Teacher Handbook

Formative Assessment Principles and Practises

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# Introduction

This *Teacher Handbook* is an introduction to formative assessment principles and practises. It is written for teachers and includes lots of practical ideas for lessons.

Developing teaching practice so that formative assessment is at the heart of teaching and learning is important because we now know from research that formative assessment has a significant positive impact on learning.[[1]](#footnote-1)

Formative assessment is the connecting ‘bridge’ between the teaching and the learning in every lesson.[[2]](#footnote-2) The research that has taken place into formative assessment shows that building this bridge can actually accelerate learning. However, teaching, learning and formative assessment should be seen a part of one continuous process. In other words, they cannot be planned for or put into practice separately from each other.

This handbook emphasises three essential questions that every teacher needs to ask about the learning in their lessons:

* Where are we going?
* Where is each pupil now?
* How do we get there?

These are key questions for teachers who use formative assessment in their lessons. The questions show that learning is a process that requires a constant dialogue between the teacher and their pupils. The elements of this dialogue include:

* Ensuring every pupil understands the purpose of the learning and how to judge their own success during their learning;
* Supporting every pupil to produce evidence of their learning so that their individual understanding is frequently checked and consolidated;
* Giving feedback regularly to help move learning forward.

All these elements of formative assessment are needed so that teachers can plan each pupil’s next step in their individual language development. A teacher can better understand their planning and the needs of pupils when their decisions are informed by formative assessment practices.

We need to add two more essential elements of formative assessment: how pupils can help each other and be involved in making judgments about their learning. Peer-assessment and self-assessment are therefore very important for formative assessment, helping to involve pupils in their learning and to become independent learners.

As with so many terms in education, formative assessment is often discussed in different ways and cam mean different things to different people. The first section of this handbook uses a definition taken from the work of a leading expert in formative assessment. This is the best definition we have available at present and by looking at this definition closely we can understand more clearly what formative assessment is and what it is not. As we will see, formative assessment has been defined in a general way but it will help us to focus on exactly *how* formative assessment has most impact on pupils.

In the second section of the handbook we look in detail at nine necessary building blocks for formative assessment. There are also practical suggestions and teaching ideas for each building block.

The third section looks at developing and supporting a classroom culture based around formative assessment where every pupil can succeed by developing self-confidence in their learning and positive attitude to assessment.

Finally, some suggestions are given for further reading, since there is so much more to discover about formative assessment than this short handbook can cover. Hopefully, this handbook will inspire teachers to further explore formative assessment ideas and approaches and to use formative assessment regularly in all their lessons.

# What is Formative Assessment?

What does the word ‘formative’ mean? If you look up this word in a dictionary you’ll see that it refers to something that helps *form* or *shape* something else. The dictionary definition shows that the *formative* in formative assessment refers to the *function* of assessment: how it is carried out to help *form* and *inform* the learning.

What exactly is meant by *assessment*, since this is often associated with testing and grading? Are tests and grades part of formative assessment? To answer this, let’s look at a definition of formative assessment that has been taken from the work of Dylan Wiliam, a leading expert in this field. His definition describes formative assessment in this way:

Assessment becomes formative assessment when evidence about pupils’ learning is used by teachers and pupils to make decisions about the next steps in learning.

These decisions are likely to be better than decisions that would have made without using that evidence.

(adapted from Wiliam, 2018, p. 48)

Let’s think about what this definition means for teaching and learning (or ‘instruction’ as Wiliam terms it), and to clarify important aspects of what Wiliam is talking about.

## Adjusting the teaching

Wiliam’s definition states that it is the *function* of assessment that is crucial. Assessment functions in a formative way when it is used to identify the next steps in a process of learning. Grades on their own are not useful; it’s what the teacher does with the information they collect about the learning that matters most.

Teaching may have to be adjusted to take account of what has been ‘interpreted’ by the teacher about a pupil’s progress based on formative assessment. For example, if a teacher decides, based on a task carried out in a lesson, that a number of pupils in his or her class have not understood a key concept, the concept will have to be taught again to these pupils. The teacher may need to adjust their lesson planning.

Of course, grades and marks are useful for tracking pupils’ progress and may also indicate where there are gaps in knowledge or misunderstandings. However, this information is only useful if teachers are able to take action or change their plans in time to make things better. If grades are only made available several weeks after the teaching, then it may be too late to address the problem. Furthermore, if the purpose of grades is *only* to track progress then assessment is not functioning formatively.

## A flexible and responsive approach

Being able to make adjustments to lesson planning — or even having to make changes to a lesson plan during the lesson — requires a highly flexible and responsive approach. Teachers have to plan moments of ‘contingency’. These are moments in which formative assessment takes place so that what happens next is based on the result of that assessment: what happens next is not pre-determined or fixed in a lesson plan.

