

Interactive comment on “School students from all backgrounds can do physics research: On the accessibility and equity of the PRiSE approach to independent research projects” by Martin O. Archer

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Overview

This paper provides a more comprehensive and thorough analysis of a school engagement project than is typically done. The detail involved is welcomed, and it is excellent to see such evaluations being published.

Section 2 - Participation Regarding Independent schools who fail to initiate partnerships: were they allowed to continue with the programme? And were there any common reasons for not being able to set up partnerships? This information would be

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useful for anyone trying to replicate the work.

Appendix A: how should a reader interpret the missing information about admissions policies? Is it simply not available publicly?

Background metrics: - It would be worth clarifying the difference between the full catchment area and the "local census area" for schools. My assumption is that it is just the area immediately surrounding the school's location/postcode - There is considerable variation between the local and full catchment data for indices of multiple deprivation, as noted in the text and the caption of Figure 3. The author discusses the difference in the data sources, though the text gives the impression that full catchment data is "better", when in fact the local data is in better agreement with the national average. - Is it due to the London/non-London locations, and if so does restricting the samples with local data to just those schools give more consistent results? In effect, are the differences because there are significant differences between the local/catchment data for a school, or is it because there is variation between the schools in areas where catchment data is/isn't available? (Or is there insufficient data to tell?!) - Another approach may be to use national data for the relevant region (e.g. London/SE), but such data may not be available. - The clause "perhaps the issue lies in their targeting of and engagement with schools" regarding IRIS would benefit from clarification about how the approaches differ. It seems unbalanced to declare this as the issue with IRIS, but not HiSPAC. There are many, many other factors, such as the amount of teacher time required, the pupil time commitment etc., and it seems risky to attribute this to such a small subset. Perhaps wording along the line of "Such biases may be due to the cost of participation, the targeting of schools, or the engagement with schools, though it is noted that IRIS, like PRiSE, is free to schools".

Section 3 - Retention - It is mentioned in the text that participating in more than one year increases the retention of schools, and that the SCREAM data in Fig4a is perhaps an illustration of that. It would be interesting to see whether there is any more evidence of this - perhaps a similar plot to Fig 4a/b but with the data split by number of previous

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years completed (perhaps 0 years / ≥ 1 years).

Section 4 - Feedback - One of the reasons for teacher/school drop-off is the work required. What would be useful to see (either here or in the introduction) is an estimate of the role/tasks required of the teacher, or an estimate of the time involved. Experience (and the feedback in this paper) suggests that this is something that can have a big impact on school involvement.

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