

Transforming school students' aspirations into destinations through extended interaction with cutting-edge research: 'Physics Research in School Environments'

Archer et al.

Editor's Review of R1

Before considering any previous comments or responses, I reviewed the R1 manuscript with the aim of seeing it afresh as a *Geoscience Communications* reader might.

The paper evaluates the PRiSE framework, via the experiences of students and teachers, primarily based upon survey data. It finds that the extended timeframe of contact and support is important, and that the teachers and students see value in all elements of the support offered within the framework.

The Introduction is long, but excellently written and draws the reader into precisely what makes PRiSE distinctive, and thus why an evaluation of PRiSE is a useful contribution to the scientific community as a whole (students, teachers and academics). Section 2 is again sizeable, but with the evaluative purpose of the paper clearly stated in the Abstract, it is necessary and useful to set the scene. The data collection and analysis are clearly and reproducibly set out, statistically robust, with useful figures to summarize key results (i.e. 3-5). The thematic analysis is very detailed, long, but not quite disproportionately so. Together, the work allows the final section to consist of unambiguously well-supported conclusions, which contain clear and important messages.

Major points

1. From a detailed read of the new manuscript, then the authors' responses to all previous comments, it is clear the authors have done an excellent job of responding and have made changes that do everything asked of them. This is now an impressively well-constructed and presented manuscript.

Minor points/comments

L4 - Please satisfy yourself that 'provision framework' is a thing. Sounds a little odd, but I can't immediately suggest a change.

L8 - comma before 'with'?

L47 - Nice that international experience is recognised.

L50 - 'This review' ?

L52 - This chimes with my experience of supervising high-school students on extended projects.

L55-65 - Good to place PRiSE in the context of other related schemes so that its benefits can be clearly identified.

L67 - rather than '.... typically one' <5 perhaps might be fairer than 1, from my memory of Nuffield 2-3 was quite common although 1 was not unusual. '1 to 3'? It doesn't harm your point.

L135 - Use of supplementary material to avoid lengthy digressions from the stated point of the paper works.

L144-155 - Please consider placing this in a sub-section 2.1.1 highlighting ethics e.g. 'Ethical considerations'.

This is something of importance to GC's ethos. If you choose to, renumber following sections i.e. 2.1.2 for Roles of Teachers etc

L195 - Motivation of academics is a useful and important aspect to consider. Well put.

L198 - I agree it's definitely 'can' not 'is'. This is not as developed as it could be. Hillier et al (2019)

'Demystifying Academics' in GC (<https://gc.copernicus.org/articles/2/1/2019/>) includes an analysis of how impact is included in academics promotion criteria in the context of how they/we are motivated.

L557-559 - Your choice, but a somewhat negative tone. e.g. L559 instead of 'no data' you could just state that 'We have also gathered data on the impact of the PRiSE initiative, which is assessed elsewhere (Archer & Witt, 2020)'