A marked improvement?

A review of the evidence on written marking

April 2016

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Executive summary

The central role of marking

Marking plays a central role in teachers’ work and is frequently the focus of lively debate. It can provide important feedback to pupils and help teachers identify pupil misunderstanding. However, the Government’s 2014 Workload Challenge survey identified the frequency and extent of marking requirements as a key driver of large teacher workloads. The reform of marking policies was the highest workload-related priority for 53% of respondents. More recently, the 2016 report of the Independent Teacher Workload Review Group noted that written marking had become unnecessarily burdensome for teachers and recommended that all marking should be driven by professional judgement and be “meaningful, manageable and motivating”.

To shed further light on the prevalence of different marking practices, the Education Endowment Foundation (EEF) commissioned a national survey of teachers in primary and secondary schools in England. The survey, conducted by the National Foundation for Educational Research, identified a wide range of marking approaches between schools and suggests teachers are combining different strategies to fulfil the multiple purposes of marking pupils’ work.

Given this diversity, the increased use of high-intensity strategies such as triple-marking, and the huge amount of time currently invested in marking, it is essential to ensure that marking is as efficient and impactful as possible.

The approach taken in this review

The original purpose of this review was to find evidence that would inform teachers’ decision-making about marking. The time available for marking is not infinite, so the central question was: What is the best way to spend it?

However, the review found a striking disparity between the enormous amount of effort invested in marking books, and the very small number of robust studies that have been completed to date. While the evidence contains useful findings, it is simply not possible to provide definitive answers to all the questions teachers are rightly asking. This review therefore summarises what we can conclude from the evidence – and clarifies the areas where we simply do not yet know enough. It also identifies a number of key questions that schools should consider when developing their marking strategies, including considerations around workload and the trade-offs teachers face in adopting different approaches.
Main findings

- **The quality of existing evidence focused specifically on written marking is low.** This is surprising and concerning bearing in mind the importance of feedback to pupils’ progress and the time in a teacher’s day taken up by marking. Few large-scale, robust studies, such as randomised controlled trials, have looked at marking. Most studies that have been conducted are small in scale and/or based in the fields of higher education or English as a foreign language (EFL), meaning that it is often challenging to translate findings into a primary or secondary school context or to other subjects. Most studies consider impact over a short period, with very few identifying evidence on long-term outcomes.

- **Some findings do, however, emerge from the evidence** that could aid school leaders and teachers aiming to create an effective, sustainable and time-efficient marking policy. These include that:
  - Careless mistakes should be marked differently to errors resulting from misunderstanding. The latter may be best addressed by providing hints or questions which lead pupils to underlying principles; the former by simply marking the mistake as incorrect, without giving the right answer.
  - Awarding grades for every piece of work may reduce the impact of marking, particularly if pupils become preoccupied with grades at the expense of a consideration of teachers’ formative comments.
  - The use of targets to make marking as specific and actionable as possible is likely to increase pupil progress.
  - Pupils are unlikely to benefit from marking unless some time is set aside to enable pupils to consider and respond to marking.
  - Some forms of marking, including acknowledgement marking, are unlikely to enhance pupil progress. A mantra might be that schools should mark less in terms of the number of pieces of work marked, but mark better.

- **There is an urgent need for more studies so that teachers have better information about the most effective marking approaches.** The review has identified a number of areas where further research would be particularly beneficial, including:
  - Testing the impact of marking policies which are primarily based on formative comments and which rarely award grades.
  - Investigating the most effective ways to use class time for pupils to respond to marking.
  - Comparing the effectiveness of selective marking that focuses on a particular aspect of a piece of work to thorough approaches that focus on spelling and grammar, in addition to subject-specific content.
  - Testing the impact of dialogic and triple marking approaches to determine whether the benefits of such approaches justify the time invested.

New funding to fill evidence gaps

Since its launch in 2011, the Education Endowment Foundation (EEF) has funded over 120 projects in English schools, working with over 6,500 schools and 700,000 pupils. Included within this programme of research are a number of studies testing ways to improve the quality and impact of feedback in the classroom.

However, to date no projects have looked specifically at written marking. As part of the publication of this review, the EEF is calling on the research community to join forces with schools to fill these gaps and is ear-marking £2m to fund new trials which will lead to practical and useful knowledge for teachers in such a critical area of teaching practice. The new funding will be available immediately.
Introduction

The marking challenge

Marking is a central part of a teacher’s role and can be integral to progress and attainment. Written responses offer a key way of providing feedback to pupils and helping teachers assess their pupils’ understanding.

Previous research suggests that providing feedback is one of the most effective and cost-effective ways of improving pupils’ learning. The studies of feedback reviewed in the Teaching and Learning Toolkit – an evidence synthesis produced by the EEF, Sutton Trust and Durham University – found that on average the provision of high-quality feedback led to an improvement of eight additional months’ progress over the course of a year.

While it is important to note that written marking is only one form of feedback (see Figure 1), marking offers an opportunity to provide pupils with the clear and specific information that the wider evidence base on feedback suggests is most likely to lead to pupil progress.

Marking also has the potential to be hugely time consuming. Marking was identified as the single biggest contributor to unsustainable workload in the Department for Education’s 2014 Workload Challenge – a consultation which gathered more than 44,000 responses from teachers, support staff and others. Approaches to marking vary widely in terms of their content, intensity and frequency. For many teachers, it is not the time that each approach takes up by itself, but the cumulative requirement of combining several different approaches, in depth, across multiple classes each week, which can create a heavy workload. In 2015, the schools inspectorate Ofsted confirmed that an assessment of marking would be included in inspections, but that decisions about the type, volume and frequency of marking completed would be at the discretion of individual schools.

Figure 1. Examples of different forms of feedback.
The burden of marking on teachers was also noted by the 2016 report of the Independent Teacher Workload Review Group, *Eliminating unnecessary workload around marking*. It suggested that providing written feedback on pupils' work has become disproportionately valued by schools, and the quantity of feedback has too often become confused with the quality. The group noted that and there is no ‘one size fits all’ way to mark, instead recommending an approach based on professional judgement.

