Note 7.1 – On the distinction between school- and classroom-level variation

Estimates from EEI research find that variation in performance at the level of the class and/or teacher tends to be higher than at the school level – with about 15-30% of attainment variation being associated with the class/teacher to which the pupil is assigned (compared to the 5-10% school variation, discussed above) (see Luyten, 2003; Reynolds, 2007). This has led many to argue that the focus of educational improvement should be on teachers and teaching rather than schools. In general, lower units of analysis (teachers, classes, subjects) tend to have more variation than larger ones (schools, school groups). In other words, there tends to be more variation in effectiveness *within* schools than *between* them, although this is not inevitable (Luyten, 2003).

One point to make about the relative size of school and teacher effects is a note of scepticism about the distinction: If school effects are small but teacher effects are large, it seems to follow that a) teaching effectiveness greatly matters but b) that it is rare for any one school to have large numbers of effective teachers. It seems reasonable to suppose that the most effective schools in the country would contain teachers of consistently high effectiveness. If there were many similarly effective teachers within a school, this would show up in the school results. In this way, the school value-added ('Progress') distribution suggests a boundary on the teacher effect as well as the school effect. Recall our discussion of the Progress 8 variation above, where we explain that the difference between attending a very high versus a very low performing school is likely to be 1 grade per pupil, per subject, and perhaps in excess of 2 grades per pupil, per subject. In this aside, we are suggesting that this is also a reasonable upper bound for the impact of replacing or transforming a staff of extremely ineffective teachers to exceptionally effective ones. Of course, typical impacts will fall well within this limit. Moreover, we might (inverting the usual logic) view the school effectiveness distribution as being larger than the teacher effectiveness one, as there are other school-level factors which influence pupil performance - which, again, we assume will be present/optimised in the outstandingly effective schools in the extant data.

References

- Luyten, H. (2003). The Size of School Effects Compared to Teacher Effects: An Overview of the Research Literature. *School Effectiveness and School Improvement*, *14*(1), 31-51. <u>https://doi.org/10.1076/sesi.14.1.31.13865</u>
- Reynolds, D. (2007). Schools learning from their best: The Within School Variation (WSV) project.