it effective remain elusive.

consciously shifted towards:

helping learners to improve;

increasing their motivation; helping teachers to improve.

When a teacher sets a written task and marks a pupil's response, a dialogue is set up between teacher and learner

from which both sides have much to gain. Michael Ronayne

was interested in whether all the marginal comments and

feedback a teacher gives were beneficial. Do teachers know

how to mark work effectively, so that pupils learn from the

comments? While there is general agreement that formative

assessment is important to both pupil and teacher as part of

the teaching-learning process, how it is done and what makes

WHAT IS FORMATIVE FEEDBACK?

The main purpose of assessment was once its selection and

grading functions. Teachers customarily marked work in order

to grade it and to give a position in class. This prompted the question whether assessment was motivating children to learn,

and whether the effort put into assessment could have a more

constructive role to play in learning. The emphasis then

Formative assessment is thus distinct from summative assessment. It can encourage and teach pupils, it can make

them think about their work and can challenge them to go further. As has been said, it is not so much about what students

have learned, as what they might learn with appropriate help.

MARKING AND FEEDBACK

THE STUDY

The project investigated eight separate occasions, ranging across the subjects and age groups in an 11–18 secondary school, on which teachers marked their pupils' work and gave written feedback. My data came from discussion with the eight teachers about learning objectives, by which we meant the main purposes behind the tasks they would set their pupils; from scrutiny of their feedback comments; and from subsequent discussions with a small group of pupils sampled from each of the eight classes.

Each case study followed the same procedure. When the pupils had completed the task, the teacher marked the work with formative feedback (grades were ignored in the study), and I analysed the comments made. After the lesson in which pupils got their books back, I discussed the feedback with a small group of them. I placed a transcription of what they said against my record of the exact comments written during marking.

I looked to see whether there was a match between what they said they had read and the actual comments the teacher made. The investigation considered the type of comments that pupils retained, whether they remembered more of the comments on the learning objectives and which types of comment were not effectively communicated.

AIMS

The aims of the study were to find the following:

- 1. What is the nature of the feedback teachers give?
- 2. Do pupils read and retain all the comments as intended?
- 3. Which types of comments are recalled and which are not?

TYPES OF FEEDBACK COMMENT

A first stage was to bring order to the diversity of feedback comments, which was achieved by categorising comments into five types. Official published sources from the TTA, OFSTED and HMI give a start by signifying that teachers' marking is supposed to be:

Encouraging – the reports say marking should 'respond, encourage and praise' and should 'support'.

THE PROBLEM

Firstly, teachers are rarely taught how to give feedback as part of their professional training. Teachers told me:

'On my PGCE, there was advice only on methods of summative assessment.'

'I have mostly learned by trial and error.'

'The message we were given in teacher training was "Feel it!"

Secondly, in many schools and departments there is no agreed practice on giving formative feedback. Thirdly, teachers rarely know how pupils respond to their marginal comments and summary remarks at the end of a piece.

DPIC ACTION



•	Constructive -	-	'handle misconceptions, build on	
			their responsestowards clearer	
			understanding'.	

• **Challenging** – 'extend' and 'steer them towards new learning'.

To these types may be added two other kinds of comment that teachers often make, namely those which require pupils to **organise** their written work, and those which strive to get pupils **to think again** about what they have written. 'Think' comments perform no direct teaching, but are a very common means of getting students to look back on what they have written.

The five categories of comment make a convenient and reasonably satisfactory way of grouping teachers' formative responses: organisational, encouraging, constructive, 'think' and challenging.

PATTERNS OF MARKING: WHAT THE TEACHERS WROTE

More than 1,100 scripts were examined. The pattern of feedback that teachers gave emerged as follows (in percentages):

-	Organisational comments	5
_	Encouraging/supportive	20
_	Constructive	18
_	'Think' comments	48
_	Challenging	9

Organisational comments

Organisational comments included asking for correct subjectspecific procedures, like mathematical notations or map conventions; requiring work to be presented in the conventional, orderly way (such as date, title, underlining); correcting of spelling, punctuation and grammar; and reminders to write in formal English and use a dictionary. 'Plan the work first to avoid crossing out' is an organisational comment in a constructive form.

