

Dear referee,

Many thanks for the time you have taken reading and commenting on this submission. In order to make our response more focused we have provided comment (in red) directly to each point:

Thank you for the opportunity to read your work. For the most part I found this to be a well-presented account of the Living Labs that have been developed at Keele University, which was well structured and engaged with the appropriate literature.

However, at the moment I do not feel that this manuscript is ready for publication in *Geoscience Communication*. The main reason for this is that the work that is presented here is very descriptive. There is little formal reflection, and it is also unclear what the 'success' or impact of the programme of activities has had on both the student and the staff that have been involved in these labs to date. As such, while it is interesting to read about these initiatives, it is unclear how they are advancing the field, and also how (and why) others might adopt such an approach at their own institutions.

We appreciate that the manuscript does not include primary data asking about staff and student perceptions, however we disagree that there is little reflection – the framework these activities are based on was drawn from reflective practice, as were the case study activities themselves (which we agree are quite descriptive in nature). In terms of 'success' or impact, these activities have been evidenced – the impacts/success includes providing students authentic experiences (realism, spontaneity etc.) within the environment in which they live and learn (these are well documented and we would suggest it would be “evidencing the obvious” to pursue data asking students to reflect on these authentic experiences vs “other” pedagogical approaches). The main impact here is embedding these activities into a wider Living Lab – and using the Living Lab as an educational setting (we are aware that this does occur elsewhere – but not on the scale we have attempted to conduct, nor is there currently a framework for individuals to work to (Ref 1 suggested we make this more obvious and link the activities to the framework in a more coherent fashion, which we think would be useful). The “data” we provide is very much conceptual, framework and thematic (e.g. the linking of activities to pedagogic concepts and ideals). This said, we do have access to student, and staff, feedback on the case study/working in the Living Lab etc. This is through Module Evaluations, plus some data gathered from affiliated scholarly projects (with appropriate ethical approval). We have not included this for the reasons stated above, but it would be possible to. Much of this data is somewhat generic and response numbers are limited.

I would strongly encourage the authors to revisit this work and to conduct a detailed study with the students and staff that were involved in these programmes to assess their feedback and evaluate the impact of the Living Labs. The results of these surveys could then be used to contextualise the impact that these Living Labs are having and would also

help to move the findings of the current work from beyond anecdotal evidence to something more formalised. The results from such a survey (or focus group or series of interviews) could also be used to frame the labs and to present a series of recommendations for the development of future activities at both Keele University and beyond.

A detailed perception study would be another manuscript itself – which would require a framework such as this to be available first. The suggestion of recommendations for the development is something that we agree could be included here (from the staff involved in the running of the activities) - student recommendation would be another interesting angle that would probably require a further project phase/output?

I hope that these comments are not too disheartening, as it is really interesting to hear about the work that is being done in these Living Labs. With further reflection, evidence, and framing I believe that this work will be of great value to the wider Geoscience Communication community.

Thank you for these kind words, the review process is always an interesting one! Again, many thanks for the time you have taken to read and comment on the submission.