

The effect of immediate verbal feedback compared to written feedback on reading, writing and maths – a randomised controlled trial



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PURPOSE OF RESEARCH

Well-being and teacher workload are at the forefront of the current policy changes both in OFSTED and teacher workforce unions as increasing numbers of staff are leaving the teaching profession within the first five years, with many reporting burn-out and unmanageable workloads. Recent studies into teacher well-being and the effectiveness of written marking led to a teaching and learning policy review at Queensbridge Primary School in June 2019.

In line with the DfE research project on teacher workload, an initial teacher survey (26 respondents – of which 17 were class teachers, 5 HLTAs, 1 non-class based teacher and 3 SMT), 81% stated that the time spent on written marking was disproportionate to pupil success. Additionally, teachers found that there was less time to adapt lesson content with the current marking policies, and that the children preferred immediate in-class verbal feedback. This was then echoed in the results of a child-friendly questionnaire that was conducted at the beginning of the academic year 2019-20. This showed that children felt that the time spent between completing an activity and receiving feedback was too long and did not impact on their knowledge and understanding.

Using the study ‘A Marked Improvement’ (EEF, 2016) and the aforementioned qualitative data from teaching staff, we created two templates of reformed marking in writing and numeracy. The aim of these reforms was to provide teachers with a written marking format that had a better impact on children’s learning and on their ability to improve their work.

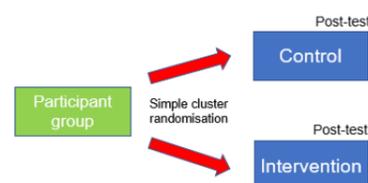
THE RESEARCH DESIGN

Between-participant designs (simple cluster randomisation)

A post-test only between-participant design was used. To define the independent variable (immediate verbal feedback), participants were randomly allocated to one of two conditions:

- Control condition (IV Level 1) – Normal practice, with detailed written feedback
- Intervention (IV Level 2) – Immediate verbal feedback in class, with occasional written feedback

Figure 1: Research Design



Dependent variables

The following measures were used:

- DV1 (attainment) – Teacher assessments in class
- DV2 (teacher perception) – Pre and post well-being surveys, (Qualitative and Quantitative)
- DV3 (pupil perception) – Pre and post opinion survey on written feedback (Qualitative and Quantitative)
- DV4 (teacher time) – Recording of written marking time in writing lessons

The design allowed for the testing of the following hypotheses:

- H1 – Pupil attainment as measured by teacher assessment will not be negatively affected by reducing written marking.
- H2 – Teacher’s perceptions of wellbeing will improve as a result of immediate in-class marking.
- H3 – Teachers will spend less time writing feedback and more time giving immediate verbal feedback and adapting lesson content.

METHODS

Participants, sample size and randomisation

This study included 175 pupils from Years 2, 3 and 6 in an inner London primary school. Whole classes were randomly allocated to control or intervention using simple cluster randomisation.

Procedures

The treatment window was the Autumn Term 2019.

Students were taught the same lessons, that would usually take place, by their class teachers.

Control Group

Teachers continued to carry out written feedback, giving a positive written comment and a written next step in both literacy and numeracy at the end of the school day.

Intervention Group

In numeracy – pupils self-assessed in-class to gain immediate feedback, distinguishing between calculation, transcription and understanding errors. Teachers used this information to identify pupils who needed same-day interventions.

In literacy – teachers carried out mini-plenaries within single sessions to highlight misconceptions and work to share. At the end of the school day, teachers filled in a tick-list sheet based on the work in pupils’ books, highlighting work to praise and share and general misconceptions to address the following day. At the end of each taught writing unit, teachers were expected to follow traditional school policy, ‘deep marking’ a piece of summative writing based on the skills taught.

Materials (and apparatus)

Maths and writing tick lists were created for teachers in intervention groups to assess whether pupils met their targets.

NFER tests were used to inform teacher judgements when it came to assessing pupil progress in maths and reading.