Wiliam explains how the identification of next steps through moments of contingency can be planned ‘proactively’, ‘interactively’ or ‘retroactively’, as explained in the table below.[[3]](#footnote-3)

|  |  |  |
| --- | --- | --- |
| Proactive planning | Interactive planning | Retroactive planning |
| Fostering a classroom culture in which pupils take ownership over their learning.  (Proactive formative assessment is discussed in the third section of the handbook) | Identifying and responding to pupils’ needs within the flow of the lesson.  For example, a quick ‘thumbs up, thumbs down, thumbs sideways’ from every pupil is used to show how many are ready to move on to a new topic.  What happens next in the lesson is dependent on the results of this formative assessment. | Takes place after the lesson has been taught. It involves planning for the next lesson or a unit of work based on formative assessment.  For example, the results of a self-assessment taken by pupils are used to identify prior knowledge. This then feeds in to the planning for subsequent lessons: this planning might include deciding which topics need more time as well as how to make use of pupils as support for each other. |

## Time cycles

Formative assessment can also differ in terms of the timescales involved. Wiliam suggests that there are long, medium and short cycle responses in formative assessment, each having a different type of impact. These are explained in the following table. This table shows that formative assessment needs to be planned regularly across the different time cycles.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Short cycle | Medium cycle | Long cycle |
| **Span** | Within and between lessons | Within and between teaching units | Across terms or teaching units |
| **Length** | Minute-by-minute and day-by-day | One to four weeks | Four weeks to a year (or more) |
| **Impact** | Pupil engagement increases  Teacher responsiveness improves | Pupils understand how they are being assessed  Teacher understanding of assessment improves | Benchmarking for pupil progress  Improvements made to the curriculum |

(Adapted from Wiliam, 2018, p. 51)

## Helping pupils to produce evidence of learning

Another aspect of Wiliam’s definition of formative assessment is the idea that teachers ‘elicit’ or support pupils to produce evidence of their learning or ‘achievement’.

Helping pupils to produce evidence of their learning must be guided by three principles — variety, specificity and frequency — as explained below.

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| Principle | Example |
| **Variety**  Using different sources of evidence:   * The decisions that teachers need to make about the next steps in learning are more reliable and valid if these decisions are based on different sources of evidence. So formative assessment needs to be varied. | A lesson includes: small group discussion activities; practising specific skills and applying knowledge; a whole class ‘plenary’ (this is an opportunity at the end of a lesson, or at the end of a phase of learning within the lesson, to review the learning).  These three formative assessment methods: **discussions**, **deliberate practice**, and **a review of the learning** provide different sources of information about pupils’ progress, all helping to inform the teacher’s decisions about the next steps. |
| **Specificity**  Collecting specific information:   * The more specific the information is, the more useful it can be. Formative assessment is more effective if it collects specific information about the learning so that the pupil can receive specific feedback. | Multiple-choice questions can be used to diagnose specific misconceptions about a topic, thus allowing a teacher to focus their teaching on dealing with these specific misconceptions rather than assuming that everyone in the class has understood. |
| **Frequency**  Planning regular formative assessment opportunities:   * When formative assessment is used frequently it helps to both check and consolidate learning. This includes repetition through regular recapping of learning from previous lessons. | Learning can be checked regularly throughout a sequence of lessons in the form of classroom quizzes. These checks on learning are sequenced so that the consolidation of learning builds up over time, not just squeezed into a short period (this is called **spaced practice**). Each quiz includes checks on learning from previous lessons alongside checks on new learning. |

## Involving pupils

A final point to make about Wiliam’s definition is that formative assessment does not only involve teachers. Individual pupils and their peers are an essential part of the process. They can be involved in several ways: through the on-going dialogue with the teacher; through discussions with each other so that they are able to share and combine their ideas; through self-assessment and peer-assessment activities that involve pupils in assessment. These ideas are explored in the following table.

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| On-going dialogue between teacher and pupil |
| Formative assessment requires an on-going dialogue between teacher and pupil.  This means planning opportunities in lessons to speak to individual pupils or small groups to check on progress. Getting regular feedback from pupils about their learning is also essential. For example, exit cards can be used to check on specific aspects of the learning or to get feedback about activities and teaching approaches that have been used. |
| Pupils help each other with their learning |
| Getting pupils involved in helping each other with their learning through discussions and cooperative learning tasks is an important way to involve pupils in formative assessment.  Cooperative learning tasks such as ‘think pair share’ help pupils to share and combine their ideas. |
| Peer-assessment and self-assessment |
| Peer and self-assessment opportunities enable pupils to be involved in the process of assessment and contribute to a shared sense of ownership over the learning.  Peer-assessment works best when pupils are asked to give feedback to a peer on specific aspects of their learning, such as a specific aspect of the quality of a piece of work. Pupils who find it difficult to give effective feedback to each other if the feedback task is too complex.  Self-assessment needs to be carefully planned for and supported. For example, learning diaries kept by pupils can reveal areas that need clarification or specific skills that need further development. This can be a source of vital information for the teacher. |

Wiliam insists that his definition of formative assessment needs to be general because it has to cover the range of approaches that can be considered formative assessment. This includes: proactive, interactive and retroactive approaches; formative assessment that is planned over long, medium and short time cycles; a variety of techniques used in the classroom.

We need to define and understand formative assessment in this broad way but then focus on exactly ***how*** formative assessment can have most impact on pupils. According to the research that Wiliam has undertaken and reviewed, **short cycle and interactive responses have the most benefit for pupils**. That is why in the next section of the handbook the focus is on a short cycle and interactive approach to formative assessment.

