Interactive comment on “Using PhET™ Interactive Simulation Plate Tectonics on Initial Teacher Education” by Bento Cavadas and Sara Aboim

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Thank you for an interesting paper. The digital resource described in the paper does indeed seem to be useful and this evaluation is important. I see in the discussion that the study was impacted by the COVID-19 pandemic, and I would like to commend the authors for presenting good work despite this considerable setback.

I agree with Reviewer #1 that the discussion of the research instruments is quite elementary. I have seen that the authors have acknowledged this review and added a few sentences, however, I would encourage them to add a little more detail throughout the Methods section of the paper. Section “4.3 Methods of data collection” is fundamental to the paper, but is very short. I would like to know more about the choices of research instruments, particularly the survey, and also about the methodology of the data analysis. (To prevent the paper becoming longer, I would suggest that perhaps the first part of section 5, concerning the specifics of the tasks, could be trimmed a little shorter without losing vital understanding.)

In places, the language in the paper is grammatically incorrect or confusing. I will give a few examples to the editor to pass on to the authors, but I encourage the authors to have the paper fully proof-read if possible. I understand English is probably not the authors’ first language, but I think this paper could be very useful, not only for other geoscience education researchers but also geoscience education practitioners, and clear language will encourage a wider readership.

Overall, I recommend this paper be published subject to minor corrections: 1) adding some more detail to the Methods section, particularly on the methods of data collection and the analysis of the qualitative data 2) improving the clarity of the written English by correcting confusing grammatical errors

Well done again on producing an interesting paper despite the pandemic setback!