For all these reasons, there is a clear need for high-quality evidence to inform schools’ decision-making about marking.

**The research challenge**

Despite its centrality to the work of schools and teachers, there is in fact little high-quality research related to marking. There are few examples of large-scale, robust studies, such as randomised control trials. Most studies of marking conducted to date look at impact over a very short period (e.g. a few lessons), with a smaller number assessing impact over a slightly longer period such as a term. There is very little evidence of the long-term effect on attainment of different approaches (e.g. across a Key Stage) and impact is rarely quantified in precise terms.

There are two implications of the research gap on marking for this review. First, the low quantity and quality of research related to marking means that the findings from this review are necessarily more tentative than in other areas where more studies have been done. This means that it is essential for schools to monitor the impact of their decisions about marking, and continue to evaluate and refine the approaches that are adopted.

Second, the limited amount of high-quality evidence on specific approaches to marking means that it would not have been productive to conduct a meta-analysis or a systematic review, as such an approach would have been likely to yield very few studies. Instead, a broader search was undertaken that included randomised controlled trials from other contexts such as higher education, small studies by classroom practitioners, intervention studies and doctoral theses. While this approach does enable some recommendations and discussion questions to be highlighted to inform decision-making, few definitive statements about effective marking can be made. In some cases it is simply necessary to say: ‘there is currently no good evidence on this question’ and identify the most promising questions for future investigation.

**Teacher survey**

To inform this review, the EEF commissioned a national survey of teachers’ marking practices through the NFER Teacher Voice Omnibus, carried out in November 2015. A panel of 1,382 practising teachers from 1,012 schools in the maintained sector in England completed the survey. The panel included teachers from the full range of roles in primary and secondary schools, from headteachers to newly qualified class teachers. Fifty one per cent (703) of the respondents were teaching in primary schools and 49 per cent (679) were teaching in secondary schools.

The results reveal the extent to which teachers use marking to develop their pupils’ understanding, by writing targets and providing time for pupils to respond. 72% of all teachers reported writing targets for improvement on all or most pieces of work they mark – the most common strategy of all ten practices the teachers were asked about. However, this approach does not appear to replace the more traditional approach to marking, that of identifying and correcting errors, which over 50% of respondents indicated they do on all or most pieces of work they mark. The findings, together with the Workload Challenge survey results, contribute to an emerging picture that suggests that teachers combine different approaches to fulfil the multiple purposes of marking pupils’ work: for monitoring progress, to gauge understanding, to plan future lessons, to develop understanding, and to gather data for whole school summative reporting. The implications for a teacher’s workload are considerable, yet these developments have largely taken place without the solid evidence to justify them.

It is hoped that the evidence discussed in this review, and the EEF’s commitment to funding more work into marking practices, will provide a starting point for teachers and researchers to consider both the effectiveness and sustainability of marking approaches.

The full NFER survey is available in the appendix to this review and relevant survey findings are highlighted in each section.
Review structure
The review examines existing British and international evidence on marking.

The evidence is presented in seven chapters, with further details of the research considered in each section in the references at the end of this review:

1. Grading
2. Corrections
3. Thoroughness
4. Pupil responses
5. Creating a dialogue
6. Targets
7. Frequency and speed.

How to use this review
We recognise that teachers are regularly reviewing their marking approaches and engaging in professional conversations with colleagues around best practice. This review aims to provide information and stimulus to support an informed discussion about marking within and between schools. Each section defines an aspect of marking and summarises the existing evidence related to it, as well as highlighting particular areas where there is a need for more research. In addition, a consideration of workload is presented and three or four discussion questions are provided.

The review might be used in three ways:

- To check where assumptions underpinning decisions about marking are supported by evidence and to be clear where they are not
- To encourage a discussion of the multiple trade-offs involved in many decisions about marking. Trade-offs might relate to workload, but also relate to other areas, such as the amount of work undertaken by the teacher versus the student, and the speed with which marking is completed versus how detailed feedback is
- To provide information about the wide range of marking strategies that have been studied or used in schools to support further innovation and evaluation.
1 Grading

The issue
Many school marking policies specify that pupils should be given a grade for their work to signal their performance. Generally, but not exclusively, this is provided alongside formative comments explaining what to do to improve in the future. Here we investigate the evidence on the impact of awarding grades, either alongside or instead of formative comments.

The evidence base
A large number of studies have investigated the question of awarding grades. Encouragingly, and in contrast with many other aspects of marking, many of these studies are school-based, as opposed to coming from higher education or foreign language teaching, and multiple studies have been conducted in English schools.

The findings in this area are relatively consistent, including between British and international studies. However, it would be valuable to conduct more trials in this area, in particular to test whether findings from overseas studies are replicated in English schools.

Case study: Huntington School
“For Huntington School, the removal of National Curriculum Levels in 2014 was an opportunity to improve feedback to students. Without a level to hang the comment on, teachers have been encouraged to think more deeply about what the feedback needs to say and do. It’s also a way to make sure pupils are focusing on what they need to improve, without the obsession with getting and comparing grades.”

Full case study on page 32.

How much, if at all, do you use the following marking practices? - Putting a mark on work (e.g. 7/10).* All pieces of work I mark/most/some/few/none.

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>Most</th>
<th>Some</th>
<th>Few</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Classroom Teachers</td>
<td>2%</td>
<td>2%</td>
<td>10%</td>
<td>32%</td>
<td>51%</td>
</tr>
<tr>
<td>Secondary Classroom Teachers</td>
<td>10%</td>
<td>19%</td>
<td>33%</td>
<td>22%</td>
<td>15%</td>
</tr>
</tbody>
</table>
What does the evidence say?