Encouraging supportive comments

Teachers said they strongly believed in the value of encouraging comments. There was some lengthy praise explaining what was done well, but very commonly 'good' and the ubiquitous tick (\checkmark). In formative marking the tick apparently serves to acknowledge the presence of content rather than its quality. Teachers said, however, that it had a motivational intention.

Constructive comments

Constructive comments show a pupil how something should be done, or build upon the present level of performance by means of instruction, including constructive criticism. Such comments may lead to improvement of:

Knowledge :	As in ' If people had no property qualifications, they could not vote'.		
Understanding:	'You could imagine walking round the shape and adding up all the distances you travel.'		
Skills:	' a larger scale can give a better indication.'		
Teachers also made use of the 'ideal' constructive comment: 'Ask me and I will explain' which shows a commitment to			

'Ask me, and I will explain', which shows a commitment to relate to the learner's starting-point.

'Think' comments

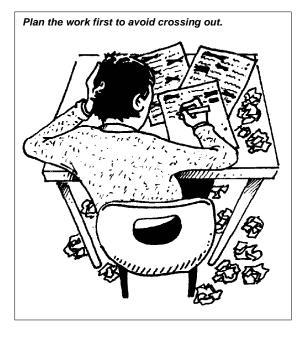
Think comments do not correct an answer, nor directly give teaching, but reflect the work back to pupils. Comments like 'Unnecessary', 'Too many numbers', 'Not much different really' or 'Vague' are shorthand ways of telling pupils what to think about further. They may often be in the form of terse questions such as: 'Why?', 'Reasons?', 'Average?', 'Contradiction?', and so on, intended simply to prompt more thought.

Challenging comments

Feedback of the challenging type – 'Is this the only conclusion that could be reached?' or 'Why will it be a fair test?' – should extend pupils' thinking. A comment such as 'Which factors are more important?' takes a task beyond explanation into more challenging evaluation.

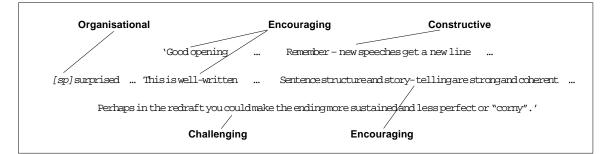
LEARNING OBJECTIVES

All teachers in the study had definite learning objectives for the tasks they set, and commented on them. However, by no means all comments they made in pupils' books related to the learning objectives.



HOW THE MARKING WAS ANALYSED

The method of categorising marking feedback is illustrated with the comments made by an English teacher on one pupil's work:



HOW PUPILS RECOLLECT FEEDBACK COMMENTS

On average, what pupils recalled corresponded with approximately one-third of the teachers' written comments. By way of examples, the feedback that teachers gave to two pupils is shown here. Firstly, the feedback written on the pupil's response to a task in English:

'Good opening ... Remember - new speeches get a new line... [sp] surprised ... This is well-written ... Sentence structure and story-telling are strong and coherent ... Perhaps in the redraft you could make the ending more sustained and less perfect or "comy".'

When questioned about the written feedback, this pupil recalled:

'He told me to rewrite my ending of my story as it is a bit corny ... also to correct all my spelling errors ... I have to start a new person's speech on a new line.'

Secondly, the written feedback given to another pupil for a Maths task was:

'If you aren't starting from zero, put this symbol ... Why are you considering these? ... They could be external points... What is this axis? ... Consider the whole year ... Did you work out the average height?... For each six months? ... Good structure, thinka bit more about the detail.'

When questioned, this pupil recalled:

'He said about zooming in, and the symbol on the bottom of each axis. I got it wrong on my work ... I had not spotted the problem, "Are people born in the first or second six months of the year?" It's a school year not the true year. I got that right but I forgot to mention it in my work ... He said whether the information we collected was valid ... [Question: Did he set you any targets?] ... To explain the results we got ... To ensure that we say what we are doing.'