Based on his research, Wiliam has also put forward five principles of formative assessment that help to show what makes formative assessment most effective.

## Wiliam’s five principles

Wiliam insists that the ‘big idea’ in formative assessment is that teaching ***adapts*** to the needs of each pupil. Evidence about learning is gathered to then adjust teaching to meet the needs of pupils.

Asking the three key questions for formative assessment: *where are we going?; where is each pupil now?; how to get there?* requires teaching approaches and ideas that give roles to the teacher, peers and individual pupils in the process of learning.

Wiliam has formulated five principles that can guide all formative assessment practices and help teaching become adaptive and responsive.

Here are the five principles:

1. **Sharing and understanding learning objectives and success criteria**
2. **Helping pupils to produce evidence of learning (e.g. classroom discussions)**
3. **Giving feedback that moves learning forward**
4. **Helping pupils to help and support each other with their learning**
5. **Helping pupils to be owners of their learning**

(Adapted from Wiliam, 2018, p 52)

Using these principles to plan and guide minute-by-minute, day-by-day formative assessment will have the greatest impact on learning.

We will explore how to put these principles into practice in the next section of the handbook.

# Building Blocks for Formative Assessment: A Necessary Nine

We will look at nine building blocks for formative assessment, divided according to which of the three key questions for formative assessment they most relate to: *where are we going?; where is each pupil now?; how do we get there?*

Learning is a process and these building blocks are connected: they cannot be planned for or put into practice in isolation from each other. Each building block includes practical teaching ideas and approaches relevant to your classrooms.

Of course, you will want to adapt and modify these suggestions to meet your own needs and the age and needs of your pupils. You can also find more ideas using the further reading resources at the end of the handbook.

## Where are we going?

### Sharing learning objectives and success criteria

This building block relates to the first of Wiliam’s principles. As well as helping pupils understand where they are going with their learning, this first building block is also essential for lesson planning.

Identifying specific learning objectives aids in backwards planning: planning a lesson backwards from the learning objectives so that specific tasks and activities can be planned to meet each learning objective. The learning objectives describe the new knowledge, understanding and skills, as well as changes in attitudes, which pupils will be walking out with at the end of a lesson. Identifying success criteria for assessing the learning will then help the teacher to give specific feedback (see building block nine on feedback).

Here’s an idea to help with formulating learning objectives and success criteria.

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| WALT & WILF |
| These acronyms are a good way to make learning objectives and success criteria accessible to pupils. **WALT** stands for **‘We Are Learning To’** (the learning objective) and **WILT** is **‘What I am Looking For’** (the success criteria). It’s best to share the WALTs and WILFs as part of a first phase in a lesson, and to ensure that everyone really does understand them (using a suitable technique to check undertanding). |

### Exemplars

Providing examples of langauge use is an excellent way to help pupils understand where exactly they are going with their learning. For example, specific skills can be modelled or examples of learning can be shown. The exemplars can be created by the teacher or authentic examples of learning from pupils can be used.

Here are some suggestions for using exemplars.

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| Using exemplars to clarify success criteria |
| Pupils produce draft pieces of work for a task. These drafts are collected and the teacher chooses the three best as exemplars, which are photocopied. Pupils then get their work back together with copies of the exemplars. In groups, the pupils use the exemplars to devise success criteria. They then improve their work using the success criteria as guidance. |
| Ranking exemplars |
| Pupils are given five examples of pupil work (from a previous year group or created by the teacher) for a particular task. In groups, they are asked to dicuss the strengths and weaknesses of each piece of work and to rank them in terms of quality. Pupils are then asked to give reasons for their ranking and these are used to co-construct (in groups or as a whole class) the success criteria for the task. |

## Where is each pupil now?

Asking yourself where each pupil is in their learning requires evidence of learning and moments of contingency in which learning can be checked. The next six building blocks deal with ways to make teaching responsive and adaptable, so that adjustments can be made and teaching responds to the learning within the flow of a lesson.

### Starters and plenaries

Starter and plenary activities are key moments within a process of learning. Every phase of learning and every lesson need starters that activate prior knowledge and plenaries to review the learning. Here are some pointers for effective starters and plenaries.

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| Starters that activate prior knowledge |
| Starters provide feedback on what the pupils already know as well as focusing on the next stage of the learning. There are lots of ideas for starter activities. Two effective techniques are True/false questions and ABCD cards.  Give pupils red and green cards (red to show false/green to show true, or use some other method for indicating this) and start the lesson with a series of statements that each pupil has to indicate whether they think is true or false: for example, these might focus on specific aspects of language use or understanding of grammar. ABCD cards are used with multiple-choice questions (each pupil in this case has four cards, each with a letter) and pupils indicate their choice of response to a question with a card. The questions can focus on pupils’ understanding of a specific aspect of language.  Both these activities are a great way to activate prior knowledge and to diagnose specific misconceptions or gaps in knowledge. |

