Pedagogy and Practice: Teaching and Learning in Secondary Schools

Unit 12: Assessment for learning

Department for Education

Creating effective learners

Pedagogy and Practice: Teaching and Learning in Secondary Schools

Unit 12: Assessment for learning

department for
education and skills
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How to use this study guide

This study unit offers some practical strategies that teachers can use to improve their understanding and practice of assessment for learning.

Assessment for learning is a key to personalised learning because it is a powerful means of helping teachers to tailor their teaching to pupils to get the best improvement, and to involve, motivate and help them to take the next steps in learning.

The techniques suggested are tried and tested; they draw on both academic research and the experience of practising teachers. By working through this guide you can build your teaching repertoire step by step, starting with strategies that are easy to implement and moving on to those that will help pupils develop their skills still further. The unit contains 'reflections', to help you reflect on an idea or on your own practice, as well as practical tips and tasks to help you consider advice or try out strategies in your classroom. There are case studies to exemplify particular points, a summary of the research and some suggestions for 'next steps' and further reading. The final page invites you to reflect on the material and to set your personal targets for the future.

You can work through this unit in a number of ways:

- Start small; choose one class to work with. Ask another teacher to help by talking through what you intend to do and to act as a mentor.

- Work with another teacher or group of teachers who teach the same class. Work together on developing your approach to specific aspects of assessment for learning. After three weeks compare notes. Discuss which strategies are the most effective and why.

- Find someone to pair up with and team-teach. Design the tasks together and divide the role of teacher in the lesson between you.

- Work with a small group of teacher-researchers within your school. Use the guide to help you focus your work as a professional learning community.

- Identify sections of the unit that are particularly relevant to you and focus on those.

There is space in this study guide for you to write notes and responses to some of the questions, but you may also find it helpful to keep a notebook handy. For some tasks, you might want to make an audio recording or video of yourself in action so you can review your work more easily. You could add this, along with any other notes and planning that you do as part of your work on this unit, to your CPD portfolio.

The evidence of work you gather in your portfolio could count as points towards accreditation of an MA, or could support your application for membership of a professional body, such as the General Teaching Council of England (GTCE). It could also be used to support an application to reach threshold or Advanced Skills Teacher status.

You will need access to video sequence 12, Assessment for learning, when working through this unit.

Assessment for learning

Contents

Introduction

When assessment for learning is well established in a classroom pupils are:

- actively involved in their own learning;

- able to judge the success of their work and set and understand targets for improvement;

- able to take responsibility for their own progress.

Common issues

Where assessment for learning is not a strong feature in classrooms, pupils do not tend to develop the skills necessary to take charge of their own learning. They may not fully understand what it is that they are trying to learn or what successful outcomes will look like. As a result they are unable to assess the quality of their own work or engage constructively in identifying what they need to do to improve specific aspects of their learning. Pupils do not readily talk about their learning and rarely take responsibility for their own progress. This can lead to disengagement with the learning process and sometimes to poor behaviour.

Resolving the issues

Research has shown that assessment for learning can have a significant effect on how well pupils achieve in terms of their attainment, behaviour, motivation, engagement and their ability to work independently. These improvements are encouraged when assessment for learning is embedded as part of normal classroom practice. In such classrooms, what is to be learned is made clear to pupils, as well as the standards at which they are aiming. Time is found within classroom routines for discussion about how well work meets a particular set of criteria or standards, not only between teachers and pupils but also between the

pupils themselves. Feedback to pupils tells them what they have done to meet criteria so far and what else they need to do. Routines are planned to provide the time for this to happen. Finally, every pupil's confidence is improved because the expectation is that they can achieve, and joint consideration of assessment data demonstrates this.

1 What is assessment for learning?

Assessment for learning has been defined as:

> *The process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there.*

Quoted from *Assessment for Learning: 10 Principles* by the Assessment Reform Group, 2002, available from aaia.org.uk.

The following key characteristics identify assessment for learning in practice.

Assessment for learning:

* is embedded in a view of teaching and learning of which it is an essential part. Assessment for learning is not something extra or 'bolted on' that a teacher has to do. Pupil learning is the principal aim of schools and assessment for learning aims to provide pupils with the skills and strategies for taking the next steps in their learning;

* involves sharing learning goals with pupils. If pupils understand the main purposes of their learning and what they are aiming for, they are more likely to grasp what they need to do to achieve it;

* aims to help pupils to know and recognise the standards that they are aiming for. Learners need to be clear about exactly what they have to achieve in order to progress. They should have access to the criteria that will be used to judge this, and be shown examples or models where other learners have been successful. Pupils need to understand what counts as 'good work';

* involves pupils in peer and self-assessment. Ultimately, learners must be responsible for their own learning; the teacher cannot do that for them. So pupils must be actively involved in the process and need to be encouraged to see for themselves how they have progressed in their learning and what it is they need to do to improve. Teachers need to encourage pupils to review their work critically and constructively;

* provides feedback, which leads to pupils recognising their next steps and how to take them. Feedback should be about the qualities of the work with specific advice on what needs to be done in order to improve. Pupils need to be given the time to act on advice and make decisions about their work, rather than being the passive recipients of teachers' judgements;

* involves both teacher and pupil in reviewing and reflecting on assessment data (information). Pupils need to have opportunities to communicate their evolving understanding and to act on the feedback they are given. The interaction between teacher and pupil is an important element of developing understanding and promoting learning;

- is underpinned by confidence that every student can improve. Poor feedback can lead to pupils believing that they lack 'ability' and are not able to learn. Pupils will only invest effort in a task if they believe they can achieve something. The expectation in the classroom needs to be that every pupil can make progress in his or her learning.