LIMITATIONS

The study involved a relatively small sample size of 175 pupils across three year groups. Originally it was intended to case match inside the design, but this was not possible due to the attainment variable.

CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

Immediate feedback in the place of written marking has shown an improvement in pupil enjoyment and engagement. The difference in attainment between the control and intervention classes was non-significant (with almost entirely positive effects), so we can be fairly confident in saying that a reduction in written feedback had on average no negative impact on children’s attainment in reading, writing and maths.

Staff marking surveys show a 63.46% decrease in time spent written marking in intervention classes compared with control classes where marking time stayed the same.

RESULTS

Separate 2x2 Chi-squared tests of independence were conducted on Years 2, 3 and 6, reading, writing and maths on-track, off-track status across control and intervention groups. The table below shows the effect sizes, confidence intervals, and p-values for each of these tests.

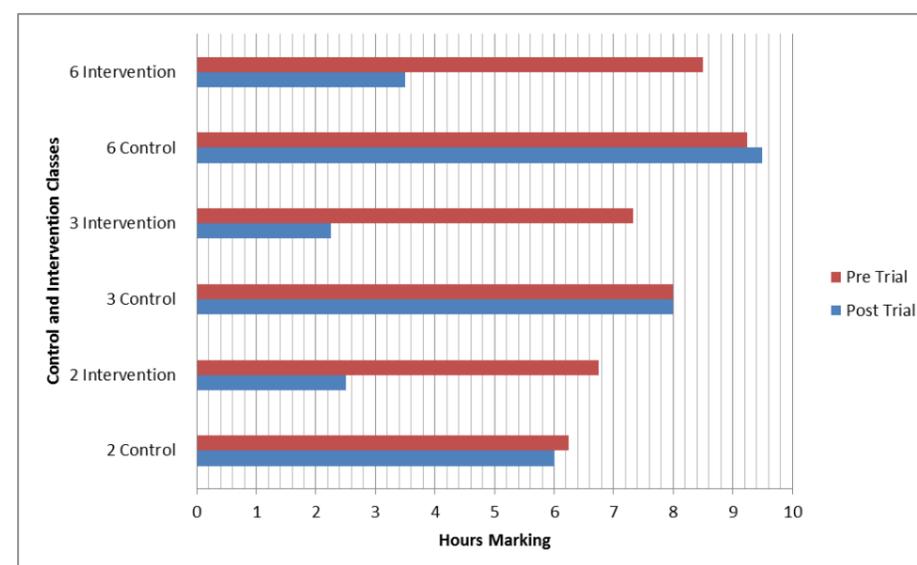
Table 1 – Results

Subject	Year Group	d	CI(95%)	P-value	w	n
Reading	2	0.038	(-0.44-0.51)	0.885	0.019	60
Writing	2	0	0	1	0	60
Maths	2	0.07	(-0.41-0.55)	0.787	0.035	60
Reading	3	0.139	(-0.36-0.64)	0.597	0.069	56
Writing	3	0.149	(-0.36-0.66)	0.577	0.075	56
Maths	3	0.377	(-0.15-0.90)	0.158	0.189	56
Reading	6	0.2	(-0.3-0.7)	0.438	0.1	59
Writing	6	0.136	(-0.35-0.63)	0.598	0.068	59
Maths	6	0.267	(-0.24-0.77)	0.302	0.133	59

Teachers and pupils were given perception questionnaires. These found that the new marking policy allowed more time for adapting of plans and lessons to suit the needs of the pupils. Immediate feedback had a positive impact on pupil understanding and engagement. Pupils preferred the new system where they were able to identify errors and celebrate their achievements at the time of the learning.

Teachers recorded time spent doing written feedback and found there was a noticeable decrease over a given time in the intervention groups. See graph below:

Figure 2 – a comparison of time spent marking and giving written feedback between the control and the intervention teachers.



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REFERENCES

EEF (2016) ‘A Marked Improvement’. London: Education Endowment Foundation.