

EGUSPHERE-2025-3899 GC Insights	
Supplement	Author reply
<p>You now have three two very different reviews of, and some editor notes on, your ms. I think that these should be sufficient to revise your ms. Your responses to reviewers appear to indicate that you will take on board their advice. Their advice will help you improve your ms considerably. Assuming that most of the improvements are made in v2 of you ms and that it has been checked again by the referees, it is likely that I will be able to recommend publication to the Executive Editors, who make the final decision. Let me summarize the main areas that I see, based on the comments made. First a summary of the reports, then some detailed points.</p>	<p>Thank you for your thorough summary of the reviews, below I will address and answer the comments directly.</p> <p>I think the manuscript has improved greatly with the reviews and your editorial work. Thank you!</p>
<p>Improve the figure. Pls provide as high a resolution as you can (the higher the better), and the publisher will adjust.</p>	<p>I have improved the design and wording of the main figure. However, I have not transferred it to Adobe Illustrator to provide you with a vector graphics version of the figures. I will do that in the final phases, to not spend a week on figures for a manuscript that is not approved for publication yet. I promise the figures will be better, as soon as I know if the work is going to be published, I will spend the time. Hope you understand.</p>
<p>Clarity on extinction events.</p>	<p>We now have a title without “extinction events” and I have added the geological story to the results part (line 63-73).</p>
<p>Mention debriefing. If you have developed debriefing material, then I encourage you to include this, with a facilitator guide, in the materials package in your depository.</p>	<p>We have not developed this material. The teaching material is an inquiry lesson with all the phases; therefore, students should end up with a solution to the problem posed and hopefully not need debriefing.</p>
<p>It might be worth mentioning the places and circumstances (maybe a small table or bulleted list?) in which you have tested your VR materials so far.</p>	<p>I have added this to the supplementary material. I think there is a balance to strike here, as we do not claim that we have full fleshed research into the material (that is why it is an GC Insight manus) but of course testing was an integrated part of the development process.</p>
<p>Please shorten the title – this is the first thing that a potential reader will see. A simple hook! I suggest: Virtual fieldwork inquiry for the exploration of extinction events – or something along those lines. In a word, you need to include only the key concepts to keep the title short, and put the key words as close to the start as possible.</p>	<p>We have chosen the short version of the title to indicate that we want to present the “design” and the use of “inquiry”.</p>

<p>Situate VR as a special form of simulation – the Alghanaim ref that I suggested seems to be good, I think; it is in med ed, and they generally do excellent work. Also add two or three more if you can find them easily.</p>	<p>We have chosen not to do this, as we are not claiming to do simulation of fieldwork. We have simply used the VR to show the field sites, place fossils in their correct place, and build an inquiry lesson where students can explore on their own.</p> <p>In addition, we have deleted any mentioning of “authentic” to not confuse this.</p> <p>The VR is more engaging, as the students do need to “find the fossils” and they can move around in the material and on the sites, but they can solve the task on a desktop as well.</p>
<p>Situate your VR within the Kolb ELT – not much explanation needed here – just a few refs – as everyone knows about ELT.</p>	<p>We have added Kolb to line 53.</p>
<p>You are the best person to configure and describe the relationship between your article and the supplementary material. My hunch is that you should clearly separate the two documents (article and supplement) so that they can be read more or less independently of each other, even if that means including some of the (maybe reworded) material from the article in the supplement.</p>	<p>I have deleted and compressed a few paragraphs from the Supplementary Material, so the overlap is minimal.</p> <p>My initial idea was that a reader who finds their way to the supplementary material should be able to understand the context without the GC Insight. But I gather that your web interface makes a really strong link between them, so I am very okay with this solution.</p>
<p>I am not sure how strict the word count is. If you need to ask, Copernicus (editorial@copernicus.org) will be able to tell you. I think that it would help the reader if you mention the issues outlined in the second paragraph.</p>	<p>The word count is slightly higher in this version, to be able to fit in all the extra elements of the review. If you or Copernicus needs it to be shorter, please help me evaluate what needs to be taken out.</p>
<p>In regard to Tilden’s principles, I wonder whether they might not be built into part of the debriefing in some way, obviously at a level suitable for high school students. Just an idea.</p>	<p>As mentioned above, we do not have a debriefing phase in this lesson.</p>
<p>In AC6, you say “there is a slight misunderstanding of the aim of how we are using VR”. If I may say so, that is for you to make clear. In our writing, we cannot blame the reader for misunderstanding, unless, of course, it is wilful on the part of the reader. I suggest that you include at least some of your explanation from AC6 in your ms, so as to lift any possible ambiguity for the reader.</p>	<p>I have deleted any mentioning of “authentic”, as I believe that was the basis for the misunderstanding. We simply used the VR to show the field sites, place fossils in their correct place, and build an inquiry lesson where students can explore multiple sites on their own. Our focus has not been to argue for any version of VR; we simply used it to be able to show three field sites in one lesson. In our local context, schools usually only have time to visit one site, we have therefore made it possible to “visit” all three sites and be able to solve the problem.</p>
<p>The issue about the appropriacy of physical microfossils is intriguing – and important. It raises the question of the relationship between a simulation and its referent, which is an</p>	<p>I have clarified the sentence where we discuss the use of microfossils and argued that both micro- and macro fossils are important for solving the task.</p>

<p>altogether different ball game. It also raises the question of making sure that students can differentiate between the simulation world and the real world. That too is an important question to be included in a debriefing protocol. In fact, it is a fairly standard question in many debriefing protocols. Personally, I see no reason why students should not experience some form of frustration (it occurs in most real-world fieldwork), as long as it is resolved in some way (eg, cognitive explanation during the simulation and/or emotional release during the debriefing). Indeed, some pedagogical activities, including simulation/games purposefully create ambiguity and frustration in order to give participants the experience of sorting out and understanding complex, multi-dimensional phenomena. Pedagogical activities should present challenge, otherwise participants loose interest; but not too challenging, otherwise they give up.</p>	<p>The discussion of physical fossils has been interesting in our development work, but I simply cannot see that we can fit it into this short manuscript. In a longer version, we would probably have a full section on this. But I find it more important that readers get a chance to understand the principles of our design and the strengths of Inquiry.</p>
<p>Finally, yes, please do find a really good copy editor who can smooth your prose. You can start by using the OWL (online writing lab) at Perdue, and then give it to a harsh colleague.</p>	<p>I have had help to edit the manuscript, and I hope it is now up to your standard.</p>
<p>Please consider my comments in EC1. Your reply in AC7 is, in my view, important, and pedagogically sound, although some educators may not like it much.</p>	<p>Thank you for your comments. We have decided to not go into Simulation as such, as this is a very short piece and we simply cannot fit everything into it. We aim to introduce Inquiry into VR and that has been our focus for the two-year development phase.</p> <p>We have also deleted all mentioning of “full phase” and “multi-phase” inquiry to avoid any confusion. Our initial idea was to argue that many other VR projects claim to be “inquiry” but in a close look does not live up to the standard of including all phases. However, we have given up that line of argumentation to save space.</p>
<p>I should add that it would be much appreciated by your reviewers if you were to acknowledge their help. Reviewing takes time, is unpaid and requires expertise. Even if a review was harsh, in your eyes, it may well be that it provided good feedback from which your article benefitted. Acknowledgement makes their work a little less thankless. You do not need to (should not) acknowledge me.</p>	<p>I have added reviewers to the acknowledgements.</p>