

Broader Impact Statement: Example Three for Discussion (May 2010)



[Liesl Hotaling](#)

Please comment on your thoughts/evaluation of the following broader impact example. What are the merits? If you were a panelist, would you consider this a robust BI activity? Why or why not?

The overall goal of the education and outreach plan for the XXXXX effort will be to show the relevance and importance of science and the natural resources of the XXX River and Estuary in the everyday lives of people living, working, and traveling in the watershed and beyond.

- *Design and create educational display about XXXX with access to real-time data from website through a computer kiosk with a beacon/lighthouse theme or appearance.*
- *Develop a public interface to help interpret the data, putting data into context for the general public.*
- *Provide a linkage between the current water quality conditions and key practices individuals can do to make a difference for water quality.*
- *Provide additional information at these “Beacons” to further educate visitors about the local ecology.*



[Britt Holbrook](#)

OK — so here I think the idea is good, but I’m far from convinced that the proposer can carry out these activities. I should add, however, that I think this is still above average, even for funded proposals.



[Sharon Franks](#)

As written, the BI statement seems to raise more questions than it answers:

- To whom do the writers propose “to show the relevance and importance of science and ...”? [No clearly identified target audience]
- Are the bulleted items the intended objectives? [It would help to say so explicitly.]
- Who will do the design/creation of the display/website/kiosk? [Is a partnership proposed?]
- What is the basis for thinking that the public will be interested in or have the knowledge and skills to help interpret the data? (bullet 2) If what was meant is that the interface (what kind? where? on the kiosk?) will help viewers understand the societal or environmental implications of the research results, that should be more clearly explained.
- Will an authoritative body be consulted in the development of the suggestions for individuals described in bullet 3? It’s one thing for researchers to present their findings, but quite another to responsibly make informed assertions about individuals’ practices.
- Bullet 4 is a bit of a throw-away: What sort of “additional information”, and where will that information come from?
- Will any effort be made to assess the effectiveness of the proposed project? Is there any evidence that approaches like this have been successful in the past?



[Chris Parsons](#)

I agree that there’s no target audience, which make the proposed activities difficult to assess. But the main issue I have with this is that it lists only outputs (what it is the researcher will do). It does not list outcomes (what it is the audience will gain). How will the audience be changed by these activities/outputs? A successful broader impact isn’t just about doing something (although I know that can be challenging enough). It’s about changing the audience you’re working with and then measuring success based on audience change. That’s what we’ll talk about during the final webinar in this series.



[Britt Holbrook](#)

Chris makes a great point, I think — and I wonder whether we all agree on terminology here — about the difference between outputs and outcomes. Essentially, I would suggest there are 4 major stages of the research process, looked at from the outside, as it were, from a performance assessment sort of angle: (1) inputs, (2) process, (3) outputs, and (4) outcomes. Outputs are often considered the ‘immediate’ products of research, such as publications, patents, etc., whereas outcomes are often thought of as ‘longer-term’ impacts. But I really like the way Chris takes the temporal dimension out of it here — outcomes are about audience change, which makes it easier to measure outcomes, at least to the extent that we don’t necessarily have to wait a (long) while for that change to become evident.

I agree with Chris, too, that outcomes are a huge part of broader impacts — and such outcomes are, in fact, what those higher up in the food chain are looking for most. Remember Chris Petrone talking about ‘jobs’ during the last webinar But I think that there are aspects of BIC all along the chain, from inputs (broadening participation of underrepresented groups could fall here), to process (broad dissemination of results — rather than the results themselves — could be thought of as a process), to outputs (a website might be considered an output), to outcomes (the benefits to society clause fits well here).