Based on: Assessment Reform Group (1999) *Assessment for learning: beyond the black box.* University of Cambridge, Faculty of Education. ISBN: 0856030422.

The following table suggests some teaching strategies that will support the development of assessment for learning in your classroom.

Key characteristics of assessment for learning	Teaching strategies
Sharing learning objectives with pupils	• share learning objectives at the beginning of the lesson and, where appropriate, during the lesson, in language that pupils can understand • use these objectives as the basis for questioning and feedback during plenaries • evaluate this feedback in relation to achievement of the learning objectives to inform the next stages of planning
Helping pupils to know and recognise the standards they are aiming for	• show pupils work that has met criteria with explanations of why • give pupils clear success criteria and then relate them to the learning objectives • model what it should look like, for example exemplify good writing on the board • ensure that there are clear shared expectations about the presentation of work • provide displays of pupils' work which show work in progress as well as finished product
Involving pupils in peer and self-assessment	• give pupils clear opportunities to talk about what they have learned and what they have found difficult, using the learning objectives as a focus • encourage pupils to work/discuss together, focusing on how to improve • ask pupils to explain their thinking: 'How did you get that answer?' • give time for pupils to reflect upon their learning • identify with pupils the next steps in learning

Providing feedback that leads pupils to recognising their next steps and how to take them	• value oral as well as written feedback • ensure feedback is constructive as well as positive, identifying what the pupil has done well, what needs to be done to improve and how to do it • identify the next steps for groups and individuals as appropriate
Promoting confidence that every pupil can improve	• identify small steps to enable pupils to see their progress, thus building confidence and self-esteem • encourage pupils to explain their thinking and reasoning within a secure classroom ethos
Involving both teacher and pupil in reviewing and reflecting on assessment information	• reflect with pupils on their work, for example through a storyboard of steps taken during an investigation • choose appropriate tasks to provide quality information (with emphasis on process, not just the correct answer) • provide time for pupils to reflect on what they have learned and understood, and to identify where they still have difficulties • adjust planning, evaluate effectiveness of task, resources, etc. as a result of assessment

Task 1

What does the research tell us?　　　　20 minutes

Research demonstrates that good practice in assessment for learning can bring about significant gains in pupil attainment.

As you read through the summary of research on pages 19–21, consider the key factors that improve learning through assessment and reflect on your current practice with a class of your choice. Highlight the points in the text for which you are already developing effective practice in assessment for learning.

Assessment in everyday lessons　　　　　　**20 minutes**

Watch video sequence 12a, part of a Year 7 music lesson.

As you watch the video look for examples of the key characteristics of assessment for learning (pages 3–4) in action. The sequence is not meant to demonstrate every aspect of assessment for learning but you should be able to identify a number of the techniques used.

Having read the research, watched the video clip and reflected on your own practice, you should now have a broad overview of what is involved in assessment for learning. You may find some areas of your practice that are well developed and others that could be developed further. The activities in this unit expand on the principles and strategies in more detail and will help you to implement assessment for learning in your classroom.

The intention is not that you adopt all of the techniques at once but that you work through the ideas over a period of time with one or two of the classes that you teach. Eventually, as the strategies become secure and you identify the benefits of each, assessment for learning can become embedded within normal practice. As the research indicates, there is some evidence that assessment for learning has a bigger impact on pupils who have made slower progress in the past. This is hardly surprising since it is these pupils who often have found it difficult to recognise what is expected.

2　Sharing learning objectives and learning outcomes

A significant feature of assessment for learning is the sharing with pupils of both the learning objectives and the expected learning outcomes in a clear and explicit way. The teacher makes it clear that the learning objective is what the pupils are intended to learn, and that the learning outcomes define how achievement can be demonstrated by the pupils.

Unit 1 Structuring learning, which is about lesson design, makes the point that thinking through both the learning objectives and the expected learning outcomes in advance of the lesson is the key to successful lesson planning. The nature of the objectives will determine what teaching approach (or model) you use, and the strategies and techniques you will employ to ensure that the learning is effective and efficient.

Learning objectives

Research shows that, all too often, pupils have a good surface understanding of individual tasks but little sense of the purpose of the task and, ultimately, what they are required to learn. Sharing learning objectives with pupils helps them recognise what they are trying to learn and why.

Identifying the learning objectives   10 minutes

A common pitfall in the sharing of learning objectives is to identify what pupils are going to **do** in the lesson, rather than what they are going to **learn**.

Highlight which of the following are learning objectives as opposed to activities:

1   to know how to evaluate a product against a design specification;

2   to create a Christmas decoration for a front door;

3   to know the characteristics of earthquakes;

4   to understand how you can group text graphics and symbols together to make an image that means something and has an effect on people;

5   to draw and label a diagram of the eye;

6   to debate whether King William deserved to win the Battle of Hastings;

7   to understand the main causes of World War 1 and their immediate consequences;

8   to complete activities 1b, 2c and 3a, page 41, from your textbook;

9   to learn to interpret pie charts;

10   to improve our skills in dribbling a ball.