The teachers' feedback in the examples above includes comments of all five types: organisational, encouraging, constructive, 'think' and challenging. In their recollections, the pupils produced some good matches between feedback and their perceptions of it. However, there are also cases where what a pupil thought he recalled was not in the marking. It was probably advice given in class before the task was done. The pupils, above, also tended to recall only the negative comments, and missed out the praise.

WHAT DO PUPILS RECALL?

Overall, teachers wrote an average of eight comments in each pupil's book, and pupils recalled with reasonable accuracy an average of $2^{1/2}$ comments. This could be regarded as quite a low figure: $2^{1/2}$ out of eight comments is only 31 per cent. Some pupils admitted they had barely read their comments at all, and several were observed to be more concerned with how many marks they and their classmates were awarded.

However, given that on average pupils correctly recalled 31 per cent (about one-third) of the written comments, it was important to find out *which* categories of feedback they recalled best. The percentage of different types of feedback comments that teachers gave in the first place was:

Organisational:	5	
Encouraging:	20	
Constructive:	18	
'Think':	48	
Challenging:	9	
Total	100%	

The breakdown of comments that pupils recalled was (percentages):

Organisational:	1	
Encouraging:	4	
Constructive:	10	
'Think':	12	
Challenging:	4	
Total	31%	



These tables show that pupils recalled proportionately more of the constructive feedback and, to some extent, of the challenging comment; and less of the organisational, encouraging and 'think' comments.

COMMENTS ON THE LEARNING OBJECTIVES

Marking comments can also be classified into those that are relevant to the learning objectives and those that are not. These, too, were then matched against what pupils told me they could recall. In the whole study the proportion of written comments that related to the learning objectives was:

Proportion of feedback		Proportion of feedback
about objectives		not about objectives
All subjects	35%	65%

It cannot be said that teachers *should* have made comments about the main learning objectives, unless one accepts that students benefit most from feedback informing them of progress made toward learning goals. If so, then it may be significant that two-thirds of feedback is not about the main focus of the task. Most teachers made a number of comments which related to matters outside their stated learning objectives, and seemed to be 'sweeping up' a range of other faults while marking.

When they *did* comment on matters relating to the specific learning objectives, teachers made far more use of the constructive and challenging-type comments; while their comments on other matters tended to use encouraging and 'think' comments:

	About objectives	Not about objectives
Organisation:	1	5
Encouraging:	6	14
Constructive:	9	8
'Think':	13	35
Challenging:	6	3
Total	35%	65%

In general, pupils recalled proportionately more of the feedback that related to the learning objectives (as in the English example, above, where both the feedback and all three recollections were on the teacher's learning objectives).

WHERE PUPILS FAIL

Though they do pick up many comments related to learning objectives and to constructive commentary, pupils seem to overlook a good deal of their feedback, so that a lot of the comment given (more than two-thirds of it) is lost. It remains unlearned, unrealised, forgotten and, in some cases, unseen or wrongly seen. Pupils seldom regarded encouraging remarks as worth reporting. 'Think' comments seemed particularly likely to be missed or forgotten. Presumably pupils had discerned what the key feedback items were and didn't recollect other annotations, which teachers by contrast regarded as important. Sometimes pupils thought feedback said something different from what it really said, misinterpreting an encouraging remark.

Scrutiny of pupils' perceptions showed that they had picked up the message wrongly in a number of cases. In the discussions, pupils said they:

- needed to improve structure, although it had been praised;
- should improve spelling, although it was not faulted;
- needed to improve writing, which had not been mentioned;
- thought they had received feedback on topics not raised at all.

Where pupils recalled their feedback accurately, they tended to recall little of it, and where they remembered many items, the richness and detail of the feedback was often lost, as if a trade-off takes place between these two. Of course, they do simply forget it; but it may be that pupils do not know how to read feedback properly. Those who do read through it are sifting it, looking for clues, unsure of what they're meant to find.

WHERE PUPILS RECALL WELL

Results show that pupils recalled more of the constructive comments they received (twice as many) and slightly more of the challenging; and less of the 'think'-type comments, suggesting that the manner in which teachers make comments might aid or impair communication of feedback.