No evidence was found showing that only awarding a grade, with no formative comment, leads to pupil progress. While few recent studies have looked directly at the impact of purely summative marking, this appears to be because a consensus has formed around the idea that grade-only marking does not give pupils the information they need to improve. A British study in the 1980s found that pupils who were only provided with grades made less progress than pupils provided with other types of feedback.

The evidence on awarding grades alongside formative comments is more complex. However, two messages are repeated across a range of studies in a variety of contexts.

First, there is good evidence to suggest that awarding grades alongside comments has a different impact on different groups of pupils. A large, longitudinal study from Sweden found that boys and lower attaining pupils who received grades at the end of each year made less progress than similar pupils who did not. However, grading had a positive long-term effect on girls. No definitive explanation of this effect is known, but the researchers hypothesised that boys and low-attaining pupils were more likely to overestimate their level of performance, and hence be demotivated by the grade, while for girls the converse was often true.

Second, a number of studies suggest that grades can reduce the impact of formative comments by becoming the main focus of learners’ attention. For example, a study conducted by King’s College, London, in English schools found that both high- and low-attaining pupils were less likely to act on feedback if grades were awarded alongside comments. However, it should be noted that one UK study reached a different conclusion, and found no positive impact of withholding grades from Year 7 pupils. However, the suggestion that grades obscure comments is supported by the majority of studies. It is possible that when grades are withheld for the first time students take some time to adjust, suggesting that conducting a medium- or long-term study of the impact of withholding grades would be valuable.

While the evidence base on grading is stronger than in other aspects of marking, it would nonetheless be valuable to conduct further research in this area. For example, it would be useful to test a marking policy that was comment-only for almost all pieces of work, but that gave teachers some discretion to ensure that no student underestimated their potential.

Workload considerations

Decisions about whether to grade work do have workload implications, particularly if schools decide to moderate or standardise grading within a department. Given the evidence summarised above this does appear to be an area where workload could be reduced.

Discussion questions

1. What is the right balance of grades and comments in our marking?
2. Do our pupils ignore formative comments if there is a grade on the page?
3. Can we consider alternative ways of expressing pupils’ progress to them that avoids simple grades?
4. How can we ensure that none of our students underestimate their potential and are aware of their current level of performance?

* Results from the NFER Teacher Voice Survey, November 2015, sample of 1,382 teachers – please see appendix for more details.
Corrections

The issue
When marking a piece of work, it may feel logical and efficient to provide pupils with the right answer, in addition to indicating that their answer was incorrect. By contrast, it may seem that pupils should have to do some work to correct their own work, for example by working out which word is spelled incorrectly on a line, or by re-checking a sum.

The evidence base
Overall, there are a considerable number of studies that have looked at the issue of corrections. However, few high-quality studies have been conducted in schools, either in England or elsewhere. Though some informative and relatively consistent findings from related fields, including EFL learning and higher education, are available, it would be extremely valuable to test these findings in English schools.

Dickens uses adjectives to present
1 Pips feelings in Great Expectations.
2 At Miss Havisham’s house
3 Estella is rude to Pip and Pip says he feels “humiliated” and “hurt”. This suggests he feels out of place and is aware that
4 Estella’s social class is higher than his class.

Errors vs. mistakes
In this example, the student has failed to use an apostrophe correctly on three separate occasions (indicated by 1), suggesting an underlying misunderstanding. This could be classed as an error. In contrast, the missing capital letter on “Estella” (indicated by 2), is the only incorrect use of capitals and could be classed as a mistake.

How much, if at all, do you use the following marking practices? - Indicating mistakes in pupils' work, but not correcting them.*

All pieces of work I mark/most/some/few/none.

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>Most</th>
<th>Some</th>
<th>Few</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Primary Classroom Teachers</td>
<td>21%</td>
<td>34%</td>
<td>25%</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Most Secondary Classroom Teachers</td>
<td>32%</td>
<td>31%</td>
<td>24%</td>
<td>7%</td>
<td>5%</td>
</tr>
</tbody>
</table>

*Dickens uses adjectives to present
1 Pips feelings in Great Expectations.
2 At Miss Havisham’s house
3 Estella is rude to Pip and Pip says he feels “humiliated” and “hurt”. This suggests he feels out of place and is aware that
4 Estella’s social class is higher than his class.

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What does the evidence say?

Most studies make a distinction between a ‘mistake’ – something a student can do, and does normally do correctly, but has not on this occasion – and an ‘error’, which occurs when answering a question about something that a student has not mastered or has misunderstood.¹

If a student is judged to have made a mistake, a number of studies from higher education and EFL recommend that it should be marked as incorrect, but that the correct answer should not be provided. One study of undergraduates even found that providing the correct answer to mistakes was no more effective than not marking the work at all. It is suggested that providing the correct answer meant that pupils were not required to think about mistakes they had made, or recall their existing knowledge, and as a result were no less likely to repeat them in the future.

Where errors result from an underlying misunderstanding or lack of knowledge, studies from EFL and higher education suggest that is most effective to remind pupils of a related rule, (e.g. ‘apostrophes are used for contractions’), or to provide a hint or question that leads them towards a correction of the underlying misunderstanding. It is suggested that simply marking the error incorrect (as if it were a mistake) would be ineffective, as pupils would not have the knowledge to work out what they had done wrong.

A key consideration is clearly the act of distinguishing between errors and mistakes. Errors can sometimes be identified by a pattern of consistent wrong answers. However, it may also be valuable to test the impact of providing additional training for teachers on the topic.

Within the literature a small number of exceptions to the basic idea of requiring that pupils correct mistakes versus providing hints to correct underlying errors are also identified. For example, where multiple choice questions are used, it is recommended that any incorrect answers are corrected quickly, to avoid pupils remembering plausible wrong answers.

Many teachers use coded feedback as a means of speeding up the marking process, for example, using ‘sp.’ in the margin to indicate a spelling error. Research suggests that there is no difference between the effectiveness of coded or uncoded feedback, providing that pupils understand what the codes mean.