Answers can be found on page 24.

Learning objectives can be categorised into different types, and common stems can be used to share them with pupils, for example:

By the end of the lesson you will:

- **know that** … (for knowledge: factual information, such as names of people or equipment, places, symbols, formulae etc.);

- **understand how/why** … (for understanding: concepts, reasons, effects, principles, processes etc.);

- **develop / be able to** … (for skills: using knowledge, applying techniques, analysing information etc.);

- **develop / be aware of** … (for attitudes and values: empathy, caring, sensitivity towards social issues, feelings, moral issues etc.);

- **explore and refine strategies for** … (creating, designing, hypothesising, exploring alternatives).

An alternative, to give pupils some consistency, is to phrase objectives in terms of the stem: '**We are learning to …**'.

Once the objective is made clear, a short description of what will happen during the lesson might be appropriate, but it is important to separate this from the objective. Pupils also need to know and recognise the standards they are aiming for. It is essential that teachers are clear about their expectations and communicate these to pupils. When the learning objective is made explicit, then it should also be made clear what the learning outcomes for a task or set of tasks should look like.

Learning outcomes

The learning outcome will specify what is expected from the pupil as the result of a task or an episode within a lesson. It will explain the criteria for success. This can be accomplished in a number of different ways, for example:

1 by using stems such as:

- What I am looking for is … (for you to be able to use different tints to produce a …);

- What I expect from everyone is … (that you use the idea of energy to explain why …);

- To be successful you … (will need to identify where words have different meanings and explain their effects).

The language used in describing learning outcomes is product related, for example: be able to … describe … compare … explain … generalise … create. These criteria can be written out (possibly on cards) and presented to pupils to consider during the lesson.

2 by clarifying what is expected through the use of questioning.

- To produce a good … what do you think you will need to do?

- How will you make sure that …?

- What do we already know that will help you …?

- What do we mean by creativity?

3 by looking at examples of pupils' work and discussing which features meet the criteria and why.

Task 4	**Sharing learning objectives and clarifying learning outcomes**	**20 minutes**

Video sequences 12b (science), 12c (ICT) and 12d (music) show the introductions to three lessons. Note how the teachers share the purpose with the pupils and indicate the outcomes that are expected. The clips illustrate different approaches, which are identified in the following table.

Reflect on your own introductions to lessons: how do you communicate your objectives and expectations to the pupils? Decide on one of the techniques that you observed in the video which you feel would work well in one of your lessons. Try it out and evaluate the impact on the standard of pupils' work.

Which strategies did the teacher use to share learning objectives and outcomes with pupils?	How did the teacher make sure that the pupils understood the learning objectives and outcomes?
Science sequence - uses 'WALT' and 'WILF' to introduce objectives and outcomes - uses just one learning objective and one learning outcome - further explains nature of outcome (fact file) and what it will look like - provides 'big picture' in terms of scientists' concerns regarding the environment	- clarifies understanding of 'certainty' through questioning pupils - assesses pupils' initial understanding of the 'facts' and 'theories' and the need to weigh up certainty of scientific understanding (through paddle exercise) - clarifies format of the fact file
ICT sequence - uses flipchart to share learning objectives and outcomes with pupils - reflects on learning objectives - keeps to just two learning objectives - goes through and breaks down the learning outcomes - provides success criteria cards - links success criteria back to principles of good design, underpinning learning outcomes on flipchart	- asks questions to probe understanding of learning outcomes and rationale behind them - sets a brief task to help assess their understanding of the planned outcome - exemplifies the outcome, which helps set standard aimed for - uses success criteria cards to provide reference points during lesson to make sure pupils understand 'what I am looking for'
Music sequence - overview of lesson placed in context of previous lesson - uses cards to give stories for pieces of music - exemplifies achievement of learning objectives and helps set standard by using a piece of music - provides cards with objectives and success criteria	- pupils are questioned about previous lesson - questions pupils to ensure they understand elements of music - uses a piece of music to exemplify the success criteria - questions pupils about success criteria - cards provide reference during lesson

3 Helping pupils recognise the standards they are aiming for

At times, sharing learning outcomes at the start of a task is not enough, and there may well be occasions when more time needs to be spent on helping pupils understand what they have to do to reach a particular standard. The research evidence and teachers' own practice indicate that this is time well spent. Pupils need:

- to be shown 'what a good one looks like';

- to be told why it is considered 'good' and what specific features contributed to that judgement;

- to be given some suggestions about what to do, or to include, in order to reach a similar standard;

- to be told what they need to do to reach the next stage in their learning.

The following are some ways in which this can be achieved:

- **modelling** (see unit 6) is particularly useful for introducing a new skill, procedure or convention (such as a text type);

- **showing and discussing good examples and bad examples** is useful for a wide range of products, such as artefacts, texts, written designs, diagrams and new behaviours;

- **teacher-led discussion against criteria** is useful for judging a piece of work and demonstrating how some aspects match the criteria and some do not. This helps pupils begin to understand which qualities are being sought. Explaining mark schemes to pupils can also help here;

- **peer and self-assessment against criteria** can be used for a wide range of products and have many benefits (see section 4).

