

5: Improving student learning through assessment and feedback

“ For assessment systems to enhance learning – and not just measure it – students need to be at the centre of the assessment framework. To become lifelong learners, they need to be able to assess their own progress, make adjustments to their understandings and take control of their own learning. ” (OECD 2013, p 220).

Excellent schools give a great deal of attention to improving the quality of their assessment practices. Assessment is not only critical in measuring achievement standards. It also helps students understand their own strengths and limitations, and know what they need to do to improve. Because of its significance to learners, teachers and parents, it is important to have a clear assessment policy.

This chapter looks at assessment that is used to support learning. This includes feedback teachers give to students in day-to-day interactions as well as marks, comments and reports they produce. A section of this chapter looks at how teachers can provide valuable oral and written feedback to students. Feedback that teachers get from students' comments in class and work is critical in helping them understand how the learner is thinking. Assessment information needs to be recorded and tracked in a way that is meaningful.

This chapter suggests that criterion-referenced reporting against clear learning and assessment objectives is a good approach that helps make learning progression understandable. Teachers need to be sure they have a common understanding of assessment standards so we briefly consider standardising teacher assessments. Using assessment data is important for the school development planning process as well as reporting to parents and other stakeholders.

5.1 Developing classroom assessment practice

Assessment is central to the teaching and learning process in the classroom, not only to measuring student achievement and progress. The following different uses of assessment are often distinguished:

- **Formative** – assessment activities which are used primarily to help student learning by providing feedback during the learning process. This enables teachers and/or learners to modify teaching and learning activities to improve learning.
- **Diagnostic** – activities which identify learning difficulties or issues and indicate where help or change is needed.
- **Summative** – an assessment of learning that has taken place at the end of a course or unit of study. This is designed primarily to measure achievement but could also involve ranking, certifying competence or accountability.

Harlen (2012, p. 98) believes it is better to describe assessment purposes and practices as a dimension. At one end are informal formative procedures which directly influence the next steps in learning. These are characterised by immediate feedback as a normal part of classwork, and usually not planned in advance. This broadly corresponds to assessment for learning in the sense Swaffield (2009, p. 8) describes: “*Assessment for learning's prime concern is with the here and now of learning. It occurs in the flow of activity and transactions occurring in the classroom. The focus is on the learning of these students now, although there is also consideration given to their learning in the*

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future.” Formal formative processes are more structured. An example might be a brief test planned for the whole class, with feedback into the teaching of that class. Informal summative assessment might be a more structured process that is primarily used to monitor progress. Formal summative assessment would be a higher-stakes text or exam. The distinction between formative and summative is largely based on considering what the assessment is used for. In practice, summative assessments that are primarily designed to assess learning at the end of a learning episode can, and in many cases should, be used formatively as well.

A further important consideration is raised by Carless (2011). He points out that more ambitious interpretations of formative assessment aim to help students accurately evaluate their own work, develop motivation, metacognitive awareness, self-regulation and independence. He describes this as extended formative assessment. Restricted formative assessment, in contrast, has the more limited purpose of feeding back into the teaching and learning process relating directly to the course of study and assessment expectations.

Carless argues that how far the more ambitious extended aim can be implemented will depend very much on the school context and culture. Schools need to be sensitive to this:

“Although extended formative assessment is more theoretically desirable than restricted formative assessment, it risks being viewed by some teachers as too difficult to implement within their own educational setting because facilitating factors are not in place ... when pedagogy is dominated by testing then formative assessment needs to take credence of that reality” (Carless 2011, p. 107).

This is a very good example of how schools need to consider their own context in terms of prioritising developments. Consider the example of a school working in a culture where the existing pedagogy is predominantly direct, teacher-led instruction, and pressure on teachers and students is for immediate good test results. A more effective and realistic strategy will be to focus initially on restricted formative assessment and do this really well. This presents a win-win situation as the formative assessments will be designed to support learning that will result in good summative assessment performance. As assessments are designed to test a broad range of higher-order thinking skills, students will still need to understand the specific assessment criteria,

their application and their own performance in relation to this. They will at least start to develop a more sophisticated understanding of what constitutes excellence in a particular discipline and what they need to do to improve. Developing good restricted formative assessment practice over time will then make it possible for this to be more ambitious and extended in the future. Trying to move too quickly may alienate teachers and parents, and slow progress.

