The Continuing Impact of CoPE

Summarising further statistical analysis of the data collected for UWE, first published 2012/13

The impact of ASDAN's Certificate of Personal Effectiveness (CoPE) on GCSE results, reported by the University of the West of England (UWE) in its 2012/13 research of the 500,000+ Department for Education national pupil assessment cohort, has now been re-explored and the data put through further statistical analysis. What emerges concerning the CoPE qualification is of continuing high significance to the overall national evidence about attainment.

This latest analysis of the research evidence is undergoing academic peer review and could be subject to some changes. We present this preliminary summary within the context of an ongoing and important national debate about standards and which qualifications and courses are valuable for students to pursue. Overall, this further work has upgraded and increased the rigour (and so the reliability) of the analysis; one can be more confident in the results. The further work aims to improve the original analysis by adding further context, baseline mathematics attainment data and by extending the "paired pupil" comparison.

Context

The original work used a 'flat' binary logistic regression that looked at individuals without context. The new work uses multi-level binary logistic regression that groups the individuals into units that might be expected to have similar experiences, i.e. schools. This enables the researchers to probe (and reject) explanations that the effect of CoPE was due to features of the schools that offer CoPE rather than the qualification itself, e.g. that high achieving or high deprivation schools are more likely to offer CoPE.

Baseline mathematics

The new work also uses KS3 attainment in maths for the regression model for achievement of the five GCSE passes including English and maths threshold. This eliminates an apparent anomaly in the original research work, which saw girls doing worse than boys within the model, which didn't seem to correspond with previous research. Once baseline maths ability is woven in, this anomaly disappears.

Extended paired pupil comparison

In the original work, the research hand-paired 200 pupils with 'wide' CoPE and 'no' CoPE usage in schools, and analysed their outcomes, effectively creating two hypothesised schools. In the new work, the matching process has been automated; over 3,500 pairs are now used in the analysis. This has enabled the scrutiny of subgroups in more detail, e.g. by gender, Special Educational Needs (SEN) or Free School Meals (FSM).

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New findings

- The effect of 'wide' CoPE usage in school on the overall likelihood of good GCSE English passes has risen from 10% in the original work to 11% in the new work.
- The effect of 'wide' CoPE usage in school on the overall likelihood of five good GCSE passes including English and maths has risen from 5% in the original work to 19% in the new work. This is partly due to the improved modelling by including KS3 maths attainment as a factor.
- These likelihoods translate (through the hypothesised matched schools) as an uplift in overall pass rates of 4% and 3% respectively. These are somewhat lower than in the original paper (4.5% and 5.5%), which is a result of the larger number of pairs used, i.e. it is a more reliable estimate.
- The new school analysis also now adds estimated pass rate uplifts for subgroups, with Black Minority Ethnic (BME) pupils, those with English as an additional language, (EAL), Free School Meals (FSM) or Pupil Premium pupils, persistent absentees, lower ability pupils and those with SEN experiencing a greater effect from undertaking CoPE than the average.

In other words, the impact of CoPE is greatest for those with intersecting forms of educational or situational disadvantage. This data is new and there is no direct comparison in the original work, although this was suggested by the original regression analyses.

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