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| Plenaries for reviewing learning |
| Reviewing learning at the end of a lesson or phase of learning can help to consolidate learning and also enables the teacher to check what learning has taken place. For example, getting pupils to write down what was the most important thing they learnt in the lesson can provide a valuable insight into the process of learning. **Exit cards** filled in by pupils in response to specific questions on the learning in a lesson can help teachers to identify specific gaps in undertanding that can then be addressed in the next lesson. |
| Reflecting on learning |
| Reflection tasks for pupils can also be used as part of a plenary phase and these can help promote metacognition — that is, pupils’ learning about their own undertanding of how they learn. Through reflecting on their learning, pupils can also identify ways to improve their approach to learning, contributing to a proactive approach to formative assessment in which pupils take ownership over their learning.  For example, pupils complete a learning log at the end of a lesson or sequence of learning. These logs record the pupils’ responses to questions about what went well in their learning and what could be even better (Dylan Wiliam advises using a variety of open-ended prompts so that a pupil can chose two or three to respond to). These logs can also reveal areas that need clarification or specific skills that need further development. |

### Deliberate practice

The idea of deliberate practice is that **learning needs to be broken down into small steps**. Here are the features of deliberate practice (taken from Christodoulou’s book *Making Good Progress*).

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| Deliberate and focused practice |
| Pupils can be given tasks to help them improve specific skills and knowledge. The focus in deliberate practice is always on specific areas of learning to improve. By breaking generic skills and complex tasks down into small steps working memory is not overloaded. Feedback can be very precise because it can focus on the specific skill that has been practised.  For example, pupils can work on a card match activity matching rules of comma usage to example sentences. They can then practise writing sentences using the rules. The teacher can monitor each pupil’s progress and identify which of the rules need more practice. |
| Practice looks different to the final skill |
| The different skills that are practised are components of the final skill or task that is the learning goal. For example, if the goal is to write an extended text then deliberate practice focuses on practising the specific and different skills required to achieve this.  In *Making Good Progress*, Daisy Christodoulou gives an example of what this approach can look like. Early activities in a sequence of lessons focus on the building blocks in a sentence, such as replacing present tense verbs with the past tense. There are then activities for rewriting sentences by focusing, for example, on pronoun usage. Other activities build up understanding of grammar by focusing, for example, on avoiding run-on sentences. At the end of every lesson pupils can apply the skills practised in a structured writing task, working towards the final goal of writing an extended text. |

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| Spaced practice |
| Learning can be checked throughout a sequence of lessons in the form of classroom quizzes. These checks on learning are sequenced so that the consolidation of learning builds up over time, not just squeezed into a short period. Each quiz includes checks on learning from previous lessons alongside checks on new learning. This repetition through regular recapping from previous lessons helps to consolidate learning. |

### Questioning

Questions from teachers fulfil a variety of functions: for example, they might be used for managing the classroom, focusing attention or keeping pupils engaged in a lesson. As a teacher you can also use questions to find out how much your pupils understand, and to encourage and prompt further learning to deepen understanding. In this way, questioning is used to embed formative assessment into a lesson.

Here are some ideas to help with this.

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| No hands up |
| Ask pupils to keep hands down and select one pupil to give an answer. Alternatively, you can use lollypop sticks, each with a pupil’s name on, and then pick a stick randomly from a jar. Aim to establish a climate in the classroom in which not offering an answer is unacceptable: having this as a classroom ‘rule’ will encourage everyone to be involved in the lesson. So if someone cannot come up with a response, offer them additional thinking time and then come back to them for a response later, or as a last resort offer suggestions and allow the pupil to select their answer (and then with prompts encourage them to justify that selection). |
| Mini whiteboards |
| A good way to support pupils with their answers in a ‘no hands up’ classroom is to use mini whiteboards. A mini whiteboard is an A4 sized double-sided plastic board, a baby version of the large whiteboard found at the front of most modern classrooms (plastic laminated sheets of paper can also be used). Think of them as a kind of personal workspace for every pupil. Using them demands that every pupil gets involved. Each pupil has one, so when the teacher asks a question, everyone is expected to give an answer (by holding their mini whiteboard up). This avoids one of the problems with the hands-up approach to teacher questions: that all too often it is the same few pupils offering answers. |
| Wait time |
| Wait time is the time given between asking and then collecting a response to a question. Research on wait time has shown that teachers often wait less than a second for an answer to a question, which does not give pupils much time to think![[4]](#footnote-4) No one can really think in such a short amount of time. So increasing wait time (to at least three seconds) can feel uncomfortable at first, but you and your pupils will soon become used to it. More importantly, the quality and length of answers will quickly increase the more wait time is used, as pupils have more time to remember their answers and think through what they want to say. To save you feeling too uncomfortable with the silence in the classroom, you can use wait time to repeat and rephrase the question, which helps to ensure that everyone understands the question. |
| Plan questions |
| Plan and sequence your questions with a clear purpose in mind. Identify the level of challenge involved, the kind of thinking required from your pupils and what information about their thinking their responses might give you. Plan probing or follow-up questions as well. Use ‘how, who, what, when, why, where’ questions for this probing, or verbs such as ‘describe’ and ‘explain’. Ensure too that questions are clearly phrased and plan for the possible answers that might be given. |

### Discussions

Giving pupils open and stimulating questions to think about and discuss can provide a window into their thinking. Discussions can also stimulate HOTS (higher order thinking skills) that help to deepen understanding. For example, you can ask pupils to compare their answers, to look for patterns or differences, or to evaluate their responses in various ways.

