Too Much Data?

By Mike Cronan, co-publisher

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Winston Churchill was once asked during the Cold War why he refused to fund additional nuclear weapons to increase the British stockpile. He replied that their only purpose "would be to make the rubble bounce." Similarly, the successful proposal relies on knowing the difference between sufficient and excessive information to ensure the wise use of allocated space and an appropriately balanced project narrative. For example, knowing how much background information-- technical detail, preliminary data, etc.--will satisfy your readers is a key factor in writing a well-balanced proposal narrative. Finding this level is not always an easy task.

This is particularly the case when writing an institutional proposal of the type discussed in the companion article in this newsletter (*Value of Institutional Transformation Proposals*). These types of proposals, in particular, can lend themselves to data excess with the result that the proposal ends up looking more like an Excel document than a Word document. Sometimes the project narrative can be distorted by a blizzard of data used to substitute for a clear sense of precisely those data needed to best support a specific argument. But blizzards will not convince reviewers to fund the proposal.

Finding the right amount of data is somewhat like the trial and error test used by pasta chefs that gave rise to the expression "throw it against the wall and see if it sticks" to determine whether pasta is done. The tactic of throwing excessive data at a proposal narrative assumes that, if you throw all the data you have at reviewers, then surely something will stick,, convincing them to recommend your proposal for funding. This is not a good bet. If the author of a proposal does not clearly know why some data are important to include and other data are not, then it is wishful thinking to assume the reviewers will take on this responsibility.

Excessive data in a proposal often appear when the solicitation leaves it up to the proposal author to select those data needed to make a case for funding rather than specifying which data do and do not need to be included. Of course, when solicitations are highly prescriptive about which data the agency wants to see in the proposal, then the task is fairly straightforward, at least it is if some office at your university actually gathers and keeps the required data in a usable format. In the case of institutional transformation proposals, the solicitation may require some specific core data, but leave the inclusion of most other data up to the principal investigators. Of course this forces you to think very carefully about which data you actually need to make your case. They may be fairly extensive, but they may not, depending on the proposed programmatic activities.

For example, it is often the case in institutional transformation proposals, as well in research center grants that may include institutional transformation components, that the data used to support your arguments are self selected (as opposed to agency prescribed) based on the programmatic activities you propose and such supporting factors as your success in past efforts that demonstrate your capacity to perform. However, keep in mind that institutional and programmatic performance data or research data are used to support arguments you make in the project narrative specific to what you will do, why you will do it, why it is significant, its value-added contribution to the field, and why your past performance and expertise will contribute to the proposed project. Supporting data need to be tightly aligned and focused on your research goals and objectives to make the case to program officers and reviewers that your proposal merits funding. Just as you would not make arguments in your project narrative that do not clearly advance your case for funding, it is equally important that you exclude data irrelevant to the goals and objectives you describe. Unfortunately, researchers are often tempted to add more rather than less data.

It is important to be mindful of reviewers' reluctance to sift through extensive data to determine the merit of your proposed project. That is not their job. It is the job of the author, however, to explain the significance of any data used in a narrative in the most economical way possible. A blizzard of data is likely to give reviewers a "brain freeze," along with heartburn. Proposals are about ideas, and data need to be judiciously selected to support the merit of the ideas described in the narrative. ***But data in and of themselves are not ideas***. Rather, your narrative needs to explain and illuminate the significant patterns in the data you present rather than push that task onto reviewers. In a sense, project data can be thought of as three-dimensional coordinates that more precisely characterize your position than would be possible otherwise.

In this way, project data complement the narrative text and visuals. But be judicious in the use of data. Consider when data are best woven into the narrative arguments and when they are best presented in tables or other representational formats, such as bar charts. Too much data presented in the narrative text can quickly make it dense and impenetrable. The point of using data is to numerically illuminate and support your arguments, not to send reviewers in search of an Enigma machine to decode your narrative.

In your final review of a proposal before submittal, examine the narrative for verboseness and any lack of proportional balance in its allocation of space. This also applies to data.