Workload considerations

It is likely to be more time consuming to pose questions or provide hints to correct errors. However, some of this time may be offset by the time saved not correcting mistakes. Using coded feedback is likely to save time.

Discussion questions

1. How do we distinguish between mistakes and errors?
2. Does our marking approach require our pupils to work to remember or reach the correct answer?
3. What strategies can we use to ensure that our pupils’ underlying misunderstandings are addressed?

¹ NOTE: The terms ‘mistake’ and ‘error’ are not used precisely in all studies on marking. As a result, it has not been possible to apply this distinction throughout the review. In other sections of the review they should be treated as synonyms.

* Results from the NFER Teacher Voice Survey, November 2015, sample of 1,382 teachers – please see appendix for more details.
Thoroughness

The issue

The ‘thoroughness’ with which a piece of work might be marked can vary very widely, from simply acknowledging that it has been seen with a tick or the provision of simple praise, through marking it as correct or incorrect without a comment (see also ‘Grading’) to a variety of very intensive forms of marking where every error is identified, including those related to spelling, grammar and handwriting.

Some marking policies explicitly encourage ‘thorough’ marking, particularly in literacy-related subjects. Conversely, some argue for an approach that focuses solely on the task or the understanding of material that has just been taught. A related form of ‘selective’ marking, relevant particularly to literacy-related subjects, is to identify all types of errors within a limited section of work, but to leave other work unmarked.

The evidence base

No studies appear to focus solely on the impact of ‘acknowledgement marking’. This may reflect a consensus that there is no strong logical argument for why this type of marking would be of benefit to pupil progress. Alternatively, it may be the case that wider evidence highlighting the value of detailed feedback has been viewed as sufficient to conclude that simple acknowledgement marking is unlikely to support learning.

No school-based studies appear to have explored the impact of very thorough marking approaches, making it very difficult to reach firm conclusions about the optimum level of detail to provide. A small number studies are available from higher education and the field of EFL. It is not clear how transferable their conclusions are to schools. However, they may provide valuable suggestions for future study.
What does the evidence say?

No strong evidence suggests that simple acknowledgement marking (sometimes known as ‘tick and flick’) contributes to progress. Likewise, it does not appear to be beneficial to provide generic praise or praise that is not perceived as being genuine. It is also clear that offering information on how pupils should improve their work is substantially more effective than simply marking an answer as right or wrong. Studies exploring selective marking that focuses on a particular type of error have found it to be effective in helping pupils tackle those errors. There is some evidence to suggest that when teachers mark essays, a large majority of their comments focus on spelling, grammar and word choice, rather than content, organisation or the construction of arguments. It is possible that narrowing the focus of written comments on some pieces of work would be beneficial. However, this proposal has not been tested in schools. Given renewed emphasis on spelling, punctuation and grammar (SPAG) in external examinations, it would be valuable to explore the impact of such an approach on both SPAG outcomes and subject-specific content.

EFL studies examining the impact of focusing marking on limited sections of a piece of work and correcting all errors appear to have found a positive effect, and it would be valuable to test a similar approach in English schools.

Workload considerations

While simple ‘acknowledgement marking’, or the provision of a short comment such as ‘good effort’ may have been commonplace in the past, it is likely that these forms of marking could be reduced without any negative effect on student progress. A simple mantra might be that teachers should consider marking less, but marking better. Clearly moving to a form of selective marking could substantially reduce marking workloads.

Discussion questions

1. Would marking time be more effective with less acknowledgement marking?
2. What would a marking approach look like based on ‘mark less, but mark better’?
3. What balance should we strike between marking for SPAG and marking for subject specific content?
4. Does our marking focus on the learning objectives related to the piece of work that has been completed?
4 Pupil responses

The issue
Marking provides pupils with formative or summative feedback on their work. However, what pupils are required to do with this feedback can vary widely. This section explores two questions related to pupil responses: whether pupils should be provided with designated time to reflect on marking in lessons (sometimes known as ‘Dedicated Improvement Reflection Time’ or ‘Feedback and Response’) and at what point in extended pieces of work pupils should be provided with written feedback. The type of responses that pupils might be required to provide is considered in the next section.

The evidence base
The evidence base on the impact of student responses is limited. Most available studies are from higher education and use student survey responses as the measurement of impact, rather than directly examining attainment.

In some cases it appears that studies have taken for granted the fact that pupils will be given time to consider and act upon feedback, which may explain why the evidence base on this aspect of marking is underdeveloped. However, given the range of forms of pupil response practiced in schools, it is clear that more evidence in this area would be valuable, for example by testing the impact of marking with questions to be answered in class time.

How much, if at all, do you use the following marking practices? - Giving pupils time in class to write a response to previous marking comments.*

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<th>Most</th>
<th>Some</th>
<th>Few</th>
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<tbody>
<tr>
<td>Primary Classroom Teachers</td>
<td>22%</td>
<td>33%</td>
<td>24%</td>
<td>8%</td>
<td>13%</td>
</tr>
<tr>
<td>Secondary Classroom Teachers</td>
<td>28%</td>
<td>30%</td>
<td>28%</td>
<td>10%</td>
<td>4%</td>
</tr>
</tbody>
</table>

All pieces of work I mark/most/some/few/none.
What does the evidence say?

The most basic question related to pupil responses is whether pupils should be given time in class to consider comments. While no high-quality experimental studies appear to have looked at this question, surveys in schools and higher education settings consistently suggest that pupils do not engage with or find it hard to act on the feedback they are given, and that pupils value the opportunity to respond to feedback. Given this, it appears that there is a strong case for providing dedicated time to consider and respond to marking in class. As noted above, it would be valuable to investigate the most effective ways to use this time in more detail: if pupils simply use class time to provide superficial responses, then this is unlikely to improve outcomes.