Assessment for learning (or informal formative assessment) involves activities that support the learning that occurs naturally in class. It is a continuous process and should be viewed as an aspect of effective teaching practice. More structured formative assessment activities and summative assessments that are also used formatively need to be regular and planned in schemes of work and lesson plans. Teachers always need to be clear about how they will review and use the resulting data before the assessment takes place.

5.2 Assessment policy

Because of its critical importance, a whole-school approach to assessment should be adopted that involves teachers, learners and, where meaningful, parents. This approach focuses on developing a clear understanding of the purposes of assessment and the values, practices and procedures the school uses.

Developing and implementing a whole-school policy for assessment will help to ensure that systems for assessing learning have an impact on the quality of teaching and learning across the school, and are understood by teachers, learners and parents. One important first step is to agree a common understanding of different types of assessment and how they can be used effectively to promote learning in each classroom. It may also be necessary and desirable to engage in further research and in whole-school training for the effective use of assessment to support learning.

An assessment policy should provide the structure for the school's approach to assessment. It will identify the framework through which learners' progress can be monitored, summarised, recorded and reported. It also needs to overlap with the school's policies for teaching and learning, and the policy and procedures for marking and reporting.

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A typical policy for assessment will include:

- a brief explanation of the purpose of assessment and uses of assessment
- a clear statement about what is valued in assessment – this should include reference to broader educational objectives, including the development of the Cambridge learner attributes
- what learners should expect from assessment
- planning for assessment
- assessment processes
- responsibilities (who needs to do what)
- guidance on marking and providing feedback to students
- guidance on reporting, providing feedback to students and parents
- the school's marking policy
- guidance on portfolios of work
- details of which assessment data will be shared with parents, in what format and how frequently.

The policy should also be accessible to key stakeholders such as parents, who will want to understand how their children will be assessed or evaluated (see Chapter 3 on school policies).

5.3 Supporting student learning through formative assessment

Well-designed and applied formative assessment has a significant positive impact on learners' motivation and achievement. It also supports their ability to work independently. In a good school, formative assessment will be embedded in day-to-day classroom practice. Where this is the case, learners have a clear understanding of what they are learning as well as the standards towards which they are working. There are frequent discussions about how students' work meets assessment criteria, both between the teacher and learners and between the learners themselves. Specific and clear feedback helps learners to understand and evaluate what they have done to meet the criteria so far and what they need to do next. Students are encouraged to become reflective, curious learners, confident in assessing their own and others' progress, knowing that they will be supported in their next steps to achieve the standards set.

Formative assessment activities will range from very informal but rich interactions, for example a student going over their work with a teacher, receiving verbal feedback, to more structured assessments, for example unit tests. Classroom assessment should be:

- **Relevant** – relate directly to the learning objectives and the course and syllabus standards.
- **Appropriate** – give the information that is required. Teachers will almost certainly need to use a variety of methods to assess different assessment criteria and learning objectives.
- **Fair** – assume that all learners can make progress, regardless of their starting point, and provide them with the opportunity to demonstrate what they know, understand and can do.
- **Reliable** – provide an objective and accurate check of learners' skills, knowledge and understanding at the point of assessment.
- **Informative** – establish where learners are in their learning, i.e. what they already know, understand and can do. This information should then be used to diagnose what each learner needs to improve and how the teacher can support this. Where this information is gained during a lesson, it may lead to immediate changes to the lesson plan. Or, where it is gained from a series of lessons or unit of work, it may lead to revisions in course plans or schemes of work.
- **Integrated into the lesson and teaching and learning cycle** – the reflection on learning and progress by learners and teachers will provide evidence that guides the next steps to be taken and provide motivation for future progress in learning.
- **Manageable** – assessments should be integral to classroom activities. The recording of these assessments needs to be time efficient and the information provided needs to be valuable for improving learning.