Monitoring discussions can help to identify gaps in understanding and opportunities for filling those gaps within the lesson. Discussions are also a way to use pupils as resources for one another, so that through interaction they can help each other with their learning.

Here are some ideas for planning purposeful discussion activities.

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| Talk partners |
| Talking through their ideas with a partner or in a small group, before they respond to questions, ensures that pupils have been given time to think. Also, by having time to discuss their ideas with a partner or in a small group the teacher can assume that everyone in the class is ready to provide an answer. Posing the question before identifying someone for a response also creates a classroom culture in which everyone knows they need to be prepared to answer every question, and thus engaged at all times in the lesson. |
| Think pair share |
| Using talk partners and small group discussion activities also gives pupils language rehearsal time. For example, by firstly writing down or thinking through an answer on their own a pupil is able to identify the language they need to use. Next, they rehearse using this language with a talk partner and they can combine their ideas. Only after this do they then get to give an answer in front of the entire class (this process is also referred to as a pyramid discussion or snowballing). This form of activity takes pressure off a pupil in terms of having to supply an immediate answer verbally and will help them to make longer and better quality responses. These longer responses provide more information about their thinking and the progress they are making in their learning. |
| Communication regulators |
| Communication regulators provide a structure to a discussion and can help to equalise communication amongst the members of a group so that everyone has an opportunity to speak. This then helps to promote positive communication patterns in the classroom. It is essential to give pupils preparation time for these activities (time to think about the topic for the task before the discussion begins).  There are lots of varieties of communication regulator activities. With **Talking Chips,** each pupil has a ‘chip’ (for example, they can use a pen). If someone wants to talk, they must place their chip in the centre of the table or hold it. They cannot then talk again until everyone has used their chip. When everyone has used the chip, then anyone can talk again. With **Response Mode Cards**,pupils are given different cards, each indicating a specific type of response that they can make in a discussion (for example, asking a question, giving an idea, giving praise, responding to an idea etc.). If a pupil wishes to speak they must show the appropriate card, representing their response mode. In **Timed Turns**,no one can talk for more than a minute and there is a timekeeper on each turn, and **Hot Seating** involves one person in the ‘hot seat’, answering questions on a given topic by the other members of the group, who can only listen and ask questions. Pupils take it in turns to be hot seated. |

### Quick Scans

Quick scans are all-pupil-response techniques that enable the teacher to quickly check understanding across a whole class. Here are some examples.

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| Traffic lights |
| Pupils use green, amber and red traffic lights (such as coloured plastic cups or card) to indicate levels of understanding and to attract support from peers and/or the teacher.  **Red:** I don’t understand what is going on  **Amber:** I almost get it, but I lack confidence  **Green:** I understand it, and I can support others  The teacher can ask an amber pupil what it is that they don’t understand and then ask a green pupil to explain their answer. This technique can also help with differentiation: red pupils can be grouped to get further support from the teacher while amber pupils seeking further help from green pupils. |
| Thumbs up, thumbs down, thumbs sideways |
| This technique is most useful when the question posed by the teacher checks pupils’ thinking:  Thumbs up: showing agreement  Thumbs down: showing disagreement  Thumbs sideways: not sure  When a question has been posed and there are two or three different responses, thumbs can be used to show agreement or disagreement with each response. Pupils are then asked to give reasons for their thumbs up, down or sideways and suggestions for how to improve the answers. |
| Hinge questions |
| In his book *Embedded Formative Assessment*, Wiliam explains the use of ‘hinge’ questions. These are key questions that are used within the flow of a lesson to check understanding before moving on. This assessment needs to be quick (Wiliam recommends no more than two minutes) and the teacher needs to be able to check the results from the whole class (mini whiteboards are a useful aid for this). |

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| One-minute verbal assessment |
| The teacher asks pupils to prepare and share a one-minute verbal summary of a forthcoming or completed activity, session or topic. This provides a recap at the start of a lesson or consolidation during the lesson. To check for understanding, the teacher can listen in on the summaries or choose one or two for sharing with the whole class. |

### Self-assessment and Peer-Assessment

Self and peer-assessment are important teaching and learning strategies in formative assessment practice. These strategies ensure that pupils are involved in assessment and are able to help each other with their learning. Here are some ideas.

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| Two stars and a wish |
| When a pupil gives feedback to another pupil on an aspect of their learning, the feedback must take the form of two things that were good (stars) and one area for improvement (wish). Wiliam explains how the quality of feedback can be developed: the feedback can be collected by the teacher (for example, if they are written on post-it notes) and shared (anonymously) with the class. Pupils then vote on which comments are most useful and discuss why. |
| Peer assessment to improve answers |
| Pupils work individually on a task and then in small groups they share their work. They then work together as a group to generate the best possible answer. Groups share their collaborative results with the rest of the class. |
| Pupils designing their own spot tests |
| Pupils work in groups preparing their own short test to check on learning. They do need to make sure they know all the answers to their questions! The tests can be swapped within the class and pupils complete each other’s tests, returning them for marking to the group that designed the test. Each group can then get feedback on their answers from the group that made the test. Follow-up learning could involve working in groups to improve answers, based on the peer feedback. |

## How do we get there?

So far we have looked at eight building blocks that help to show pupils where they are heading and to help them produce evidence of learning along the way. Feedback that helps to move learning forward is central to the process of learning.