These activities are often used when teachers recognise that pupils are not performing as successfully as they might. They are examples of assessment informing teaching: rather than ploughing on regardless, the teaching takes account of previous work and changes direction to meet a need. The following video sequence illustrates this well.

| Task 5 | Improving the writing of conclusions | 20 minutes |

Watch video sequence 12e and note how the science teacher involves pupils in improving their written conclusions. This illustrates a slightly different technique.

After watching the sequence, reflect on an aspect of work that some of your pupils do not do well. Use one of the techniques to plan part of a lesson, with the aim of enabling pupils to improve in this area. After the lesson, assess the outcome. How might you refine the technique still further? Did some pupils require more help than others? If so, how might this be managed? Consider these pupils as you work through the next section on peer and self-assessment.

4 Peer and self-assessment

Pupils are more likely to make rapid progress in their learning if they understand what they are aiming for – the intended learning outcome – and can assess what they need to do to achieve it. Peer and self-assessment are much more than simply marking their own or each other's work. In order to improve learning, it must be an activity that engages pupils with the quality of their work and in reflecting on how to improve it. Peer assessment provides pupils with valuable feedback, enabling them to learn from and support each other. It also adds a valuable dimension to learning: the opportunity to talk, discuss, explain and challenge each other enables pupils to achieve more than they can unaided. Self-assessment promotes independent learning, helping pupils to take increasing responsibility for their own progress.

Pupils do not become self-evaluative overnight. The development of peer and self-assessment takes planning, time, patience and commitment. When pupils don't understand the intended learning outcomes they find it difficult to move beyond the superficial. By planning and using a range of techniques, and by dedicating time to allow pupils to reflect on and discuss their learning, teachers can develop pupils' assessment skills.

The process of developing peer and self-assessment needs to be tackled in stages. In the beginning the pupils may need to have the process modelled for them. It is useful to have examples of work that demonstrate the intended learning outcomes, produced either by previous pupils or by yourself. These can then be discussed with the whole class, preferably on OHT or a whiteboard, so that you can model the approach before expecting pupils to assess either each other's or their own work. 'Thinking aloud' while critiquing can help pupils develop the necessary language and approach. Unit 6 Modelling will give you more detail about how to do this. Having demonstrated the process with an anonymous piece of work, the students can then begin to assess each other's work.

Reflection

This is a teacher talking about her experience of studying A Level English:

'I didn't manage to produce a grade A essay even once. Part of the problem was that I didn't know what one looked like and if I had asked to see one I would have been accused of cheating. I kept on producing those C grade essays and I didn't have a clue what I needed to do to get better.'

Reflect on your own experiences of learning. Were standards always made explicit for you? How can you help your students feel more secure about how they can make progress?

Task 6

Using criteria in peer assessment: four video case studies   30 minutes

Making standards explicit is key to unlocking understanding. Asking pupils to use common criteria to judge each other's work can do this. Video sequences 12f, g, h and i show four approaches to using criteria in different lessons: a Y8 RE lesson, a Y10 science lesson, a Y7 ICT lesson and a Y8 English lesson.

Pupils do not naturally find it easy to critique other pupils' work and they need to be taught structures of language that they can use. Encourage them to start with positive language, identifying where criteria have been met before discussing where things are missing and then making suggestions about what to do to fully meet the criteria. Stress the importance of evidence to support their judgements. The task below suggests some ways of doing this.

Task 7

Developing a language for peer assessment — 30 minutes

Decide on a lesson in which you are going to provide an opportunity for peer assessment. Will pupils be in pairs or small groups? Think about how you are going to introduce this strategy and about the language you want the pupils to use when discussing each other's work. Consider producing 'an ideal solution' or a set of progressive steps against which they assess and identify what they need to do to improve.

Plan an oral prompt sheet or a writing frame that will be given to your pupils to support this strategy. The following stems may be a useful starting point:

- you have met the criteria here by …

- this is your best sentence because …

- you could improve this example further by …

- you have not met this part of the criteria because …

- to reach the next stage you need to include more of …

Ensure that sufficient time is planned into the lesson to allow for discussion and subsequent action.

Make a note of how this activity went. How would you refine it to make improvements?

In its simplest form you can use self-assessment to ascertain levels of prior knowledge and pupils' perceptions of their own starting point. For example, you could begin a topic with a self-assessment activity that encourages pupils to think about 'where they are now' in their learning. A science teacher beginning a topic on digestion might begin by asking the pupils to assess their current understanding of some of the key vocabulary by 'traffic-lighting'. This can be returned to after the teaching input so that the pupils can see how they have made progress in a very explicit way. This type of self-assessment can take place at any point during the course of a lesson, or series of lessons.

In the classroom, teachers will need to:

- explain the intended learning outcomes behind each task;

- plan for peer- and self-assessment opportunities in lessons;

- train pupils over time to assess their own work and the work of others and develop an appropriate language;

- frequently and consistently encourage pupils' self-reflection on their learning;

- guide pupils to identify their next steps.

