwarded upstairs, the project officer may have been in touch with the researcher to clarify certain questions. Such calls ring joyfully in the researcher's ear, but this is no assurance the project will be funded. Read on.

**Two typical review process examples.** The exact review process depends on the program. The descriptions that follow are of recent review practices at a competition in the National Institute of Education (NIE) and the general process at the National Institutes of Health (NIH). Both give you an idea of what the review process can be like. Cavin (1984) provides an excellent summary of the processes of several other

programs: the Department of Education's Fund for the Improvement of Postsecondary Education (FIPSE), Office of Special Education and Rehabilitation Services (OSERS), and Office of Postsecondary Education (OPSE); the National Science Foundation (NSF); and the National Endowment for the Humanities (NEH). Quarles (1986) in a chapter giving inside reviews of funding agencies provides descriptions of the review process at NSF by Felice S. Levine, at NIH by Janet M. Cuca, and at ADAMHA (Alcohol, Drug Abuse, and Mental Health Administration) by Susan Quarles and Salvatore N. Cianci.

The review process for an unsolicited proposal competition of the National Institute of Education began with screening by the professional staff for relevance to education. Proposals that qualified were sent to at least two outside reviewers. Proposals relevant to an established program were also reviewed by NIE professional staff members. The outside reviewers included educational practitioners and were drawn from a wide range of disciplines. (Note the breadth of audience to be considered in proposal writing!) Reviewers gave each proposal a numerical score as well as comments. The highest-ranked proposals were then submitted to a panel of outside judges for review. A typical unsolicited proposal competition judged this way reduced over 400 proposals to the best 100 for the panel. The panel members' recommendations and supporting documents were then studied by an administrator of the program who put together a set of funding recommendations for the director of NIE, who made the final funding decision. In this instance, 26 of the 100 proposals were funded. Clearly there is considerable room for the professional staff to exercise their judgment in this process: in their initial reading, in their choice of field and NIE staff reviewers, in their reactions to the reviews, and in their reactions to the panel's judgments.

In the National Institutes of Health, a proposal is assigned to the most relevant institute by the Division of Research Grants. An investigator may indicate which institute is preferred, but the request is not binding. An Initial Review Group or Division of Research Grant Study section, composed of outside reviewers evaluating proposals on their scientific and technical merit, either approves, disapproves, or defers for additional information. Study sections typically consist of 15-20 members nominated by the executive secretary of the group, who is an NIH scientist. She also designates the chair. Approved projects are ranked using a 5-point scale in half unit intervals from the best, 1.0, to the least acceptable, 5.0. The scores given by individual reviewers are averaged and multiplied by 100 to obtain a priority score ranging from 100 to 500. The executive secretary makes a summary report, which, together with the proposals and priority scores, is reviewed by the institute's National Advisory Council. The council (which includes lay members) judges the project's relevance to the institute's goals. Note again the inclusion of lay members, which considerably broadens the audience for which one must write. A proposal not approved by the council is rarely funded. The membership, authority, and function of all these groups are given in an annual publication, *NIH Public Advisory Groups*.

Figure 16 shows peer review score sheets designed by the National Institute for Handicapped Research for use with a range of project types (research, development, training, and so on), which are typical of the task confronting a reviewer and of the criteria used. (See also pages 108-109 re review criteria.)

**Determining who will review the proposal.** Even though all members of a panel will have copies of the proposal, a proposal is usually assigned to two or more principal reviewers who lead the discussion of it. The reviewers' names are often not available, but the pool from which reviewers and field readers is drawn usually is, as is the composition of past panels. Ask for information about panels; it gives you clues to the nature of your reviewing audience.

Researchers may find out to which panel their proposal has been sent for review. It is unethical to contact the reviewers on the panel, but if one believes that the proposal has been assigned to the wrong panel, and there is another that would be more appropriate, one may appeal the assignment and ask that it be changed.

**Project withdrawal.** It is possible in some agencies, such as the National Institute of Mental Health, to withdraw a proposal that has received low panel ratings so that it is not recorded as being turned down. It is not clear how much of a difference this makes, unless the reviewer remembers the previous version and is prejudiced by it. A panel should be primarily concerned with the quality of the proposal before it and some of our best researchers were not funded on the first submission of a project.

If the writer's research record on past grants is bad, that is another matter. As noted in the section on personnel, one's record on past grants seems to be increasing as an important factor, but Howarth's research (1980) indicates it has always been important. Ethical transgressions may result in a researcher's being barred from applying to a program for a certain period, but these decisions are usually a staff rather than reviewer responsibility.