In formative assessment, feedback is not something that only happens at the end of a phase of learning, for example, after a pupil hands in work to be marked. Feedback is on-going, frequent and occurs throughout the learning.

The final building block that we will look at is feedback.

### Feedback

A teacher gets feedback on a pupil’s progress through the planned formative assessment activities. These activities provide the teacher with the opportunity to give feedback to the pupil on their progress. A classroom in which there is regular formative assessment taking place is an environment where there is frequent and on-going feedback on pupil learning. This teacher-to-pupil feedback is effective if it:

* recognises what the pupil did well
* identifies challenges and points forward to the next step.

If the teacher is not sure about pupil understanding or ability, the teacher can ask further questions before deciding on the feedback. This also promotes an environment where pupils can express their ideas. Some example questions:

* Do you like ‘*the story’*? Why?
* What does *‘a new word’* mean?
* Did you mean …?
* What do you think about…?
* Why do you think…?

‘Medals and Missions’ model:

Geoff Petty has developed a very useful model for how to give effective feedback to a pupil. In formative assessment, pupils need information about their progress and not just praise or encouragement. They need to know:

* what they are aiming for — goals (learning objectives and success criteria, the nature of good work, etc.)
* where they are now in relation to these goals — (Medals)
* how to close the gap between where they are now, and the goals — (Missions).

Let’s look at the components of the model in more detail.

**Medals**: This is information about what a pupil has done well, e.g. 'Your paragraphs and punctuation are good' or 'That's a good argument!’ written in the margin next to a well-made point by the pupil. Grades and marks are measurements not medals. Medals are **information** about what exactly was done well. Petty also stresses that a medal can relate to the process of learning as well as a final product.

**Missions**: This is information about what the pupil needs to improve, correct, or work on. It is best when it is forward looking and positive. For example, 'Try to give more evidence for your views' or 'Use more paragraphs to show the structure of your writing'. Again, measurements such as grades do not usually give this information.

**Clear goals**: Medals and missions need to be given in relation to clear goals usually best given in advance. This is what the first building block for formative assessment, discussed above, helps to establish, so that by sharing learning objectives and success criteria with pupils they know what their goals are. Goals can include success criteria such as 'Use paragraphing to show the structure of your writing' or 'Give evidence, illustrations for the points of view you express'.

**Setting targets:** Missions need to be turned into targets for pupils to work on. In this way, the pupil knows what they need to do with the feedback and what action they need to take. Targets need to be SMART (specific, measurable, achievable, realistic, and time-bound). Teachers can record feedback, including the target and action planned, on Individual Learning Plans (ILPs), which can be paper-based or electronic.

Ensuring that feedback is effective is very important. If feedback is specific, frequent and moves learning forward in the way that the ‘medals and missions’ model does, then it has a significant impact on achievement.

Example of ‘medals and missions’ feedback

You gave a clear explanation of the benefits of a healthy life style. The details will be helpful for other pupils. In your next written essay pay more attention to punctuation.

**Medal:** This is: *You gave a clear explanation of the benefits of a healthy life style.* Here the pupil is receiving a medal that relates to language use as well as understanding of subject knowledge.

**Mission:** This is: *In your next written essay pay more attention to punctuation.* This mission relates to language use and draws the pupil’s attention to a specific aspect of their use of language.

Saying or writing exactly what a pupil has done well and also saying or writing what a pupil needs to improve, correct or work on is a key element of formative assessment practice.

The next section will help you picture a supportive classroom culture based around formative assessment where every pupil is encouraged to become a confident learner.

# Using mini whiteboards

A mini whiteboard is an A4 sized double-sided plastic board, a baby version of the large whiteboard found at the front of most modern classrooms. They are a great addition to a language teacher’s toolbox (as an alternative, plastic laminated sheets of A4 paper can also be used). Mini whiteboards need to be used with non-permanent marker pens: the boards and pens are collected at the end of each lesson.

There are several important reasons why mini whiteboards are so effective. To begin with, using them demands that every pupil gets involved in an activity. Each pupil has one, so when the teacher asks, for example, a question, everyone is expected to give an answer (by holding their whiteboard up). This avoids one of the problems with the traditional hands-up approach to teacher questions: that all too often it is the same few pupils who are offering answers.

Let’s look at the elements of formative assessment that underpin activities that make use of mini-whiteboards.

**1. ACTIVATE PRIOR KNOWLEDGE**

Activating prior knowledge is important in formative assessment practice to help find out what pupils already know about a topic. There are lots of ways that mini-whiteboards can be used for quick and easy-to-setup warming-up activities at the start of lessons. For example, play scrabble: pupils write a random letter on their board and then they have to arrange the boards to form words. To make this activity more related to a particular topic, let them have a wider choice of letters and challenge them to make words that are related to the topic for that lesson.

At other moments in a lesson, mini whiteboards allow the teacher to see everyone’s answers to a question, giving feedback on what the pupils already know, and then allowing the teacher to choose which responses they want to focus on in order to connect to the content or next stage of the lesson.

