

Response to Reviewer 1

Reviewer 1:

The authors of this manuscript provide a very meaningful evaluation of their field excursion to Iceland as a method of Geoscience education for MSc students. With the opportunity to evaluate the impact of Covid-19 and the need for virtual excursions, they answer the question 'Field or Virtual?' thoroughly.

Response authors:

Thank you for these kind words! We invest every year a lot of time, effort and money into the Iceland excursion. With an increased pressure on this type of academic education we hoped to find answers to multiple relevant questions, by a survey among participants. We were also happy with the clear answers given by them.

Reviewer 1:

Technically, the methodology of using questionnaires is sound, and authors are very clear about the details of the questionnaires, how they link to three study questions (A-C; lines 83-86), and how participants over the time frame 2011-2025 responded.

Response authors:

Thank you, indeed we did invest in preparing a questionnaire that would provide honest answers and as such reliable results. We grouped the questions (A-C) to be able to grasp the real opinions of the participants. And that worked also very well.

Reviewer 1:

Authors are strongly encouraged to review the concluding statements in the abstract (lines 23-26) and in the conclusion section for consistency. I find those in the abstract missing key elements of the paper's focus and responses to what was learned from the literature (lines 40-41). Similarly, authors should check that questions A-C are clearly answered in the conclusion section, as noted in the annotated file.

Response authors:

Very good observation! Indeed the abstract jumped to quickly into the virtual versus real excursion. A segment has now been added that relates to the questions A-C.

Reviewer 1

I have added detailed editorial suggestions in the attached copy for authors to improve their writing.

Line 24

From this statement, the content of the Iceland experience (undisturbed catchments) was not highlighted. If only inspirational interaction and a professional network were valued, these could also be gained closer to home? None of the strengths in lines 40-41 below are mentioned and neither questions 83-86 are addressed.

Response authors:

Good observation! We now added a section that directly relates to the lines 40-41 and questions in line 83-86.

The response on the statement ‘Planning and/or fieldwork are an important part of my current job or study’ is moderately agree, with > 50% of the responses even with a response strongly to fully agree. This indicates that field training is very important for the majority of the junior and senior geoscientists. The study also showed that a multiple day excursion to Iceland strongly contributed to the understanding of undisturbed hydrologic systems and to the general scientific development of the participants.

Line 63

What system?

Response authors:

With ‘conceptualizing this system understanding’ we try to indicate that we aim at a complex system where all kinds of processes can be studied, like impact of climate change, drought propagation, flow generation processes and more. We now changed it into ‘conceptualizing this process understanding’. Hope that makes it more clear.

Table 1

Add the ‘Other’ options as well?

Response authors:

We did not include options om the category ‘Other’ because we intended to leave that open for all kinds of jobs. We refer back to the ‘Other’ category in chapter 4.1 (line 219) by mentioning that the answers ranged from secondary school teacher to advisor for renewable energy. Other answers were for example ‘transmission system operator’, ‘product management research company’. We chose to just give a range to avoid that we move away too far from the overall story line. This ‘Other’ group is 8% of the total population.

Line 173

While this question is relevant, it does not follow well from the original questions (A-C), it just shows up here.

Response authors:

Good observation. This whether flying is acceptable has become an issue at Wageningen University. Therefore also this question was added to the survey. It strongly relates to finding alternatives closer to home. We now added the question also in the text in the introduction where category A-C is explained (line 94): ‘.....is a more managed area than Iceland a good alternative? Is flying with a large group for course education acceptable?’.

Line 305

I do not see this conclusion from the results as the reason given for the answer is not clear.

Response Authors:

The respondents disagree on the alternative of an excursion to a more intensively managed area, see figure 8. It is true that in a more intensively managed area also processes can be studied and not only management practices. But in our opinion the students have to look through the management practices to see the real processes. And – in the case of Iceland – this management filter is hardly there, which gives a very clear view on the processes. We now rephrased the sentence ‘.....that excursions for geoscientists should predominantly aim at processes instead of management practices.’ Intothe excursions for geoscientists should predominantly aim at processes in a field setting without much management practices disturbing the view.’.

Conclusions, general remark

I suggest checking that questions A-C are clearly addressed here, and that the statements align with the abstract.

Response authors:

We added new text which reflects to the questions A-C, making it more in line with the results section and the improved abstract.

Line 349

What does ‘This’ relate to here?

Response authors:

The word ‘This’ relates to the added value of real excursions. Text has been adapted accordingly: ‘This added value of real excursions is demonstrated by....’.

Response to Reviewer 2

I appreciate the opportunity to review this manuscript. This is a very, very useful study and I hope that it is widely appreciated. I have minor comments (attached pdf). Thanks for doing this research! John Geissman.

Response authors:

Many thanks for these kind words regarding our manuscript on excursions for geoscientists. We enjoyed preparing the survey and analyzing the outcomes. We also thought this population of students would provide an unique insight in the added value of excursion. We also hope that this study is appreciated by the scientific community.

We are also thankful for the minor comments in the pdf and adapted the manuscript accordingly.