Some studies have looked at when pupils should be provided with feedback over the course of longer projects or pieces of work. There is promising evidence suggesting that pupils who receive mid-project written feedback are more likely to act on it and view it as helpful.

Workload considerations

Setting aside class time for pupils to consider and respond to marking should not increase marking workloads unless teachers are required to mark responses. This is considered further in the next section. Unless some time is set aside for pupils to consider written comments it is unlikely that teachers will be maximising the impact of the marking that they have completed out of class time.

Discussion questions

1. What are the best ways to provide the time for pupils to consider and respond to written comments?
2. How do we check that pupils understand all written comments and are purposefully engaging with them?
3. Are pupils given an opportunity to redraft or improve their work after receiving written feedback, or are our comments intended to improve future pieces of work?

Case study: All Saints Roman Catholic School

“The fundamental principle at All Saints is that students should do at least as much work responding to their feedback as the teacher did to give that feedback. The school have adopted the approach of marking fewer pieces, but with a real focus on the learning. Main subjects will do two major pieces of work every half term, and those pieces are marked in depth with successes and targets, and then students have to spend some time in the classroom responding to those targets.”

Full case study on page 31.

* Results from the NFER Teacher Voice Survey, November 2015, sample of 1,382 teachers – please see appendix for more details.
Creating a dialogue

The issue
After a decision has been made to give pupils time to respond to written comments, schools have a range of options regarding what type of response pupils should be encouraged to provide, and decisions to make about what to do with these responses.

Marking approaches in this area include ‘triple impact marking’ whereby teachers provide a written response to student responses, and ‘dialogic marking’, in which a written ‘conversation’ is developed over time between teachers and pupils.

The evidence base
A small number of studies have explored the impact of dialogic marking in schools and universities. However, in common with the wider evidence base on whether pupils should be given time to reflect on marking, almost all studies rely on answers to surveys rather than academic achievement as outcome measures. In addition, some studies have looked at the impact of dialogue without focusing specifically on written dialogue.

No high-quality studies appear to have evaluated the impact of triple impact marking.

Case study: St Margaret’s CE Primary School
“St Margaret’s has been the centre of a major project in digital feedback in recent years, using tablet computers to record verbal feedback over videos of annotations of pupils’ work. The oral element is designed to overcome ‘the abstraction between what the teacher intends, and what the pupil understands’ in written feedback. The pupils get two improvement points, with a photo of their own work side by side with a photo of a model text. Then, when improving their text, pupils can replay the teachers’ voice as often as they like.”

Full case study on page 33.

How much, if at all, do you use the following marking practices? - Writing a response to pupils’ response on teacher feedback (i.e. Triple Impact Marking).*

All pieces of work I mark/most/some/few/none.

Primary Classroom Teachers

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>Most</th>
<th>Some</th>
<th>Few</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>7%</td>
<td>14%</td>
<td>26%</td>
<td>21%</td>
<td>30%</td>
</tr>
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Secondary Classroom Teachers

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<th></th>
<th>All</th>
<th>Most</th>
<th>Some</th>
<th>Few</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>8%</td>
<td>15%</td>
<td>26%</td>
<td>23%</td>
<td>27%</td>
</tr>
</tbody>
</table>
What does the evidence say?

As noted above, the lack of high-quality evidence focusing on student outcomes makes it challenging to reach conclusions about the benefits of dialogic or triple impact marking.

Qualitative evidence suggests that dialogic approaches may have promise that merits further evaluation. For example, a US study that analysed 600 written feedback journals used in middle school literacy lessons concluded that the use of teacher questions in the feedback helped to clarify understanding and stretch pupils, while a Dutch study found that engaging in dialogue led pupils to become more reflective about their work. A study of university students found that they often did not understand the terms used in written feedback, and recommended that dialogue could be used to resolve this problem. However, no studies appear to have compared the impact of written dialogue to verbal dialogue for this purpose and it is not clear why written dialogue should necessarily be preferable.

It also appears worthwhile to caution against elements of dialogic or triple impact marking that do not follow the wider principles of effective marking that are underpinned by relatively stronger evidence summarised elsewhere in this review. For example, there is no strong evidence that ‘acknowledgment’ steps in either dialogic or triple impact marking will promote learning.

Workload considerations

Dialogic and triple impact marking clearly have the potential to generate large quantities of additional workload. While there does appear to be some promise underpinning the idea of creating a dialogue, further evaluation is necessary both to test this promise and to determine whether any resultant benefits are large enough to justify the time required.

Discussion questions

1. What is the most effective way to check that pupils understand our marking?
2. Have we attempted to assess the ‘time-effectiveness’ of dialogic or triple impact marking?
3. Are we clear about the purpose of responding to pupils’ responses to create a written dialogue?
4. To what extent do acknowledgement steps enhance pupil progress?

* Results from the NFER Teacher Voice Survey, November 2015, sample of 1,382 teachers – please see appendix for more details.
6 Targets

The issue

Formative assessment aims to provide information to learners about how to improve their performance. A simple way to do this is to provide explicit targets for pupils as part of marking. In schools these may appear as the ‘even better if…’ statement after ‘what went well’, the ‘wish’ after ‘two stars’, or a variety of other labels. An extension of this approach is to use previous targets as explicit success criteria in future pieces of work.

The evidence base

Very few studies appear to focus specifically on the impact of writing targets on work. However, a large number of studies and syntheses consistently identify the impact of making other types of feedback specific. A number of studies have explored how useful pupils perceive targets to be, without including a direct assessment of their impact on attainment.

A related area of research, composed mainly of studies from higher education, has explored the impact of using explicit success criteria in setting and marking assignments.

Case study: Meols Cop High School

“Students are actually asking, how do I improve this, what do I do to change this? They’re always looking back at their last target, because they know, that’s what they’re trying to improve on in their next piece of work - forget the grade, what’s the skill you need to work on?”

Full case study on page 34.