Table 6 provides examples of some teaching and learning strategies that support assessment for learning. In addition to ongoing feedback on class activities, assessment tasks need to be selected that provide an accurate understanding of learners' current strengths, limitations and needs. Teachers will need to collect assessment data from a range of appropriate activities and tasks – this will depend on the subject being studied and the level of the programme. These are likely to include class tests, student written work completed at home and/or in the classroom, student responses to structured

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questions, oral responses, project work, portfolios, presentations, creative work and exhibitions.

5.4 Using assessment data to improve learning

Using multiple sources of evidence/assessment data helps to 'triangulate' data. This means that evidence from different sources is compared to generate a richer and more accurate picture of students' understanding (see Figure 5). This can be particularly useful for developing hypotheses and educated guesses for what approaches may be most effective for the next stage of learning.

The two examples 5A and 5B illustrate how triangulating data can help teachers to identify students' needs and prioritise what to do next. Using summative test data formatively, to identify where learners performed well and where more depth of understanding is needed to improve attainment, helps teachers to recognise how they might need to adjust lesson plans, unit plans and schemes of work. Using a variety of data from classroom assessments as well, teachers can be more confident in deciding what needs to change in order to improve learning. Whenever changes to curriculum plans, or to teaching strategies teachers use to deliver those plans are made, it is important to review and evaluate the success of those changes.

Table 6: Examples of classroom practices and assessment in support of learning

Characteristics of classroom assessments	Teaching and learning strategies
Teachers recognise that assessment for learning is integral to and an essential aspect of teaching for learning. They understand that it provides learners with the skills and strategies to take the next steps in their learning and plan their schemes of work and lessons accordingly.	<ul style="list-style-type: none"> • Integrate assessment activities into schemes of work. • Plan each scheme of work, series of lessons and individual lessons backwards: <ul style="list-style-type: none"> – Identify what learners need to be able to do with what they will learn – the learning goals or priorities for this unit of work. – Decide how you will know that learners have achieved the learning goals set – the evidence that you need and the methods for gaining this. – Plan the learning experience – the scheme of work, unit plan, individual lesson, or the next episode in the lesson. – Plan the points for and methods of assessment.
Teachers share learning objectives (learning intentions) with learners.	<ul style="list-style-type: none"> • Share clear and age-appropriate learning objectives at the beginning of the lesson/series of lessons and, where appropriate, during the lesson. • Use these objectives as the basis for questioning and feedback during the lesson and at the end. • Evaluate learner progress against the learning objectives for assessment of learning and for informing the next steps for learning.
Teachers establish what learners already know through classroom activities that show evidence of learning.	<ul style="list-style-type: none"> • Refer to individual learner assessment data, including records of feedback on previous work and actions taken by learners in response. • Use a 'recall' question-and-answer session to check prior learning with strategies such as: <ul style="list-style-type: none"> – Each learner is provided with a mini white or blackboard so that they can all respond to a question at the same time when prompted. Teachers can see at a glance who has the knowledge and who needs further support. – "Here's the answer, what's the question?" e.g. "The answer is 42. What could the question be?" This strategy can quickly encourage learners to think more deeply and to make connections. – Use questions that require higher-level thinking and allow time for this thinking before accepting any answers, e.g. instead of "Draw an isosceles triangle", ask learners to "Draw four different triangles. Now explain what is similar and what is different between each of them". – Traffic lights or thumbs up to show recall and follow up with questions to check understanding.

