10 Common Grant-Writing Mistakes

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So your grant proposal came back with an unenthusiastic response from reviewers. Was it because they found your science lackluster? Maybe. But there's a good chance the problem was important nontechnical questions that you left unanswered in the proposal itself.

Questions like: So what? Who cares? Is this project trying to do too much? Or too little? And why is this researcher going it alone?

In our hypercompetitive funding climate, it's critical for investigators to write clear, cohesive, compelling proposals that foreground the science and its potential significance. With so much at stake, it's a shame to watch a proposal rejected for something that could have been avoided with a little work upfront. Given that we have a collective 15 years of experience working with scientists to sharpen their grant proposals, we thought it might help researchers to have a list of the 10 most-common nonscientific errors we see in grant writing.

No. 1: Square pegs and round holes. Too often scientists start with a compelling research idea, but fail to adapt it to the stated priorities of the organization they're asking for money. Your proposal has to highlight its responsiveness to the funder's interests, or all the reviewers will see is that your idea is a poor fit for them.

Solution: Review the proposal guidelines as well as the agency's mission statement, published priority areas, and evaluation criteria. They provide critical insights into how to construct a proposal, and which elements of research to emphasize. When we see a proposal that seems unresponsive to those measures, we work with scholars to create a checklist based on the grant agency's evaluation criteria and funding priorities. Then we go down that list with the investigators to assess how many issues have been resolved in the proposal.

No 2: Poor planners. Most grant proposals start with a one-page project summary. Ideally, it lays out the research objectives, the relation to the funder's interests, the theoretical contribution, and the steps to completion.

It is no longer sufficient to write a proposal aimed only at the experts in the field. Investigators need to outline their research, its contribution, and its impact to a diverse audience.

We've seen two major missteps on this front: (1) scholars who draft a vague summary page, or (2), those who depart in the actual proposal from decisions they explained in the summary. Either way, the result is a proposal that reads as inconsistent, meandering, and noncommittal.

Solution: First, go through and highlight the inconsistencies between the summary page and the full proposal. Once you've done that, you can judge how easy they are to resolve. Sometimes, inconsistencies can represent arguments and methods that need to be more fully developed in your proposal.

No. 3: "The loner." That's what we call a grant proposal ambitious in scope, but meager in investigators.

In the past, grants were often viewed as a one-person show — a single investigator assisted by his or her graduate students. Not anymore. Today agencies and foundations tend to value projects that require cross-disciplinary participation. Incorporating novel research perspectives requires one or more co-investigators to ensure those perspectives are thoroughly integrated.

Solution: It's pretty simple. Add another investigator (if appropriate) to lend credibility to your proposal. Research-development professionals on your campus can help, as we often have networks to facilitate cross-departmental and cross-college connections among faculty members.

No. 4: Promising too much or too little. It's hard enough to identify the ideal scope of a research project, but many researchers also fail to align the proposed scope of the work with the time period specified by the agency, or the amount of money it has available. We see this happen in two main ways:

New faculty members — accustomed to operating on a shoestring budget — may overpromise by including unpaid labor in their proposal. Or they fail to allocate paid time in their proposed budget for analyzing data and writing up results.

Meanwhile, more seasoned researchers may be reluctant to make bold proclamations about the transformative potential of their project. To compensate, they overdevelop the initial phase of the project, and leave subsequent aims paltry and underdeveloped.

In both cases, the result is a grant proposal that seems out-of-sync with the funding mechanism.

Solution: The most effective tool for rectifying scope is to have investigators construct a timeline (and include it in the proposal) that covers all phases of the project, from where they are now to publication of research results.

No. 5: Throwing spaghetti. Often new investigators have trouble committing to a research direction. As a result, they start chasing grant opportunities with very limited relevance to their research interests, or to where they want to go as scholars. Their plan? Decide on a research direction based on where they get funding.

In short, they throw spaghetti at a wall to see what sticks. All they succeed in doing is wasting a lot of their time and energy drafting proposals that require new teams and new areas of expertise. Worse, the failed proposals are often discarded rather than resubmitted — because the topic was only of limited interest to the investigator in the first place.

Solution: There are no shortcuts here. Fixing misdirection requires you to sit down — alone, with a colleague, or with someone from your campus grants office — and sift through your rejected proposals to find a common theme. Parse out which of the failed proposals were motivated by real interest in the work, and which were motivated purely by money. Then focus on the former.