Pupils cannot actively engage in effective peer and self-assessment unless they understand the learning goals and the standards they are aiming for. Self-assessment is learned and developed through peer assessment, and doing this helps pupils learn a valuable skill that will serve them well throughout secondary education and beyond.

5 Providing feedback

Learners need information and guidance in order to plan the next steps in their learning. Oral and written feedback are closely interrelated and provide opportunities for teachers to identify learners' strengths and to give clear and constructive advice on which areas need improvement. A supportive classroom ethos is essential so that pupils feel safe to take risks, for example by giving speculative responses to challenging questions. Once teaching routinely provides good oral feedback, then it is possible to provide more informative and selective written feedback.

Oral feedback

Oral feedback is a powerful force for moving pupils on and will be the most regular and interactive form of feedback. It is both direct (targeted to individuals or groups), but also indirect (others listen and reflect on what has been said).

The main purposes of using different types of feedback are to:

- acknowledge what pupils have learned and encourage them to reflect on and extend their learning still further;

- recognise that pupils need time to reflect on their learning;

- encourage pupils to pose further questions to clarify or further develop their own or each other's thinking;

- encourage pupils to make next steps.

Teachers' comments should always be both positive – recognising pupils' efforts and achievements to date, and developmental – offering specific details of ways forward.

| Task 8 | **Considering some examples** | 30 minutes |

Consider the following examples of oral feedback. Place the numbers for each statement on the diagram on page 13.

1 Your long jump was poor. Put in more effort next go.

2 Your long jump has really come on. You may be in the team next term.

3 Your long jump was a disaster. You didn't touch the board, your legs were too straight and I can hardly make out your shoulders from your chin.

4 Your long jump was good but you should touch the board and keep your chin forward.

Task continues

5 Well done. Your long jump has really improved. To increase still further you need to push off from the board and keep your chin well forward. Try these two things next round and let's see if you can make five metres. You could soon get in the team.

The answers can be found on page 24.

Use a tape recorder or video camera to capture two or three episodes involving oral feedback in your classroom.

Use the diagram to analyse your responses. Is your feedback mainly positive and specific?

Identify any aspects of your feedback that you would like to improve and record your next steps.

Plan an opportunity to repeat the exercise in a few weeks to see if you have achieved your targets.

Oral feedback

Specific

L   J

–   +

K   J

Non-specific
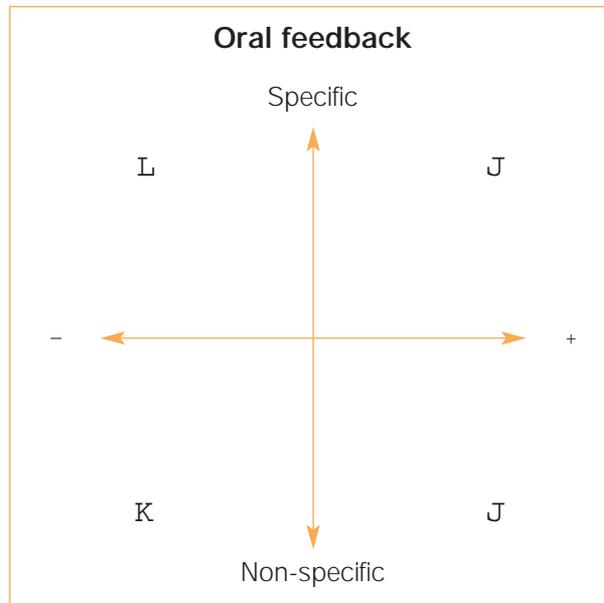
Oral feedback for different purposes

Teachers use different types of oral prompt for different purposes in lessons. The following chart shows ways of providing oral feedback that encourages pupils to develop and move on in their thinking and learning.

Feedback for different purposes	Examples of oral prompts	Examples of oral prompts observed in lessons
Correcting an error	Good try, but that's not correct. Actually it's …	If he's saying due to … is he describing … explaining?
Providing information	Yes, what you're talking about is called …	So these are all descriptions … this is telling you why, it's an explanation.
Appraising and praising	That would make sense, good thinking … Has anyone else tried something similar?	Let's just pull that … that's really important … thank you.
Challenging	Try that again. This time include/vary …	Do you agree with what he underlined?
Seeking clarification	What do you mean when you say it needs more detail?	So is using numbers not better than comparing two places?
Urging amplification, exploration or development	How might you take that argument even further? Which would be the best way to …?	What's different about this sentence from the one above?
Redirecting learning or activity	That's a detailed illustration. Move on to the explanation, as it is also important.	Now you've named places think about how you could compare them.
Focusing or orienting learning	All this is important but it's really your use of … that will really improve your work.	So she (Lucy) really focused you in on one thing you could use … actually using numbers.
Confirmation and moving learning on	Yes, that's right, now you can …	We're making quite a lot of headway here … does anyone have an even better sentence?
Crystallising steps	So spend a few minutes deciding on two changes you will make to your …	So her target would be to add numbers to her comparisons.
Distilling and summarising learning	Let's think about what we've learned so far. Firstly, we've found out …	So we've agreed that comparing is good. Using numbers to compare is even better.
Encouraging pupils to reflect	Let's just think about what we've discussed – is there anything else you might do?	I want you to read it carefully and say what you think is your best sentence.