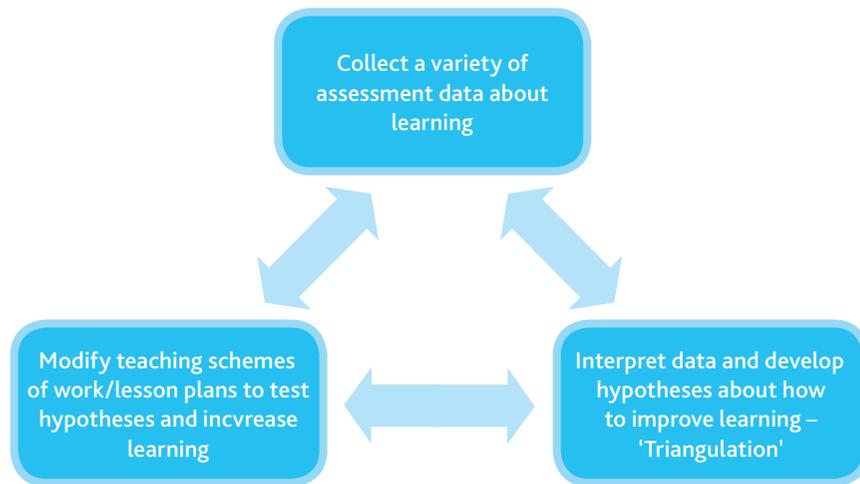
continued

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Characteristics of classroom assessments	Teaching and learning strategies
Teachers help learners to know and understand the standards they are aiming for by sharing assessment and success criteria routinely.	<ul style="list-style-type: none"> • Share examples of work that have met assessment criteria with learners and help them to understand why these are good examples. • Give learners clear success criteria related to learning objectives. • Model what a successful piece of work will be like, for example, complete an activity as a whole group. • Make sure that learners understand expectations of the presentation of work. • Display learners' work that is good 'in progress' as well as completed.
Teachers involve learners in self-assessment and peer assessment.	<ul style="list-style-type: none"> • Encourage learners to talk about what they have learned and what they found challenging in relation to the learning objective as well as the activities undertaken. • Give learners opportunities to work collaboratively and discuss their work, focusing on how they can improve. • Ask learners questions that encourage them to explain their thinking, e.g. "Can you tell the rest of us how you got to that answer?" • Make sure it becomes commonplace for learners to reflect on what they have learned. • Identify with learners the next steps in learning.
Teachers provide prompt oral and written feedback on learning that leads learners to recognise what they need to do next and how to do it.	<ul style="list-style-type: none"> • Value information on learner progress provided by oral feedback as well as written. • Make sure feedback is constructive, specific to each learner (does not make comparison with other learners) and identifies what the learner has done well in addition to what he/she needs to do to improve and how to do it. • Provide time and support for learners to act on the feedback given. • Identify the next steps in learning for groups and individuals.
Teachers promote learner confidence and make it clear that all learners can improve and will be supported to do so.	<ul style="list-style-type: none"> • Identify small steps for learners so that they can see their own progress and gain confidence as a result. • Create a classroom environment for learning that is supportive, where a wrong answer is turned into an opportunity for learning, where thinking and exploration is highly valued and where learners are encouraged to take risks.
Teachers reflect on, review and evaluate assessment data with learners.	<ul style="list-style-type: none"> • Choose learning activities that provide quality information, with an emphasis on process rather than just the outcome. • Encourage learners to reflect on the process of learning with other learners and with the teacher. • When planning lessons/units of work, build in time for learners to reflect on their learning, and to recognise where they are less secure. • Adjust schemes of work/lesson plans/resources in response to information provided by assessments. • Encourage learners to be owners of their learning.

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Figure 5: Using assessment data to improve teaching



The two examples 5A and 5B also illustrate the benefits of teachers working collaboratively in collecting and interpreting assessment data. Benefits include:

- refining and developing effective teaching strategies and practices over time
- receiving feedback from others about tentative conclusions reached and how best to proceed
- establishing common assessment practices
- establishing common expectations of learner performance
- developing understanding of the needs of individual learners and agreeing how to support identified needs
- recognising when it is not the teaching strategies that need to be adjusted but rather the curriculum plans that need improving, for example more time needs to be spent on reinforcing a skill, and when it is both.

Example 5A

A teacher shares the learning objective with her class: “We will be able to recognise layers of multiple meaning in a text”. She then hands out the short text that will be the focus for the lesson, which has some highlighted and annotated examples to help learners understand what they need to do. The teacher also discusses one of the examples and asks if everyone understands what they have to do. The teacher divides the class into small groups of mixed prior attainment, allocates each group a different paragraph from the text and tells them to highlight and annotate the text to demonstrate their understanding of the learning objective. Each group feeds back their points to the rest of the class and the outcomes are such that the teacher believes that each group has understood the learning objective and is ready to apply it to a different text.