Furthermore, pupils recalled more of the comments which related to the learning objectives. Since this feedback also tends to be more constructive and challenging, pupils perhaps focus on it more and reckon that it has more learning value than 'low-grade' organisational, encouraging or 'think' comments. It would be worth investigating the value that pupils put upon different types of comment.

The results imply that teachers might see how they fare writing mainly constructive and challenging comments, and concentrating on the learning objectives. This does not mean that they should omit any encouragement; but the impact of such comment was not studied. The study could not show which type of comment is most effective for improving learning.



THE VALUE OF EACH TYPE OF COMMENT

Organisational comments

Organisational annotations may be considered the correction of minor technicalities, rather than due response to the meaning conveyed in the writing. However, this marking actually promotes the value of following orderly procedures with care, and reinforces skills essential for communication.

Encouraging/supportive comments

Encouraging/supportive comments, including the tick (), do much more than just acknowledge that work has been seen. They mean to foster confidence and to motivate. While such comments do not directly improve knowledge, understanding and skills, teachers see motivation as a key benefit of marking. Yet pupils generally omitted to mention them when recalling their feedback (perhaps they thought they would not be considered relevant in the research).

Constructive comments

Constructive comments, which resulted in the best level of recall, should take the pupil forward from his/her present stage in order to build on the level of performance. They diagnose the way that improvement and development may take place by linking the original objectives of the task more closely to the particular pupil.

'Think' comments

Comments of the 'think' type enable efficient marking of faults and questionable points. They aim to make the pupil look actively back on his work. But with so many comments, many of them a single word like 'Predictions?' or 'Sign?', there may be simply too many ideas for pupils to absorb. Worse, many of the misunderstandings that pupils made were associated with single-word 'think' comments.

Challenging comments

Challenging comments in marking show high expectations of what pupils can achieve if they think for themselves and respond to searching questions. However, they need to be receptive. Teachers who use the assessment to respond with challenge are differentiating. They are matching the curriculum to the pupil's potential performance and motivational level.

WHAT ELSE TEACHERS CAN DO

Apart from providing pupils with time to read feedback, teachers are depending on the written words alone to reach them, and the comments may fail to communicate how to improve. So teachers often gave the class a short verbal feedback session to reinforce some key points before returning the books. They called on various strategies to help their feedback to have more impact, including:

• A preliminary exercise to focus on the task, recapping the learning objectives.

- Requiring pupils to take notes.
- Using an overhead projector, and OHT of a model answer prepared earlier.
- Using the finest work as an example to the whole class.
- Giving individual verbal feedback to pupils on a one-toone basis.

Although gauging the effect of all these strategies was not attempted, in the case of a teacher giving individual two- to three-minute consultations about the marking at the front desk (while the remainder of the class was engaged on another task), pupils' retention of feedback was then more accurate than in most case studies. It improved the average from 2_ comments recalled (out of 8) to an average of 4 out of 8. However, this strategy consumes so much lesson time that teachers can rarely employ it.

A PATTERN FOR MARKING?

Among all the case studies (leaving aside the case above), it was the pupils of a History teacher who had the best overall recall of their feedback comments. Interestingly, on each piece of work the teacher's closing remarks repeatedly followed a pattern, whereby a comment was made in four steps of this type:

Encouraging + 'Think' comment + Constructive + Challenging

as in the example below:

'You discuss many valid points	[encouraging]
but do not relate these points to the $[p]$	question rompts thought]
by saying how conditions in the fact affectedchildren	ories [constructive]
Were these changes for the good? '	[challenging]

The teacher followed this format for most of her pupils, apparently unconsciously building her feedback in this structured routine, as if by habit. Perhaps such a pattern, which incorporates encouragement, too, before the constructive and challenging comments, could be employed to explore how to make their marking more effective.

NEXT STEPS

This research has gone no further than to start investigating the practicalities of formative marking. It has tried to categorise the types of comment and to look at which types pupils retain. It would suggest that many pupils retain best the constructive and challenging comments and those relating to the learning objectives. Ideas for future research include the value that pupils place on encouragement in their feedback, and ways of teaching pupils how to read feedback.

Further reading

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