Written feedback

Although most teachers mark pupils' work regularly and record marks, this information is not always used constructively to inform future teaching and learning. Teachers need to provide pupils with written feedback so that they recognise their next steps in learning and how to take them.

For written feedback to be constructive pupils need to be clear about what is expected of them. The learning objectives and learning outcomes need to be the reference point for a teacher's written feedback and need to be shared and made clear to pupils in advance of attempting a task. It is important to consider how prompt and regular feedback can be given that will encourage pupils to think about their work and the task.

| Task 9 | **Providing effective written feedback** | **20 minutes** |

Below are a number of teacher comments and some feedback criteria (A–D) to help you judge the helpfulness of the comments to the pupils. Decide whether the comments provide information to the pupil about:

A whether they are on the right track;

B their limitations (plus encouragement to correct the work);

C a way to improve their learning;

D a way to think through the answer for themselves.

1 You started off well. Unfortunately you have made the same error in the last three questions. Can you see what this is? You may find it helpful to go back to the grid method.

2 Your poem about copper sulphate was interesting. We need to discuss how you think copper crystals are made.

3 Attainment 3, effort 2. You have made good progress in your handwriting. Your spelling still needs work.

4 I think we need to talk about this work in more detail. Yet again you have not completed the work.

5 Well done – 1 merit.

6 A good 'best fit graph'. The conclusion clearly explains the relationship between the force and the extension of the spring.

7 There are a lot of inaccuracies in this work. Please check it through again.

8 This work shows you have clear understanding of finding the areas and perimeters. What strategies did you use to calculate the answers? What were the important steps for you?

9 You've plotted some interesting shapes. Well done!

10 You have included more adjectives, which help bring the character alive on the page, but your sentence structure is not as varied as John's. Experiment more by using complex sentences.

11 Cracking piece of work. I like the diagrams and the interesting way you presented the impact of man on the environment.

12 Keep it up!

13 I think you have copied all of this from the Internet.

14 Well done. Your presentation for Year 6 pupils was really exciting and engaging. Do you think the time transition would allow those who are not quick at reading enough time?

15 Comment inserted in a spreadsheet comment box on cell F5: 'I think you have used the wrong columns. To work out the ticket prices you would need to look at the costs of the production and how many seats are available.'

16 Wow! You have really put a lot of work into this – thank you. It is detailed and balanced and had me 'on the edge of my seat'. Did you learn a lot from it? The only thing I would change is the conclusion, which caught me by surprise because it did not seem to follow from what you had written in the main section of the account. Does the account need adjusting or the conclusion?

17 Although this is an interesting piece of writing, with an accurate storyline and creative use of adjectives, the paragraphing is very weak and that makes the whole account much less structured than it should be.

You will find the suggested answers on page 24.

Some of the comments are simply a teacher's judgement of a piece of work. Other comments ask further questions or invite dialogue. Some of the feedback gives specific advice for improvement and other comments indicate ways in which pupils could think a problem through for themselves. Which kind of feedback do you think pupils find most helpful? If good feedback usually requires further action from the pupil, what are the implications for classroom routines?

Task 10

Developing constructive written feedback   25 minutes

Select three exercise books that represent a range of achievement within a class that you teach. Read through the written feedback that you have given. Now read the following characteristics of constructive written feedback and traffic-light those statements in terms of how they reflect your own practice (red: rarely; amber: often; green: typically).

The written feedback:

- focuses on the learning objectives selectively;

- confirms that pupils are on the right track;

- stimulates the correction of errors or improvement of a piece of work;

- scaffolds or supports pupils' next steps;

Task continues

- provides opportunities for pupils to think things through for themselves;

- comments on progress over a number of attempts;

- avoids comparisons with other pupils;

- provides pupils with the opportunity to respond.

Feedback needs to scaffold learning and engage pupils in a dialogue about their work rather than allow them to make comparisons with other pupils. Research suggests that there are a number of negative effects when a classroom culture focuses on rewards, grades or marks. Pupils will sometimes avoid difficult or more challenging tasks because they risk failure or low marks. Comparison with other pupils' marks often leads to lower self-esteem and lack of confidence about ability. Pupils sometimes waste time trying to interpret the meaning of marks and grades rather than thinking about how to improve their work.

You may feel that providing feedback in this form could be time-consuming. This need not be the case. If you are clear about the success criteria before setting a piece of work this can greatly speed up the marking process and can also provide you with the likely comments. In video sequence 12g, the science teacher used GCSE grade criteria to generate the criteria for a written explanation on photosynthesis. Pupils were provided with this in advance of their homework, then during the following lesson used the criteria in a peer-assessment session. The teacher also used this set of criteria with another class to mark their work. Doing this enabled her to give feedback quickly and to signal which criteria had been met. Some teachers prepare slips with comments on in advance and place these in books as appropriate. Whatever method you may use, it is very important to provide pupils with opportunities to respond. In some cases this may involve re-drafting or considering what to keep in mind for the next similar piece of work.

6 Reviewing and reflecting on assessment

Assessment of learning, or *summative* assessment, tends to be carried out periodically, e.g. at the end of a unit or term, year or key stage. The teacher undertakes this kind of assessment to judge how well a pupil is performing. Conclusions are generally reported in terms of grades, levels or marks. These may be set alongside national standards so that a pupil, school or teacher can evaluate their own performance against that of others. This also allows schools to track performance over time.