No. 6: Running in place. Occasionally a faculty member seems constantly busy — but with work that fails to move them toward their overall goals. They attend every meeting and every seminar, but write few papers or grant proposals. They can be identified by various projects that seem to be waiting on someone or something beyond their control that never seems to come through: colleagues, pilot data, IRB, budget numbers.

These investigators are characterized by a frenzy of activity, and a slew of abandoned projects.

Solution: "Busyness" represents currency for scholars who have had limited measurable success. Keeping busy means they're doing something, even if all of their effort seems to be achieving nothing. Rather than tell these scholars to slow down, we encourage them to draft grant proposals that set small, measurable goals for which they can be held accountable.

No. 7: Death by 1,000 cuts. The most exciting research proposals promise to make significant and innovative contributions, as well as transformative advancements in a field. But as we've noted, many researchers are reluctant to make such bold statements in a grant proposal. Instead they list a series of micro-criticisms of recent research. Their project, they say, will lead to a broad-scale advancement in the field by resolving all of those little bits.

Their proposal might be structured around a statement like, "There are five principal holes in research on X." As a result, the proposal reads as a patchwork of significance and innovation as the researchers attempt to identify the contributions of each small step forward.

Solution: Our advice on these proposals is twofold: First, we ask the researchers to identify a unifying theme for the micro-criticisms. Second, we encourage investigators to use positive language in their proposal. So rather than write, "X field has ignored Y variable," use, "great strides have been made in X field, but up until now we have lacked data to analyze the contribution of Y variable."

No. 8: Methods madness. A good proposal not only lists and defines the selected research methods, but also justifies those choices and states how they are ideally suited for responding to the research question under study. By definition, a methods section is going to be highly detailed.

But there is a point at which too much technical detail can waylay other important information — like why the project is important, who stands to benefit, and how the various elements will come together to achieve the stated objectives. Some investigators lean too much on technical detail in their proposals, and fail to establish the human impact.

Solution: To fix that, we have asked investigators to reverse-outline their project. Then we go over the outline together to see if they overemphasized elements of the methods in the proposal, and underemphasized the project's potential innovations or impacts.

No 9: So what? Humdrum responses from a funding agency can often be linked to low scores on the project's significance and innovation ratings, coupled with minor methodological and theoretical quibbles. The more specific criticisms on methods and theory can send researchers scrambling to revise specific elements of the proposal. In actuality, the reviewers are asking, "So what?" and "Who cares?"

In short, the investigators have failed to create a proposal that is compelling to a broad audience. Rather than resolving the minor quibbles, it may be time to review the significance, the innovation, and the human impact of the research.

Solution: Seeking advice on the proposal from an out-of-field reviewer — like a research-development expert — is one way to figure out how to better communicate the project's broad appeal. However, investigators may also benefit from reading about their own research topic in more popular periodicals — Time, Newsweek, The New York Times — to get a sense of what an educated nonexpert may know about the topic.

No 10: Feedback fatigue. Often investigators will submit a proposal for feedback to multiple experts or well-funded researchers in their field. Rather than providing novel insights into the proposal, the feedback starts to become overwhelming — pulling the research in too many directions, or too far from the investigators' true area of interest.

In our consulting experience, scientists suffering from feedback fatigue respond to our recommendations emphatically in one of two ways: Yes, they are ready to change everything, or, No, they refuse to change anything. There is no in between.

Solution: Usually feedback fatigue is identified not by the researchers themselves but by their mentors or by research-development staff. Once diagnosed, scientists can forward all the substantive feedback to the research-development office. We then review it, and help the investigators look for common themes in the recommendations, and create a plan for revisions.

Research development is not meant to serve as a stand-in for scholarly review. The latter ensures that the project's science is unimpeachable. However, with review panels becoming more diverse, and transdisciplinary research becoming the norm, it is important that investigators write with a diverse review panel in mind.

Burdened reviewers are reading more proposals, farther afield of their areas of expertise. As a result, it is no longer sufficient to write a proposal aimed only at the experts in the field. Investigators need to outline their research, its contribution, and its impact to a diverse audience. And they need to do that free of jargon, so that ideas are not doused, but continue to burn bright and light the way for new directions in research.

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