**2. ENGAGE EVERYONE**

Using mini whiteboards helps everyone to be engaged and everyone is expected to come up with a response or answer to a task. When pupils show their boards, the focus is on the answer and not on the individual learner. You can also use mini whiteboards as ways to promote discussions in small groups, with pupils swapping their boards with each other or adding to or adapting someone else’s ideas in various ways.

**3. PROMOTE INTERACTION**

Mini whiteboards can be used to guide a discussion and to encourage pupils to interact with each other. Interaction is important in order to get pupils to use and experiment with language. Try giving pupils the topic for the lesson and then get them to write a question on their board about that topic. They can then walk around the classroom looking at each other’s questions; offering answers if they think they have one.

**4. GIVE WAIT TIME**

Mini whiteboards can be used to give “wait time” to pupils. This is important in order for pupils to think about and to process both language and content. If you want lessons where thinking is encouraged, then try to expand the wait time pupils have. Using mini whiteboards can be one way to do this.

**5. PROVIDE LANGUAGE REHEARSAL**

Mini whiteboards can be used to provide pupils with language rehearsal time. For example, pupils can write down an answer to a question from the teacher on their board. This gives the pupil time to think on their own about the language they need to use. Next, they can rehearse using this language with a partner. Only after this do they then get to give an answer in front of the entire class (this process is often referred to as a pyramid discussion). This form of activity takes pressure off a pupil in terms of having to supply an immediate answer verbally. Language acquisition theory indicates that pupils learn a language best when their anxiety levels are lowest.

**6. ACTIVATE HOTS**

Giving pupils open and stimulating questions to think about and discuss can also help to develop these pupils’ language skills, because using higher order thinking skills (HOTS) demand longer and more complex responses, thus requiring more use of language. Also, once pupils have provided answers by showing their whiteboards, questions from the teacher at this stage about the answers on the boards can be used to further stimulate HOTS. For example, the teacher can ask pupils to compare their answers, to look for patterns or differences, or to evaluate their responses in various ways.

**7. CHECKING PROGRESS**

Mini whiteboards are an effective means for finding out how pupils are progressing in the lesson because the teacher is able to see very quickly if there are any problems — if a pupil’s answer is way off beam, for example, or if someone is struggling to participate in an activity. A teacher can then offer these pupils more focused input in order to support their learning.

**8. REFLECTION**

Whiteboards can also be used as a great way for reflection at the end of a lesson. For example, get pupils to write down on their boards what was the most important thing they learnt in the lesson. This can help to consolidate their learning and also enables the teacher to check what learning has taken place.

# Classroom Culture

Formative assessment will help foster a classroom culture in which every pupil can succeed. But for this culture to develop, pupils need to recognise the thoughts that may stop them from succeeding.

Building a classroom culture in which pupils recognise these thoughts and understand ways of thinking that enable them to achieve is part of a proactive approach to formative assessment. It is about giving pupils a sense of ownership over their learning.

Carol Dweck’s research on how pupils feel about learning has shown the difference between fixed and growth mindsets (i.e. attitude and approach). With a fixed mindset, intelligence is perceived as static: either you are clever or not and education cannot change it. With this mindset, challenge and risk taking is avoided because of the fear of failure.

Growth mindset, however, views intelligence as something that is not fixed. When a pupil has this mindset they are not afraid of challenge. They welcome feedback on their progress and they react to failure positively so as to try harder.

The table below from Shirley Clarke’s book *Outstanding Formative Assessment: Culture and Practice* (2014, p. 13) provides a clear comparison of these two mindsets:

|  |  |
| --- | --- |
| Fixed mindset (***performance*** orientation) | Growth mindset (***learning*** orientation) |
| **Intelligence is static**  ***I must look clever!*** | **Intelligence is expandable**  ***I want to learn more!*** |
| Avoids challenges | Embraces challenges |
| Gives up easily | Persists in the face of setbacks |
| Sees effort as pointless | Sees effort as the way forward |
| Ignores useful criticism | Learns from criticism |
| **Likely to plateau early and achieve less  than full potential** | **Reaches ever higher levels of  achievement** |

Promoting growth mindset can help pupils see their potential.

Teachers need to show pupils that they are responsible for their own mindset. **Rewarding effort** rather than attainment, as well as using **frequent formative feedback**, is key to developing a growth mindset classroom culture.

Here are some more ideas in the following table for creating a growth mindset classroom culture.