How much, if at all, do you use the following marking practices? - Writing targets for future work (e.g. ‘Even Better If’).*

All pieces of work I mark/most/some/few/none.

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>Most</th>
<th>Some</th>
<th>Few</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Classroom Teachers</td>
<td>18%</td>
<td>44%</td>
<td>27%</td>
<td>4%</td>
<td>7%</td>
</tr>
<tr>
<td>Secondary Classroom Teachers</td>
<td>42%</td>
<td>39%</td>
<td>14%</td>
<td>2%</td>
<td>2%</td>
</tr>
</tbody>
</table>
What does the evidence say?

Wider evidence on effective feedback – including studies of verbal and peer feedback in schools, as well as studies from related fields such as psychology – consistently finds that the specificity of feedback is a key determinant of its impact on performance, while feedback that is imprecise may be viewed by pupils as useless or frustrating. Studies from higher education find that providing clear success criteria for a piece of work is associated with higher performance. Given this wider evidence, setting clear targets in marking, and reminding pupils of these before they complete a similar piece of work in the future, appears to be a promising approach, which it would be valuable to evaluate further.

Consistent with evidence about specificity, it is likely that short-term targets are more effective than longer-term goals, and when pupils are only working towards a small number of targets at any given time. Some studies indicate that different age groups may respond to targets in different ways, but no studies appear to have robustly evaluated this difference.

In some cases, targets may be more effective if pupils have a role in setting them, or are required to re-write them in their own words. Studies from schools and universities suggest that teachers can overestimate the degree to which pupils understand targets or success criteria in the same way that they do, which may act as a barrier to improvement.

Workload considerations

Writing targets that are well-matched to each student’s needs could certainly make marking more time-consuming. One strategy that may reduce the time taken to use targets would be to use codes or printed targets on labels. Research suggests that there is no difference between the effectiveness of coded or uncoded feedback, providing that pupils understand what the codes mean. However, the use of generic targets may make it harder to provide precise feedback.

Discussion questions

1. Do we set specific targets that can be immediately acted upon?
2. Do pupils understand the targets we set them?
3. Are there occasions when we could use coded targets to reduce workload?

* Results from the NFER Teacher Voice Survey, November 2015, sample of 1,382 teachers – please see appendix for more details.
7 Frequency and speed

The issue
The frequency and speed of marking – defined respectively as how often pupils’ work is marked and how quickly the work is returned to the pupils – are two key determinants of workload related to marking. While frequency and speed can be considered in isolation, it is also useful to consider them in conjunction with questions about the type of marking that is conducted. For example, is it beneficial to provide less detailed comments quickly, or to take the time necessary to provide more thorough feedback?

The evidence base
A small number of studies on the speed of marking have been conducted in the field of EFL teaching, but no high-quality studies in schools were found. A number of studies investigating the importance of quick verbal feedback have been conducted that might inform decisions about marking. However, it is necessary to be cautious when generalising from studies of verbal feedback, which naturally is more immediate.

No studies on the frequency of written marking were found. A range of professional opinion pieces have made logical links between related pieces of evidence and practice to make judgments on effective practice, for example arguing that more feedback may lead to faster improvement, but no high-quality studies in schools appear to have been conducted.
What does the evidence say?

Several studies looking at the impact of marking quickly in the field of EFL have found that next lesson feedback had a positive impact on student progress compared to slower feedback. However, the size of the positive impact has not been estimated. The suggestion that faster feedback is more valuable is consistent with studies of verbal feedback that indicate that learners find it easier to improve if their mistakes are corrected quickly. However, the lack of studies in schools suggests that this is an area where more research would be valuable. It would be helpful to investigate both the impact of fast feedback and whether there is a point beyond which feedback has limited value.

Given the limited evidence base related to speed and frequency it appears valuable to consider both issues in the context of what is known about other aspects of marking. For example, given the relatively weak evidence for ‘acknowledgement marking’, it would not appear to be justified to adopt a high-frequency or high-speed approach if it led to a decrease in the precision or depth of marking.

Workload considerations

Decisions about the frequency and speed of marking have the greatest impact on time of any aspect of marking considered in this review. The evidence gap in this area means that it is not possible to identify clear time-savings in this area, or provide definitive guidance on how often or how quickly to mark.

Discussion questions

1. What is the right balance between speed versus quality in our approach to marking?
2. How should our decisions about the speed or frequency of marking affect the type of marking that takes place?
3. How do we balance the speed with which marking is completed against the speed with which pupils are able to act on the feedback they receive?
4. What role can verbal feedback play in giving quick, precise and frequent feedback?
References

Introduction


Grading


**Corrections**


**Thoroughness**


**Pupil Responses**


Creating a dialogue


Targets


Frequency and speed


Appendix A - Survey Results

The survey results come from the National Foundation for Educational Research Teacher Voice Omnibus. A panel of 1,382 practising teachers from 1,012 schools in the maintained sector in England completed the survey. Teachers completed the survey online between the 6th and 11th November 2015. The panel included teachers from the full range of roles in primary and secondary schools, from headteachers to newly qualified class teachers. Fifty one per cent (703) of the respondents were teaching in primary schools and 49 per cent (679) were teaching in secondary schools.

1. How much, if at all, do you use the following marking practices? - Correcting mistakes in pupils’ work.
   All pieces of work I mark/most/some/few/none.

<table>
<thead>
<tr>
<th></th>
<th>Primary Classroom Teachers</th>
<th>Secondary Classroom Teachers</th>
<th>All Classroom Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>24%</td>
<td>22%</td>
<td>22%</td>
</tr>
<tr>
<td>Most</td>
<td>29%</td>
<td>31%</td>
<td>30%</td>
</tr>
<tr>
<td>Some</td>
<td>29%</td>
<td>29%</td>
<td>29%</td>
</tr>
<tr>
<td>Few</td>
<td>11%</td>
<td>13%</td>
<td>12%</td>
</tr>
<tr>
<td>None</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>No response</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

2. How much, if at all, do you use the following marking practices? - Indicating mistakes in pupils’ work, but not correcting them.
   All pieces of work I mark/most/some/few/none.

