Review of: "Visual Science Communication: The next generation scientific poster"

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Thank you, authors, for taking the time to put your work out there for others to see.

I was heartened to see that you specifically advocate for collaboration between scientists and designers. I would have liked to have seen more on this point. How did that work in this project? You mention the initial design research tools like card sorting, but beyond that? Do the two expert groups working together edge towards interdisciplinary working, or even transdisiplinary practice? As a designer and science communication researcher, I do occasionally feel that the calls on scientists to do things like 'follow these tips to make your posters better' overlooks the obvious solution of getting to a better output by working with a designer (and valuing that expertise by budgeting for it!).

The word 'iterative' is used in in Figure 1, but I have no sense of how this played out in practice, and more importantly, the role target audience members played in this process. Both human-centred design and contemporary science communication (should) value the perspective of people who might interact, use or benefit from the design, and/or the science. I didn't have a sense that they were considered very fully. Even a critique of how hard that can be in practice (given timeframes, budgets, university ethics processes etc) would have been insightful.

A caveat here: despite it being mentioned, I cannot locate the 'supplementary video' on the page. This will of course limit any feedback on the interactive itself, but from an accessibility point of view, I have to say I found the contrast of the text – appearing light grey on black – hard on the eyes. Perhaps the backlighting of the interactive mitigates this, but even in the diagram (Figure 1) I would question the readability. My 40-something eyes aren't *that* bad, but I did find myself having to zoom in and squint.

What is being described as a 'scientific poster' seems to me to be the same as many interactives used in museum contexts (over at least the past two decades, so not exactly 'new'), but there is no mention of this field of practice at all. When I hear 'scientific poster' I understand this predominantly as a peer-to-peer scientists' practice, usually in the context of a conference environment. This practice has its own cultural norms (that from a design POV do make me grind my teeth somewhat), and I am not sure that what is described here can realistically (for most people) fill that role (given budget, technical limitations and even what the conference can accomodate). Hence I'd question if 'scientific poster' is the right term, or at least needs to be contextualised with your own understanding or definition.

Finally, I do find the conception of 'science communication' quite narrow. Perhaps this needed to be framed too, to situate

this specific project. One-way communication can certainly still have value and design can operate as a translatory medium, but the thrust of science communication as a field has certainly been to discursive and participatory practices. Though an interactive can be participatory on one level, were opportunities for discursive feedback loops considered? The 'poster' seems very much about 'helping the audience understand' with the tacit assumption that they'll be supportive and appreciative of this. If you did do user testing with audiences, I wonder if those moments were an opportunity to not only critique the design for future iterations, but also to allow the scientists to see how the audience responded to the *science* they were doing? Is there potential for human-centred design approaches applied a specific science communication output to aid reflexivity on the part of all the people in the process: audience, designer and scientist?

Thanks again for publishing this piece. I look forward to finding the video to see it in more detail. Like one of the other reviewers I'm not really comfortable with rating as these are just my food-for-thought comments, and you are most welcome to disregard them if they are not useful. Ngā mihi nui.