

Organizing an Earthquake Learning Exhibition for transferring geoscience knowledge to the public: the example from Nepal

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Answer to reviewers

Reviewer #1:

This is an excellent manuscript, and I want to begin by congratulating you on the organisation of such an impactful event. The Pokhara Earthquake Learning Exhibition is a remarkable achievement — reaching nearly 2,000 students with 14 carefully designed, interactive modules is no small task. The manuscript communicates both the scientific content and the community value of this initiative very effectively. The scale of engagement, the thoughtful adaptation of global earthquake education methods to the Nepali context, and the integration of science, art, and practice are all commendable. I particularly appreciated the creative modules (e.g., the BOSS model, liquefaction demonstration, earthquake game) and how these were connected to local realities such as non-engineered buildings, sedimentary basins, and context-specific safety advice. This paper highlights a model that has the potential to inspire similar initiatives worldwide.

That said, there are a few areas where the paper could be strengthened. The study already makes a significant contribution, and clarifying some methodological and interpretative aspects will make it even stronger.

We are very grateful for this kind and careful review. We revised the manuscript according to these points, as well as a few other polishes, and provided the respective answers to each question/concern below.

Key suggestions

The pre- and post-exhibition surveys were not matched at the individual level, yet the Results are sometimes written in a way that implies causality (e.g., “the exhibition improved awareness” or “students gained knowledge”). In reality, the analysis compares two partially overlapping groups, and differences may partly reflect sampling bias (e.g., more motivated students remaining for the post-survey) rather than direct learning effects. It may be helpful to soften causal language and add a clear note in the Methods and Discussion to acknowledge this limitation.

Thank you for the comment. Although the pre- and post-exhibition surveys were not matched at the individual level, over 90% of respondents who participated in the post survey had already participated in the pre survey. We have added a clear note in the Discussion section about this and the limitation that it is not 100%.

From ~2,000 attendees, 495 pre and 309 post responses were collected. It would strengthen the paper to discuss whether those who completed the post-survey may have been more motivated or engaged, and how this might affect interpretation.

Thank you for the comment. We have added a sentence in the Questionnaire section 3.2. We suspect that if we could collect the same number of responses in the pre- and post-surveys, it would positively change the results, since the post survey may have been more motivated and engaged. We assume there should be a negligible effect on our interpretation.

In Module 3 the statement “predicting a magnitude 6 earthquake every 10 years” could be misread as a realistic claim. Please clarify that this is a hypothetical illustration only.

We have removed the above-mentioned statement.

Line-by-line comments

L15: “on the globe” → “of the globe”

The word is corrected.

L19: “magnitude 7.9 2015 Gorkha earthquake” → “the 2015 Mw 7.9 Gorkha earthquake”

The phrase is corrected.

L27: Please use “pasta sticks” or “uncooked pasta strands” for clarity

We have not seen pasta-related words or sentences in L27.

L41: “further stressed” seems like a leftover phrase and interrupts the flow.

The word further stressed is changed to further highlighted.

L91: The Introduction ends with details on survey numbers (500 pre, 309 post). These figures fit better in Methods. Keep a short mention that impact was assessed with pre/post surveys, but move the numbers.

We have removed the survey numbers from the introduction but kept the survey information.

L239: “preparedness concepts in an enjoyable and memorable way” — add “in an” before “enjoyable.”

We have added ‘in an’ before enjoyable.

L250–253: Clarify how the 50 schools were chosen — was it random, or based on proximity to Pokhara? Were private and public schools proportionally represented?

We have clarified how the 50 schools were selected. We also added additional information about the invited schools.

L267: “The first survey contained 15 questions, and the second 31” → Please explain why the second survey was longer, and whether this influenced completion rates.

We have clarified why there are more questions in post post-exhibition survey, which is because of adding questions for the impact assessment of the exhibition. The information is updated in the manuscript.

Consistently use “post-exhibition survey” rather than “post survey.”

We have used post-exhibition survey in the manuscript.

“Model 13” should be corrected to “Module 13.”

The word ‘Model’ is corrected to Module.