

Science Faculty

Marking and Feedback Framework

ISB Science recognises the importance of feedback as part of the teaching & learning cycle and aims to maximise the effectiveness of its use in practice. Our guidance for teachers is underpinned by the evidence of best practice from the Education Endowment Foundation and other expert organisations. The Education Endowment Foundation research shows that effective feedback should:

- redirect or refocus either the teacher's or the learner's actions to achieve a goal
- be specific, accurate and clear
- encourage and support further effort
- be given sparingly so that it is meaningful
- provide specific guidance on how to improve and not just tell students when they are wrong

Notably, the English Department for Education's research into teacher workload has highlighted written marking as a key contributing factor to workload. As such, at ISB we have investigated alternatives to onerous written marking which can provide effective feedback in line with the EEF's recommendations, and those of the DfE's expert group which emphasises that marking should be:

- meaningful, manageable, motivating

We believe that the most important activity for teachers is the teaching itself, supported by the design and preparation of lessons. The quality of feedback is more important than its quantity.

Key Principles

Our guidance on feedback has at its core a number of principles:

- the sole focus of feedback and marking should be to further children's learning
- evidence of feedback and marking is incidental to the process; we do not provide additional evidence for external verification
- written comments should only be used where they are accessible to students according to age and ability
- feedback delivered closest to the point of action is most effective, and as such feedback delivered in lessons is more effective than comments provided at a later date
- feedback is provided both to teachers and pupils as part of assessment processes in the classroom, and takes many forms other than written comments
- feedback is a part of the school's wider assessment processes which aim to provide an appropriate level of challenge to pupils in lessons, allowing them to make good progress.
- all pupils' work should be reviewed by teachers at the earliest appropriate opportunity so that it might impact future learning.

Within these principles, our aim is to make use of the good practice approaches outlined by the EEF toolkit to ensure that children are provided with timely and purposeful feedback that furthers their learning, and that teachers are able to gather feedback and assessments that enable them to adjust their teaching both within and across a sequence of lessons.

Feedback and marking in practice

It is vital that teachers evaluate the work that children undertake in lessons, and use information obtained from this to allow them to adjust their teaching. Feedback occurs at one of three common stages in the learning process:

1. Immediate feedback – at the point of teaching
2. Summary feedback – at the end of a lesson/task
3. Review feedback – away from the point of teaching (including written comments)

The stages are deliberately numbered in order of priority, noting that feedback closest to the point of teaching and learning is likely to be most effective in driving further improvement and learning. As a school, we place considerable emphasis on the provision of immediate feedback. Where feedback is based on review of work completed, the focus will often be on providing feedback for the teacher to further adapt teaching.

At ISB, this can be seen in the following practices:

Type	What it looks like in Science	Evidence (for observers)
Immediate	<ul style="list-style-type: none"> Includes teacher gathering feedback from teaching, including mini-whiteboards, book work, etc. Takes place in lessons with individuals or small groups Often given verbally to pupils for immediate action May involve use of a teaching assistant to provide support or further challenge May re-direct the focus of teaching or the task May include live marking. 	<ul style="list-style-type: none"> Lesson observations/learning walks Some evidence of live marking
Summary	<ul style="list-style-type: none"> Takes place at the end of a lesson or activity Often involves whole groups or classes Provides an opportunity for evaluation of learning in the lesson May take form of self- or peer- assessment against an agreed set of criteria In some cases, may guide a teacher's further use of review feedback, focusing on areas of need 	<ul style="list-style-type: none"> Lesson observations/learning walks Timetabled pre and post teaching based on assessment Some evidence of self- and peer assessment May be reflected in selected focus review feedback (marking)
Review	<ul style="list-style-type: none"> Takes place away from the point of teaching May involve written comments/annotations for pupils to read / respond to Provides teachers with opportunities for assessment of understanding Leads to adaptation of future lessons through planning, grouping or adaptation of tasks May lead to targets being set for pupils' future attention, or immediate action 	<ul style="list-style-type: none"> Acknowledgement of work completed Written comments and appropriate responses/action Adaptations to teaching sequences tasks when compared to planning

Science Modes of Feedback and Marking

Key Stages 3

- Pupil marking of appropriate work in lessons including retrieval practice
- Live marking in lessons to identify issues promptly and assess pupil's performance. This may be evidenced in books, but common issues may instead result in further whole class teaching. This should be systematic to include all pupils over time and also include checking of presentation standards, layout of long answer questions and mathematical working and opportunities to praise pupils and build confidence
- Knowledge assessments; marked by pupils or auto corrected with technology use to gain an understanding of their strengths and areas of improvement within a topic. This is to help pupils with their review process.
- Topic tests; marked and reviewed by teachers for individual/common misconceptions. Whole class feedback and used to inform planning/reteaching as needed.
- Full or Partial Investigations; marked and reviewed by teachers for individual/common misconceptions. Whole class feedback and used to inform planning/reteaching as needed.

