



National Tests Correlation Study 2018

Introduction

RS Assessment from Hodder Education worked with Colin McCarty (for PiRA and PUMA) and AlphaPlus Consultancy to analyse GAPS, PiRA and PUMA test results alongside the National Test Scaled Scores in the 2017-2018 academic year.

The schools

Anonymous results from over 1,000 children per year group (across 33 schools for PiRA and PUMA and 26 schools for GAPS) were collated and analysed. The schools were spread across the country and from a mix of rural and urban locations, with a spread of National Test results representative of the national picture.

The pupils

Analysis of the average National Test scores of the pupils in our study compared to national averages showed that, for GPS and reading, more children in our sample achieved the expected standard and the same number achieved the high score. In maths, more of our sample achieved the expected standard, whereas fewer achieved the high score. In summary, this shows that our sample cohort were broadly representative of the national cohort in 2018.

Methodology

Firstly, the data set was cleaned, ensuring to remove pupils who had no test score.

Summary statistics were then computed on each test, in order to examine how they functioned. NB: Good tests are designed to have a fair mix of hard, medium and easy questions to ensure there is differentiation, allowing the able to show their capability and those who struggle with the subject to achieve some success. Inspection of the means and ranges indicate that the tests are fair; being sufficiently challenging, but not daunting, for the average child. This is reinforced by the Pearson correlation coefficients, which confirm a strong parallelism of performance between the tests and the NC scaled scores.

We linked the test scores from all the children who took part in each of the trials to their National Test Scaled Scores using a statistical technique called linear regression. This is a method of obtaining the best straight line for a large number of plotted points; these graphs, along with the look up tables, can be found in the 'National Test indicator documents'. To read them, visit: risingstars-uk.com/performanceindicators.