<table>
<thead>
<tr>
<th></th>
<th>Primary Classroom Teachers</th>
<th>Secondary Classroom Teachers</th>
<th>All Classroom Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>21%</td>
<td>32%</td>
<td>27%</td>
</tr>
<tr>
<td>Most</td>
<td>34%</td>
<td>31%</td>
<td>33%</td>
</tr>
<tr>
<td>Some</td>
<td>25%</td>
<td>24%</td>
<td>24%</td>
</tr>
<tr>
<td>Few</td>
<td>8%</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>None</td>
<td>8%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>No response</td>
<td>3%</td>
<td>2%</td>
<td>2%</td>
</tr>
</tbody>
</table>
3. How much, if at all, do you use the following marking practices? - Putting a mark on work (e.g. 7/10).
All pieces of work I mark/most/some/few/none.

![Bar chart showing the percentage of Primary Classroom Teachers, Secondary Classroom Teachers, and All Classroom Teachers using the practice of putting a mark on work.]

4. How much, if at all, do you use the following marking practices? - Writing a qualitative/ descriptive comment about the work.
All pieces of work I mark/most/some/few/none.

![Bar chart showing the percentage of Primary Classroom Teachers, Secondary Classroom Teachers, and All Classroom Teachers using the practice of writing a qualitative/ descriptive comment about the work.]

5. How much, if at all, do you use the following marking practices? - Giving pupils time in class to write a response to previous marking comments.
All pieces of work I mark/most/some/few/none.

![Bar chart showing the percentage of Primary Classroom Teachers, Secondary Classroom Teachers, and All Classroom Teachers using the practice of giving pupils time in class to write a response to previous marking comments.]

A marked improvement? A review of the evidence on written marking
6. How much, if at all, do you use the following marking practices? - Writing a response to pupils’ response on teacher feedback (i.e. Triple Impact Marking).

All pieces of work I mark/most/some/few/none.

- **Primary Classroom Teachers**
  - All: 7%
  - Most: 14%
  - Some: 26%
  - Few: 21%
  - None: 30%
  - No response: 2%

- **Secondary Classroom Teachers**
  - All: 8%
  - Most: 15%
  - Some: 26%
  - Few: 23%
  - None: 27%
  - No response: 1%

- **All Classroom Teachers**
  - All: 8%
  - Most: 15%
  - Some: 26%
  - Few: 22%
  - None: 28%
  - No response: 1%

7. How much, if at all, do you use the following marking practices? - Writing praise on pupils’ work (e.g. ‘What Went Well’).

All pieces of work I mark/most/some/few/none.

- **Primary Classroom Teachers**
  - All: 28%
  - Most: 42%
  - Some: 21%
  - Few: 4%
  - None: 3%
  - No response: 1%

- **Secondary Classroom Teachers**
  - All: 41%
  - Most: 41%
  - Some: 12%
  - Few: 3%
  - None: 2%
  - No response: 0%

- **All Classroom Teachers**
  - All: 36%
  - Most: 42%
  - Some: 16%
  - Few: 4%
  - None: 2%
  - No response: 1%

8. How much, if at all, do you use the following marking practices? - Writing targets for future work (e.g. ‘Even Better If’).

All pieces of work I mark/most/some/few/none.

- **Primary Classroom Teachers**
  - All: 18%
  - Most: 44%
  - Some: 27%
  - Few: 4%
  - None: 7%
  - No response: 1%

- **Secondary Classroom Teachers**
  - All: 42%
  - Most: 39%
  - Some: 14%
  - Few: 2%
  - None: 2%
  - No response: 1%

- **All Classroom Teachers**
  - All: 31%
  - Most: 41%
  - Some: 19%
  - Few: 3%
  - None: 4%
  - No response: 1%
9. How much, if at all, do you use the following marking practices? - Referring to success or assessment criteria in your written comments.

All pieces of work I mark/most/some/few/none.

10. How much, if at all, do you use the following marking practices? - Referring to the way the work was planned and completed (as opposed to the end product) in your written comments.

All pieces of work I mark/most/some/few/none.
Appendix B - School Case Studies

All Saints Roman Catholic School, York

The fundamental principle at All Saints is that students should do at least as much work responding to their feedback as the teacher did to give that feedback. Sally Glenn, Teaching and Learning Lead, explains that the focus is on implementing research based feedback that is practical in a school context: “How can we shift the balance of people’s time so that they’re not spending hours doing in depth marking as well as a version of tick and flick marking?” The school have adopted the approach of marking fewer pieces, but with a real focus on the learning. Main subjects will do two major pieces of work every half term, and those pieces are marked in depth with successes and targets, and then students have to spend some time in the classroom responding to those targets.

The school feels that the introduction of DIRT (Directed Improvement and Reflection Time) has been a key change in the way it approaches feedback. According to Sally it has been a difficult cultural change for the students, who are not keen to reflect on past work:

“Often students don’t want to go back and look at something they’ve finished, they want to move on to the next thing – it’s a cultural thing. In the past we just assumed that they went away and checked feedback but they obviously didn’t because we see their reactions where they’re reflecting on their work and finding that difficult – unpleasant – and actually demoralising at points – so we are engaged in a whole language shift in the classroom where we say look, assessment is not about saying how good you are and placing a value on how good you are, it’s about assessing where our weaknesses are and how we can fix them – and that is a good thing!”

