

Interactive comment on “Education and public engagement using an active research project: lessons and recipes from the SEA-SEIS North Atlantic Expedition’s programme for Irish schools” by Sergei Lebedev et al.

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1. Does the paper address relevant scientific questions within the scope of GC? Yes, the paper is relevant, and clearly relates to Geoscience Communication. 2. Does the paper present novel concepts, ideas, tools, or data? The project itself is novel: scientists working with school students and teachers has been done before but not a project quite like this. The authors need to flesh out the section stating “We reviewed best practices of previous EPE projects connected to active research and looked for any ideas that could be applicable to ours” (p. 4, line 106-7). We need to hear a

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summary of such best practices and/or the ideas applicable. 3. Are the scientific methods and assumptions valid and clearly outlined? These are not very clear. The paper is more of a show and tell than providing data about the evaluative aspects of the project. p. 12 line 382: The authors say “No primary data sets were used in producing this article”. However, Can they not provide the evaluation data? 4. Are the results sufficient to support the interpretations and conclusions? No, not in several cases. My main issue is that the authors tend to make claims unsupported by any data. For example: p. 6, line 194: Most presenters on the ship and at DIAS were female. This helped all-girl classes and girls in co-educational schools to connect to and identify with their own role models among the scientists. How do you know this? What data is there to support your assertion? p. 7, line 225: The feedback from the participating teachers and students indicated that the competition was enjoyable and increased the students’ interest in STEM. Where is the data to support this? How do the teachers actually know that the students’ interest was increased? Is this not just the teachers’ opinions about a project they liked? p. 11, line 338-9: This contributes to increasing the students’ interest in STEM and STEM careers. How do you know this? Line 368: Survey responses from the teachers confirm that the engagement is not only enjoyable but has a lasting positive impact. How do you know this? My point here is that the authors are reading too much into the evaluation data, and making assertions about the positive nature of the experience. They may be right in such assertions, but science communication research needs to be less about describing interesting projects and expecting positive outcomes, and more about interrogating the nature of the projects, and asking difficult questions about them. It would be interesting for the authors to look further into the lack of research on the part of the students: p. 11, line 346-7: “A proportion of entries to the song-and-rap competition showed little evidence of the students researching either Earth science or the SEA-SEIS project’s scientific goals” Why was this? What are implications for future EPE projects? 5. Do the authors give proper credit to related work and clearly indicate their own new/original contribution? Yes 6. Does the title clearly reflect the contents of the paper? Yes but

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it's too long. I would suggest: "Education and public engagement in a geophysical research project" – or something similar 7. Does the abstract provide a concise and complete summary? Yes, but needs to be edited in line with my comments under (4) above. 8. Is the overall presentation well structured and clear? Yes 9. Is the language fluent and precise? Yes, very well-written 10. Are the number and quality of references appropriate? Yes, but please check the sequencing of some references (alphabetical order).

Minor Points

P. 4 Line 119: "imaginative names" not appropriate (sarcasm?). I would suggest replacing with "unimaginative names".

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