|  |
| --- |
| Create a climate in which pupils feel safe and become willing to take risks |
| Encourage pupils to give answers and responses that still need more work (by emphasising that it is not wrong, since that is not the point). Model this risk taking yourself and show how you also learn from mistakes. |
| Acknowledge ‘mistaken’ answers by finding something positive… |
| …and not merely dismissing them. When pupils come up with something that is not quite there yet, a teacher can build confidence with prompts that help pupils to self-correct and find a better answer. A teacher can aid this process by providing ‘thinking out loud’ examples that help model a process of reflection, demonstrating increased awareness, clarification and critical thinking. |
| C3B4ME (i.e. See Three Before Me) |
| This is a great way to encourage a proactive approach to formative assessment that gives responsibility to pupils. With C3B4ME (See Three Before Me) a pupil has to speak to three other pupils before seeking help from the teacher. It also helps to create a classroom culture in which pupils recognise that they are able to help each other with their learning. |
| Involve pupils in planning |
| Involving pupils in planning lessons and units of learning is a great way to give ownership to pupils. Finding out what pupils already know about a topic, breaking the topic down in various ways and asking for pupils’ ideas about how to learn can contribute to a growth mindset: it shows that every pupil has a voice in the classroom and everyone’s views are valued by the teacher. |
| Be mindful of body language |
| All pupils can be highly sensitive to body language and the messages that posture, facial expressions and eye contact might be sending out. Be aware of how to use your non-verbal communication signals to show your pupils you are interested in them as individual learners. |
| Praising growth mindset |
| Shirley Clarke states in her book *Outstanding Formative Assessment* that the language teachers use to praise pupils has the most impact on developing a growth mindset classroom culture. Focus on praising effort by using key phrases: ‘You mean you don’t know yet’; ‘Don’t say no — have a go’; Well done! You’re learning to…’. Used alongside ‘medals and missions’ feedback, this language of praising effort will help pupils to see their learning as an on-going process rather just a task to be done and completed. |

## What’s next?

Take some time to reflect on your experience: How are you going to apply formative assessment in your lesson plans and classroom? Which formative assessment activities do you already use with your pupils and which ones would you like to try? You may find that some activities would work better with your pupils than others considering their age and needs.

Once you started applying and extending formative assessment activities in your lesson plans and teaching, return to the nine blocks in this handbook and think again: Which formative assessment activities worked well and which ones you can plan and deliver differently? Are you closer to making formative assessment principles and practices rooted in your planning and classroom environment?

You may also want to exchange ideas with other teachers and your department head about what worked well and share your ideas for future lessons. Peer discussions are a useful way to get some feedback and find out how other teachers plan and manage their lessons. Inviting another teacher to observe your classes can help make you become more aware of what you need to improve for your future lessons and how to do that.

This handbook suggested some formative assessment activities. The final section provides you with a list of references which contain a wealth of formative assessment ideas, approaches and activities.

# Further Reading and Useful Websites

|  |
| --- |
| Clarke, S. (2014) Outstanding Formative Assessment: Culture and Practice. London: Hodder Education.  This book is particularly useful for primary teachers. Packed full of practical suggestions, alongside case studies about primary schools putting formative assessment into practice. |
| Christodoulou, D. (2016) *Making Good Progress*. Oxford: Oxford University Press.  Daisy Christodoulou has become a leading thinker on assessment theory and practice in recent years. This book has useful (and controversial) ideas about the future of assessment. |
| Dweck, C. S. (2016) Self-Theories: Their Role in Motivation, Personality and Development. Oxford: Routledge.  Carol Dweck has been researching children’s views on their learning for years. This book is an introduction to her work and includes growth mindset questionnaires for the classroom. |
| Hattie, J. (2009) *Visible Learning*. Oxford: Routledge  This book is essential reading for teachers interested in evidence-based approaches to teaching. Hattie has undertaken research over several decades and identified, based on the evidence, the approaches that have most impact on learning. |
| Petty, G. (2014) *Teaching Today: A Practical Guide.* Fifth Edition, Oxford: Oxford University Press.  In addition to the ‘medals and missions’ model for feedback, this book by Geoff Petty provides a comprehensive resource of teaching ideas — it will mostly be of interest to secondary level teachers. |
| Wiliam, D. (2018) *Embedded Formative Assessment.* Second Edition, Bloomington, IN: Solution Tree Press.  This book has been a key resource for this handbook. It is full of practical ideas for formative assessment that are useful for primary and secondary level teachers and includes detailed discussions of research into formative assessment. |
| The Association for Achievement and Improvement though Assessment: **www.aaia.org.uk**  Many relevant articles on formative assessment and growth mindset can be found here. |
| Shirley Clarke’s website: www.shirleyclarke-education.org  Useful resources and films of formative assessment in practice (you need to pay a subscription to access all the films). |
| Spence Kagan’s website: **www.kaganonline.com**  Spencer Kagan is one of the pioneers of co-operative learning and here you will find lots of useful articles and resources about co-operative learning. |
| Dylan Wiliam’s website: **www.dylanwiliam.org**  Includes links to articles by this leading proponent of formative assessment. |

1. A pioneering review of research on formative assessment was published by Paul Black and Dylan Wiliam in 1998. See their *Inside the Back Box: Raising Standards Through Classroom Assessment.* Available from: [**http://weaeducation.typepad.co.uk/files/blackbox-1.pdf**](http://weaeducation.typepad.co.uk/files/blackbox-1.pdf) [↑](#footnote-ref-1)
2. This idea of formative assessment as a ‘bridge’ is taken from Dylan Wiliam’s book *Embedded Formative Assessment*. This book has been a key resource for this handbook and is recommended further reading! [↑](#footnote-ref-2)
3. See Dylan Wiliam, *Leadership for Teacher Learning* (West Palm Beach, FL: Learning Sciences International, 2016), 109-110. [↑](#footnote-ref-3)
4. Read about Mary Budd Rowe’s research on wait time: <http://www.sagepub.com/eis2study/articles/Budd%20Rowe.pdf> [accessed 12November 2017] [↑](#footnote-ref-4)