Improving the quality of feedback has been a two year whole school focus across the school. Every staff meeting in the school has become a teaching and learning meeting. The whole school meetings introduced key ideas on feedback from educational research alongside examples of good practice in the school. Staff were then encouraged to develop different approaches to written feedback. Bill Scriven, Headteacher of All Saints, points out that teachers in the school wanted the opportunity to talk about pedagogy, but the school is careful to make sure that this experimentation doesn’t become a burden on teachers.
Huntington School, York

For Huntington School, the removal of National Curriculum Levels in 2014 was an opportunity to improve feedback to students. Without a level to hang the comment on, teachers have been encouraged to think more deeply about what the feedback needs to say and do. It’s also a way to make sure pupils are focusing on what they need to improve, without the obsession with getting and comparing grades. But Huntington are keen to show that feedback needs to look different in different subjects – every department must and does do it differently.

The school feels strongly that accountability has come to dominate feedback. Alex Quigley, Deputy Head, reiterates that Ofsted have confirmed that they don’t expect to see a particular amount, frequency or style of marking: “It’s ironic that written feedback is really the only kind of feedback it’s possible to measure, when peer and self assessment, and verbal feedback are just as important,” Written feedback has to be about the learning, for this school.

Alex has framed the culture of marking at Huntington and encourages teachers in other schools to reflect on their approach:

“Be more selective and do it better, and if you’re spending x amount of time marking a book then if students are not spending twice that amount of time responding to it, then why did you spend that time doing it? Are you doing it for the SLT so there are things written in the book? Are you doing it for parents so that they see there’s some response? Are you doing it emotionally for the kids so they know you’re looking? And sometimes there’s a value in that but actually that shouldn’t be the principal feedback that you give.”

The other principle that emerges from Huntington’s approach, is that feedback should be on the best work the student is capable of. Written feedback comes at the end of a long process of oral feedback, teachers asking good questions, modelling work, setting tasks carefully and asking more questions for greater feedback at that point, and careful drafting by the pupils. ‘So you’re getting to an outcome which is much better so that then you can give really meaningful feedback, not being distracted by the error-seeking feedback that doesn’t move them forward in terms of the core aspects... it’s not distracted by a sloppy piece of writing that wasn’t fully explained or modelled so that students didn’t know what excellence looked like in the first place, and low and behold, they didn’t produce it.’ Written feedback is just part of a much larger learning process.
St Margaret’s CE Primary School Withern, Lincolnshire

St Margaret’s has been the centre of a major project in digital feedback in recent years, using tablet computers to record verbal feedback over videos of annotations of pupils’ work. The oral element is designed to overcome ‘the abstraction between what the teacher intends, and what the pupil understands’ in written feedback. The pupils get two improvement points, with a photo of their own work side by side with a photo of a model text. Then, when improving their text, pupils can replay the teachers’ voice as often as they like.

The school evaluated the impact of this using a randomised controlled trial (RCT) across several schools involving 231 pupils. Their results suggested it was highly successful. James Siddle, the head teacher of St Margaret’s, suggests a number of reasons for the positive impact: For some SEN pupils the headphones enable them to block out distractions while being reassured by their teacher’s voice – and the feedback is about things to improve, not things they’ve done wrong; other pupils felt they couldn’t read teachers’ handwriting, or what they meant by certain words. “There are multiple audiences for marking sometimes,” says Siddle. “This is just for the pupils.” The RCT suggested that for some key groups, like boys on the SEN register and pupils in receipt of free school meals, digital feedback was particularly beneficial.

In addition to the immediate feedback recorded on the iPads, teachers in the school also give extended written feedback for conceptual understanding twice for each pupil every three weeks. But it won’t necessarily be on the same piece of work for all students – enabling feedback to be more personalised and given according to pupils’ needs.

Marking will often be designed for self-regulation: asking children questions and making them do the thinking. Pupils set their own targets based on self-assessment, in collaboration with the teacher, using an e-Portfolio as a reflection tool. The school encourages the development of independent learners, with scaffolding by teachers who model different options and encourage the pupils to work out what a good one looks like.
Meols Cop High School, Southport

Meols Cop High School have completely redesigned their assessment and marking system in the wake of assessment without levels. They work from the first principle that as a school you have to be able to track what the strengths - and more importantly the weaknesses - of your entire cohort are. Then you can tackle those weaknesses to bring about improvement. Knowing grades isn’t enough - you have to know what the skills are which are underlying those grades.

As a result, the school is working on a new skills-based marking system. The impetus also came from the realisation that staff were spending too much time on marking that students weren’t looking at. Sarah Cunliffe, Subject leader for English, explains the approach:

“We decided we’d just use arrows rather than give any grades and we’d focus on specific skills. That is the only thing now that we will write on their books - an arrow, a code for what went well and a code for even better if. When the students get their work back, because they’ve all got a copy of the skills sheet in their books, so it is then up to them to use this, perhaps alongside a model answer, to work out what’s gone wrong on a particular piece of work and what they need to do to improve.”

At first students were resistant to an approach that meant more work for them but as teachers persisted, they have got to know the codes and the skills, and are happy with a system that helps them improve. For the teachers the improvement has meant a huge reduction in marking time – a teacher can now mark a set of Year 11 30 minute timed practice essays in an hour. Because marking is so much quicker, the turnaround can be faster, which is “just more productive, because it’s fresher in their heads”.

There are other benefits too - the demotivation for lower attainers that came with grades has been removed. Now they just know if they are working below, on or above target, and more importantly, what skills they are focusing on. Leon Walker, Deputy Headteacher, says there are benefits for higher attainers too, and compares it to observing staff: “as soon as you tell someone they’re outstanding, they don’t listen to anything else and as soon as you say ‘well that’s an A piece of work’ they say ‘oh that’s fine then’!”

The English department has one master list of skills that was developed from the top two bands at GCSE, that is used all the way down to Year 7. Marking is used to track strengths and weaknesses in those skills not just in classes but across year groups and across the whole school cohort. Other departments take a similar approach but have autonomy for the appropriate way to track skills progress in their subjects. As the member of staff says, “data has to inform future planning because if it doesn’t why are you recording it in the first place? So it has to loop back into the classroom and future learning.”