2020 cohort

Roger Christofides – English Teacher

Cold Calling has become a staple of classroom questioning in recent years, but can pupils creating their own questions offer more, especially to the confidence of Pupil Premium pupils?

The pedagogical techniques advocated by the edupreneur Doug Lemov have permeated British classrooms to such an extent that is has become national news (see Leslie, 2015). Cold Calling, for Lemov himself, is the most important technique because it substantially heightens the "level of expectations in the classroom" (2015, p.249). However, research indicates a contradiction. On the one hand, Cold Calling demands accountability and "can lead to greater participation of minority groups". On the other hand, it can also be "adversarial" and harm the self-esteem of pupils, especially those who face challenges to their learning (Levy and Bookin, 2014, pp.94, 95). Moreover, Cold Calling tends to reinforce lower-order questions, with "67-95 per cent of questions involv[ing] straight recall" (Knight and Benson, 2014, p.169). This research project explored whether pupils formulating their own questions, rather than being Cold Called, could break the cycle of adversarial, lower-order questioning and engender greater confidence, especially for Pupil Premium pupils.

Firstly, creating questions allowed processing time. Pupils are rarely given adequate opportunity to process information because "most teachers still find it impossible to tolerate increased thinking time" (Knight and Benson, 2014, p.169). Creating questions allowed pupils precisely that increased thinking time, opening up the space for more considered, advanced responses to the subject matter. Secondly, pupils were given the opportunity to be the questioners, placing them in the meta-cognitive position of reflecting on their own understanding. Indeed, pupils usually only average a question every six or seven hours (see Graesser and Person, 1994) and encouraging pupils to ask questions may well be "the biggest conceptual shift" needed in approaches to questioning (Knight and Benson, 2014, p. 185). Thirdly, from the perspective of English, Cold Calling best serves memorisation and comprehension rather than the higher tiers of Bloom's traditional taxonomy – analysis, synthesis, and evaluation: learning how to question the text is perhaps the most important subject-specific skill an English pupil can develop.

Over the course of a mini-scheme of work, Cold Calling was replaced with the creation of questions by pupils themselves. Using Likert scales, the participants were surveyed on their confidence when being Cold Called prior to the intervention and their confidence when creating questions after the intervention. Although quantitative measures, the interpretation of the data was qualitative due to the small sample size and the self-identifying nature of the task. Like so much education research, then, this project was a negotiation between theoretical principles and the practical realities of the lived educational experience (Bhaskar, 2008), resulting in a practical combination of quantitative and qualitative methods (Creswell and Clark, 2011; Tashakkori and Teddlie, 1998). The porous nature of the boundary between qualitative and quantitative methods also chimed with the critical approach that structured the project.

To effect Knight and Benson's "conceptual shift" towards pupil questions, I took a deconstructive methodological approach. Deconstruction is perhaps the most well-known of the popular poststructuralist methodologies used at undergraduate level and beyond in literary studies. It has, however, not permeated down into secondary schools. Deconstruction points out that the

language we use is structured by oppositions that are hierarchical, with one term gaining pre-eminence over the other. Culture imbues these oppositional terms with particular meanings, so that, for instance, "man" becomes associated with certain values or ideals that then cannot be associated with "woman". Deconstruction argues that we learn what "man" means not because the word is magically imbued with meanings, but simply because it is not "woman" (or "fish" or "bicycle"). The opposition and the hierarchy are thus deconstructed, exposing both opposition and hierarchy as cultural constructs, not natural phenomena.

Transposing this to the material conditions of this research project, there are two oppositions that came under erasure in this project: the hierarchical opposition between pupil and teacher, in which the teacher traditionally has the authority to ask questions; and the hierarchical opposition between speech and writing, in which those questions are asked orally, especially for Cold Calling. So not only did this methodological approach challenge the assumptions surrounding Cold Calling, it was also part of a process of looking for ways to improve the cognitive structure of pupils in a school in which a persistent attainment gap exists between Pupil Premium and non-Pupil Premium pupils. The hypothesis of the project was that the creation of questions could improve Pupil Premium confidence and, as a result of this improved confidence, help address that attainment gap in the longer-term.

The first survey was completed prior to the intervention. Broadly speaking, the findings were as follows:

- 5 of 6 pupils believed answering Cold Call questions helps them understand the work better.
- 1 Pupil Premium pupil was neutral about whether Cold Call questions help them understand the work better.
- 2 of 6 pupils are not confident when answering questions and, specifically, when answering Cold Call questions. Both are Pupil Premium pupils.

This seems to support Lemov's contention that of all the techniques in *Teach Like a Champion* Cold Calling is the single most important (2015, p.249). However, if Lemov's claim is being substantiated here, why does the school still have an attainment gap between Pupil Premium pupils and non-Pupil Premium pupils? Has Cold Calling helped to improve attainment for all pupils equally, thereby maintaining the attainment gap? Or, given that Cold Calling can encourage the participation of minority groups (Levy and Bookin, 2014, p.94), is greater participation alone not enough to narrow the attainment gap? Lastly, what do we mean by "participation" and to what extent is it occurring? Two of the six pupils felt they were not confident when answering questions and, specifically, when answering Cold Call questions; both were Pupil Premium pupils. So how do we characterise "participation" when the results seem to indicate that Pupil Premium pupils lack confidence when answering Cold Call questions while non-Pupil Premium pupils feel confident? This schism is invisible and subjective, yet always a factor.