Assessment becomes *formative* when assessment evidence is used to adapt teaching to meet the learning needs of pupils. Assessments in themselves are not necessarily inherently formative or summative – it is the process and how the information is used that is important. Thus, an end-of-topic test, where a student is given a level, would be regarded as assessment of learning only if that were the end of the process. If, on the other hand, the results of that test are used diagnostically to inform the next steps for the pupil, and the teacher takes account of this information in planning the next lesson, then one could describe this as assessment *for* learning.

Evidence suggests that regular classroom assessments, and the use of this assessment information to adjust teaching and learning, will have a positive impact on standards, particularly when combined with approaches which give useful formative feedback and model examples of the next steps in learning. By sharing expectations and targets with pupils, assessment of learning can contribute to assessment for learning. For example, pupils can be given the opportunity to:

- mark, moderate and review test papers;

- review their performance against the test's criteria and set personal targets;

- devise future test questions and the accompanying mark schemes;

- discuss what level descriptions or GCSE grade criteria mean in practice.

Task 11

Case study: discussing the meaning of level descriptions in music   **15 minutes**

In video sequence 12j the music teacher discusses with the whole class what the meanings of the lesson descriptions are and what else they would need to include in a piece of work to demonstrate a particular level. This could equally be carried out using GCSE grade criteria.

Arrange an opportunity during a future lesson to do this with one of your classes. How well can they articulate what is needed to attain a particular level or grade?

Reflection

- Do you always place tests or summative assessments at the end of a unit?

- What happens if assessments show that half of your class has not understood a topic thoroughly? Do you still move on to the next unit of work? How will you address their misunderstandings?

- What would happen if you placed the assessment at the beginning or two-thirds of the way through a unit and then acted on the findings?

- Have you ever provided pupils with their own responses to tests and accompanying mark schemes and discussed why certain responses are allowable and others are not? End of Key Stage 3 tests could be used in this way.

- Summative tests should be, and should be seen to be, a positive part of the learning process.

- Pupils should be engaged in reflective review of the work they have done to enable them to plan their revision effectively.

- Pupils should be encouraged to set questions and mark answers to help them, both to understand the assessment process and to focus further efforts for improvement.

- Pupils should be encouraged through peer and self-assessment to apply criteria to help them understand how their work should be improved.

Summary of research

Assessment for learning

Highlights of research findings in this area include the following work:

Inside the black box: raising standards through classroom assessment

The publication *Inside the black box: raising standards through classroom assessment* is an influential pamphlet that summarises the main findings arising from 250 assessment articles (covering nine years of international research) which were studied by Paul Black and Dylan Wiliam. The document is well known and widely used, and acts as a touchstone for many professionals in the field of assessment.

Assessment for learning: beyond the black box

This publication by the Assessment Reform Group follows up the work of Black and Wiliam and identifies five key factors:

- providing effective feedback to pupils;

- actively involving pupils in their own learning;

- adjusting teaching to take account of the results of assessment;

- recognising the profound influence assessment has on the motivation and self-esteem of pupils, both of which are crucial to learning;

- considering the need for pupils to be able to assess themselves and to understand how to improve.

The research also identifies a number of risks with regard to assessment:

- valuing quantity and presentation rather than the quality of learning;

- lowering the self-esteem of pupils by over-concentrating on judgements rather than advice for improvement;

- demoralising pupils by comparing them negatively and repeatedly with more successful learners;

- giving feedback which serves social and managerial purposes rather than helping pupils to learn more effectively;

- working with an insufficient picture of pupils' learning needs.

Working inside the black box: assessment for learning in the classroom

Working inside the black box picks up where *Inside the black box* left off. It sets out its main findings under four headings:

Questioning

- More effort has to be spent in framing questions that are worth asking.

- Wait time has to be increased to several seconds to give pupils time to think, and everyone should be expected to contribute to the discussion.

- Follow-up activities have to provide opportunities to ensure that meaningful interventions that extend pupils' understanding take place.

- The only point of asking questions is to raise issues about which the teacher needs information, or about which the pupils need to think.

Feedback through marking

- Written tasks, alongside oral questioning, should encourage pupils to develop and show understanding of the key features of the subject they have studied.

- Comments should identify what has been done well and what still needs improvement, and give guidance on how to make that improvement.

- Opportunities for pupils to follow up comments should be planned as part of the overall learning process.

- To be effective, feedback should cause thinking to take place.

Peer and self-assessment

- The criteria for evaluating any learning achievements must be transparent to pupils to enable them to have a clear overview, both of the aims of their work and of what it means to complete it successfully.

- Pupils should be taught the habits and skills of collaboration in peer assessment.

- Pupils should be encouraged to keep in mind the aims of their work and to assess their own progress to meet these aims as they proceed.

- Peer and self-assessment make unique contributions to the development of pupils' learning – they secure aims that cannot be achieved in any other way.

The formative use of summative tests

- Pupils should be engaged in a reflective review of the work they have done to enable them to plan their revision effectively.

- Pupils should be encouraged to set questions and mark answers to help them, both to understand the assessment process and to focus further efforts for improvement.