Pupil Actions Following Feedback

- Correct and improve work, recording improved approaches and ensuring they have high quality examples for reference.
- Use the KS3 assessment rubric where appropriate to plan improvements to investigative skills or to set targets.
- Work to close gaps in their understanding by practicing appropriate questions, using examples and explanations to help.

A Note on Frequency

1. Immediate feedback – to occur at the point of teaching in most lessons
2. Summary feedback – should occur at the end of most lessons/tasks
3. Review feedback – away from the point of teaching (this may include written comments on how to improve exam answers or investigation reports), this should occur in response to the mapped Faculty assessments once per unit, approximately every 8-10 lessons.

Science Modes of Feedback and Marking

Key Stages 4

- Pupil marking of appropriate work in lessons including retrieval practice
- Live marking in lessons to identify issues promptly and assess pupil's performance. This may be evidenced in books, but common issues may instead result in further whole class teaching. This should be systematic to include all pupils over time and also include checking of presentation standards, layout of long answer questions and mathematical working and opportunities to praise pupils and build confidence
- Knowledge assessments; marked by pupils or auto corrected with technology use to gain an understanding of their strengths and areas of improvement within a topic. This is to help pupils with their review process.
- Topic tests; marked and reviewed by teachers for individual/common misconceptions. Whole class feedback and used to inform planning/reteaching as needed.
- Full or Partial Investigations; marked and reviewed by teachers for individual/common misconceptions. Whole class feedback and used to inform planning/reteaching as needed.
- Synoptic tests and trial exams; teacher marked and individual next steps for pupils. Whole class feedback and to inform planning/reteaching as needed.

Pupil Actions Following Feedback

- Correct and improve work, recording improved approaches and ensuring they have high quality examples for reference. For example, challenging IGCSE past paper questions and model answers.
- Work to close gaps in their understanding by practicing appropriate questions, using examples and explanations to help.
- Students use traffic lighting documents designed to match the specification to review their understanding and to plan revision and further study in response to the feedback received at all levels but particularly before and after key formal assessments.

A Note on Frequency

1. Immediate feedback – to occur at the point of teaching in most lessons.
2. Summary feedback – should occur at the end of most lessons/tasks.
3. Review feedback – away from the point of teaching (this may include written comments on how to improve exam answers or investigation reports), this should occur in response to the mapped Faculty assessments once per unit or module of work or approximately every 10 lessons for longer units.

Science Modes of Feedback and Marking

Key Stage 5

- Pupil marking of all appropriate work in lessons.
- Topic tests: teacher marked, and individual/common misconceptions identified. Whole class feedback and to inform planning/reteaching as needed.
- Trial exams; teacher marked and individual next steps for pupils. Whole class feedback used to inform independent pupil work and planning/reteaching as needed. Follow up questions to track gap closing.
- Full or Partial Investigation practice; marked or reviewed by teachers for individual/common misconceptions. Whole class feedback and used to inform planning/reteaching as needed.
- Internal assessment Investigation first draft; Reviewed by teachers for individual written and verbal feedback.
- Folder checks for completion of work and organization

Pupil Actions Following Feedback

- Correct and improve work, recording improved approaches and ensuring they have high quality examples for reference. For example, challenging IB past paper questions and model answers. Examples of IAs with marking rubrics, comments and explanations of the grading.
- Work to close gaps in their understanding by practicing appropriate questions, using examples and explanations to help.

A Note on Frequency

1. Immediate feedback – to occur at the point of teaching in most lessons
2. Summary feedback – should occur at the end of most lessons/tasks
3. Review feedback – away from the point of teaching (this may include written comments on how to improve exam answers or investigation reports), this should occur in response to the mapped Faculty assessments once per unit or module of work.