After the intervention there was no change in how confident pupils felt overall, or usually, in English. The findings regarding the creation of questions were as follows:

- 5 of 6 pupils mostly or strongly agreed that they felt confident creating their own questions;
- 5 of 6 pupils felt more confident creating their own questions than answering Cold Call questions;
- 4 of 6 felt that creating questions helped them to understand the work better, compared with 5 of 6 for Cold Calling.

This suggests that the pupils surveyed did feel more confident when creating their own questions, but that their perception of understanding the work better was not quite as unequivocal with creating questions as Cold Calling. Still, in a short space of time, pupils seemed able to adapt to the new task of creating questions and were comfortable doing so, feeling as though they were executing it in an assured manner. That five of the six pupils felt *more* confident creating questions

than answering Cold Call questions seems to suggest that the intervention achieved an intermediate outcome of improving pupil confidence. If that figure remained broadly consistent in a scaled-up study, would that be an acceptable threshold for the school to then consider the creation of questions as a pedagogical tool to be instituted alongside Cold Calling as school-wide practice? What of the other third of Pupil Premium pupils? These are questions that would have to be considered in a scaled-up study.

In terms of limitations, the following should be considered:

- The sample size was small and, therefore, opens the door for larger, future studies rather than providing definitive answers;
- All pupils – Pupil Premium and non-Pupil Premium – were high ability.

As a consequence of the small sample size, many of the results must be treated as statistically inconclusive. Nevertheless, there was a definite trend. Pupils overall felt confident creating questions, and pupils overall felt that creating questions gave them more confidence when compared to answering Cold Call questions. As well as this, pupils overall felt that creating questions helped them understand the work. The inconclusive nature of the survey results does mean it's difficult to extrapolate general conclusions with regard to Pupil Premium pupils specifically. However, there seems to be an identifiable trend in the specific context of the school, a trend that indicates that creating questions may well be beneficial, helping with confidence in both Pupil Premium and non-Pupil Premium pupils. A larger, more substantive quantitative study would offer greater insights into how these trends clarify over a larger sweep of numbers and contexts.

Also, all the pupils were higher-ability pupils. So although free school meal eligibility (and therefore Pupil Premium funding) is above the national average, due to the geographical location of the school – at the cross-section of areas that range in scores significantly on Income Deprivation Affecting Children Index (IDACI) measures – the school also attracts pupils from more affluent backgrounds resulting in a school environment where access to, and experience of, education can often be radically different. The class involved in this project were a high-ability year eight class where the percentage of Pupil Premium pupils was actually below the national average. The results of the surveys – and the material conditions of the project itself – would have been very different with a typical lower-ability year eight class where the number of Pupil Premium pupils are usually, and often significantly, above the national average. A larger study would, then, need to see how lower-ability pupils respond, scrutinising any differences between higher-ability and lower-ability Pupil Premium pupils.

To conclude, the results indicate that there is an apparent direction of travel worth investigating further. And the worth of this, I would argue, does not revolve solely around the snapshot of generally improved confidence and comprehension. Alongside this snapshot is the deliberate, methodologically-defined opportunity this pedagogical intervention allows to facilitate a more heterogenous understanding of English, an understanding beyond the thematic strictures of the National Curriculum and the "dead white male" focus still frequently maintained by schools themselves, thus allowing a space in which the world view of the pupil – and not "cultural capital" as a monolithic, government-defined (and often Imperially Anglo-Saxon) concept filtered through the professional authority of the teacher – can enter the conversation. In this sense, this research project also paves the way for a larger, future study on whether the creation of questions can help an ever-diversifying pupil demographic – and, specifically, the diverse economic cross-section of pupils at the school – bring their cultural knowledge and experiences to bear on a subject that has, for many decades now, simultaneously celebrated and constrained difference.

Bhaskar, R. (2008). *A realist theory of science*. Routledge.

Creswell, J. W., & Clark, V. L. P. (2011). *Designing and conducting mixed methods research* (2 Ed.). Wiley.

Graesser, A. C., & Person, N. K. (1994). Question assessing during tutoring. *American*

Educational Research Journal, 31(1), 104-37.

Knight, O., & Benson., D. (2014) *Creating outstanding classrooms: a whole school approach*. Routledge.

Lemov, D. (2015). *Teach like a champion 2.0: 62 techniques that put students on the path to college*. Wiley.

Leslie, I. (2015, March 11). The revolution that could change the way your child is taught. *The Guardian*. https://www.theguardian.com/education/2015/mar/11/revolution-changing-wayyour-child-taught

Levy, D., & Bookin, J. (2014). Cold calling and web postings: do they improve students' preparation and learning in statistics? *Journal of the Scholarship of Teaching and Learning*, 14(5), 92-109.

Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches*. Sage.