Interactive comment on “Transforming school students’ aspirations into destinations through extended interaction with cutting-edge research: “Physics Research in School Environments”“ by Martin O. Archer et al.

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The article submitted about the PRISE project is very interesting. The quality of the presentation is excellent ... the implementation and results of the project are clearly presented. Nevertheless, I would have liked to have seen more details for the teachers involved in the project. What strategy is actually implemented for teacher training during the PRISE project?

line 172 ‘Therefore, opportunities for teachers’ development are integrated within the programme rather than being a separate offering to schools’

We thank the reviewer for taking the time to assess the manuscript and for their report. We agree that expanding discussion of our strategy and implementation for teacher development within PRISE would improve the manuscript.

We will add an overview of our integrated approach after line 273 as follows:

Teachers’ involvement at all stages also presents opportunities to them for continuing professional development. This is implemented informally and integrated within the programme in the form of both bespoke resources and ongoing dialogues between teachers and researchers. These are aimed to enhance teachers’ knowledge about the projects’ underlying science and how they link to curriculum-based topics where appropriate, their skills and confidence surrounding current research topics and methods, and their pedagogy in mentoring independent project work.

We will expand in section 2.4.1 for each intervention stage specific considerations for teachers:

- Kick-off: The outreach officer will also have an informal chat with (particularly new) teachers concerning how to go about undertaking and supervising the project, answering any questions or concerns they may have with either the science, activities, or project management.

- Prescribed work: Students are still required to problem solve throughout these stages and we purposely do not provide them with all the answers to prompt this, though teachers are given guidance in their resources to support student efforts.

- Visit: Teachers are encouraged to participate in these meetings and additionally further informal chats (similar to those taking place during the kick-off) between
the researcher and teacher occur to help with their project supervision and continuing professional development.

- Independent project: Potential research questions are suggested in the guides provided, with further advice for teachers on these being given in their versions, and students’ ideas are discussed during visits and/or webinars.

On line 378 we will add that by having teachers act as intermediaries for students’ ad hoc support this also forms part of teachers’ development:

This is done not only for logistical and safeguarding reasons, but also provides further opportunities for university–teacher dialogues that can contribute to their professional development.

These additions along with the discussion of the contents of teacher guides already present in the manuscript (lines 404-407) should give readers a better idea of our approach to teacher development through the programme.