- Pupils should be encouraged through peer and self-assessment to apply criteria to help them understand how their work might be improved.

- Summative tests should be, and should be seen to be, a positive part of the learning process.

The underlying issues identified are:

- **learning theory** (teachers need to know in advance what sort of feedback will be useful; they need to understand how their pupils learn);

- **subject differences** (teachers need to have an understanding of the fundamental principles of the subject, an understanding of the kinds of difficulty

that pupils might have, and the creativity to think up questions which can stimulate productive thinking – such pedagogical content knowledge is essential in interpreting response);

- **motivation and self-esteem** (learning is not just a cognitive exercise: it involves the whole person – learning for learning rather than for rewards or grades);

- **a learning environment** – principles and plans (teachers need to have forethought of how to teach in a way which establishes a supportive climate);

- **a learning environment** – roles and responsibilities (teachers need to help pupils become active learners who can take increasing responsibility for their progress).

References

- Assessment Reform Group (1999) *Assessment for learning: beyond the black box*. University of Cambridge, Faculty of Education. ISBN: 0856030422.

- Assessment Reform Group (2002) *Assessment for Learning: 10 Principles*, available from aaia.org.uk.

- Black, P. and Wiliam, D. (1998) *Inside the black box: raising standards through classroom assessment*. King's College, London. ISBN: 1871984688.

- Black, P., Harrison, C., Lee, C., Marshall, B. and Wiliam, D. (2002) *Working inside the black box: assessment for learning in the classroom*. King's College, London. ISBN: 1871984394.

Next steps

This unit has explored an aspect of teaching and learning. You may wish to develop your ideas further, to consolidate, apply ideas in different contexts or explore an aspect in more depth and innovate.

Reflect

What have been the key learning points for you?

What has been the impact on pupils?

Here are some suggestions as to how you may develop practice further:

- Use the QCA website, www.ncaction.org.uk, to download pieces of work and allow pupils to 'mark' the work against level descriptions. Share QCA's critiques of the work with the pupils. Assess the impact of this approach on pupils' understanding of levels. Does this help?

- Build in opportunities within the GCSE course to use summative assessments in a formative way. For example, share the mark scheme for a past paper with the pupils and ask them to peer- or self-assess their work against the criteria, or allow pupils to generate 'test questions' and 'mark schemes' for one of the units of work. What impact does this have on pupils' understanding of the quality required?

- Following a session involving peer assessment, investigate what pupils think about the language they have been using to discuss each other's work. Which phrases are most helpful and why?

- For a future piece of written homework, in advance generate a set of criteria for the 'perfect answer'. Provide a copy to the pupils when they are set the task and use it to 'mark' the homework and provide feedback. Does this make marking quicker and more efficient? What might you do to improve further?

For further reading the following publications are recommended:

- *Assessment for learning: whole-school training materials.*
Ref. DfES 0043-2004 G.

- Assessment Reform Group (1999) *Assessment for learning: beyond the black box.* University of Cambridge, Faculty of Education. ISBN: 0856030422.

- Black, P. and Wiliam, D. (1998) *Inside the black box: raising standards through classroom assessment.* King's College, London. ISBN: 1871984688.

- Black, P., Harrison, C., Lee, C., Marshall, B. and Wiliam, D. (2002) *Working inside the black box: assessment for learning in the classroom.* King's College, London. ISBN: 1871984394.

- Black, P., Harrison, C., Lee, C., Marshall, B. and Wiliam, D. (2003) *Assessment for learning: putting it into practice.* Open University Press. ISBN: 0335212972.

- Sadler, R. (1989) 'Formative assessment and the design of instructional systems'. *Instructional Science* 18, 119–144.

Websites

- The Association for Achievement and Improvement through Assessment:
www.aaia.org.uk

- National Curriculum in Action:
www.ncaction.org.uk

Setting future targets

Having considered your next steps, you may wish to set yourself some personal targets to support your own continuing professional development. You could use these ideas to inform your performance management discussion.

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Setting your targets   40 minutes

When setting targets for the future you may want to discuss the possibilities with a colleague or your line manager.

Whatever you decide to do, you will need to consider the following.

- What are your objectives for the next year?

- What are the expected outcomes in terms of pupils' achievements?

- What strategies will you employ to achieve these outcomes?

- How will you track progress over the year?

- How will you know whether you have been successful or not?

Answers

Task 3

1, 3, 4, 7, 9 and 10 are expressed as learning objectives.

2, 5, 6 and 8 are expressed as activities.

However, with some rewording, the learning could be made explicit. In 6, for example, 'to debate whether King William deserved to win the Battle of Hastings', it is necessary to consider what the teacher intends to focus on. Are the pupils learning the skills of formal debate or is the intention that they articulate a persuasive argument? Alternatively, is it the case that the teacher wants the pupils to demonstrate a comprehensive knowledge of the events that led up to the battle? Whatever the case, the objective should be worded so that the focus is on the learning that will take place during the lesson and the learning goals that will be achieved.

Task 8

Specific negative: 3

Specific positive: 4, 5

Non-specific negative: 1

Non-specific positive: 2

Suggested answers for task 9

A: 5, 6, 9, 11, 12

B: 3, 4, 7, 13, 17

C: 10

D: 1, 2, 8, 14, 15, 16

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