However, an assessment of written work completed individually shows that most learners do not yet have sufficiently deep understanding and skill for them to take the next steps in their learning. When she shares the assessment information with other teachers who are teaching the same topic with the same grade, it is clear that most learners in other classes have achieved the learning objective and are ready to take the next steps in the scheme of work. The teacher forms a hypothesis as a result. She identifies that she needs to amend her teaching strategy for this learning objective to include more effective modelling and more prepared higher-level teacher questioning. After including these strategies in the next two lessons, she again assesses learners’ understanding and skill through asking learners to analyse two short texts from different media. This time, all learners in the class demonstrate that they are able to recognise layers of multiple meaning and have applied their learning to two, previously unseen texts.

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Example 5B

The teacher shares the learning objective with the class: "To understand the effects of water flow on the landscape" and uses enquiry-based, practical activities and some short film sequences to embed students' understanding and learning. In a question-and-answer session, learners demonstrate that they all understand and that most can apply what they have learned. The teacher then sets a second task to assess learners' progress towards achieving the learning objective. He asks learners to work in small groups to make a presentation for the whole class that demonstrates the effects of water flow on the landscape, and gives each group clear criteria for success against which they will assess themselves and be assessed by their peers. The self and peer assessments provide evidence of learners' understanding and ability to apply that understanding.

In the next lesson, the teacher sets a summative test taken from past external examination papers, which includes the topic studied. The written responses to the questions asked in this test reveal gaps in learners' knowledge and understanding that were not evident in the classroom-based assessments. When the teacher shares the assessment data and his experience with other subject teachers who teach the same topic and the same grade, their data and experience are similar. On this triangulated evidence, the team of teachers recognises that in-class assessment data provides evidence of progress against the learning objective set. This would suggest that it is not the teachers' delivery that is resulting in gaps in knowledge and understanding. They therefore form the hypothesis that the weak performance of learners in response to the external assessment task set suggests that the unit plan is not sufficiently detailed to support teachers in their delivery of each aspect of this unit of work and that they need to revise it.

5.5 Providing feedback on student work

Giving specific and clear feedback to learners on their work helps them understand their performance and what they need to do next. Feedback also helps students understand the standards against which their work is being judged, enabling them to become better in future at judging their own performance. A better term for the guidance given to students to help them improve their work is 'feed forward'. This is because it is about providing effective feedback to help the learner improve their next pieces of written work – to prompt them to think about 'What's next?' As Hattie and Timperley (2007, p. 86) argue, effective feedback should answer three questions for the learner: 'Where am I going?', 'How am I going?', 'Where to next?'

Feedback works in three directions:

1. **Teacher to learners** – the teacher gives guidance to learners about their current achievement and the next steps they need to take.
2. **Learners to teacher** – the teacher receives feedback from learners about their learning.
3. **Learner to learner** – peer assessment.

All of these are important. Peer-to-peer assessment against clear criteria can be highly effective in helping learners to understand what they need to do to improve their work as they analyse other learners' work. It is also important to appreciate that feedback is not a one-way process. John Hattie (2009) believes that the most powerful feedback is given from the learner to the teacher as it allows teachers to see learning through the eyes of their students. In the previous sections we considered how classroom assessment processes can support this direction of feedback.

Teacher feedback on student work needs to be:

- **Focused** – it should include two or three areas for improvement, referenced to the learning objectives.
- **Accessible** – it should be given in language that is appropriate for the age and competence of the learner. It should be unambiguous and clear.
- **Constructive** – it should include specific guidance for improvement and point towards the relevant criteria for success.

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- **Supportive** – it should be given in a positive tone and make clear the support that is available for the learner.
- Related to learning objectives and success criteria that have been shared with learners.
- **Challenging** – it should encourage the learner to think more deeply about what and how they are writing.

Giving oral feedback

Oral feedback is the most regular and interactive form of feedback, and can be a highly effective way of helping learners know what they need to do to move forward with their work. It can be targeted to individuals or groups but has the advantage that others can listen to what is said and learn from it indirectly. Oral feedback is usually spontaneous, but teachers should recognise that it needs to be detailed, personalised and provide the information learners need for it to be effective. So, developing approaches to giving oral feedback, and planning explicitly for its use within a supportive learning environment, are important to achieve its potential as a powerful tool for improving learning.¹

Oral feedback has some advantages over written feedback. It is:

- **Immediate and specific to the context** – misconceptions can be dealt with as they occur and in the context of the specific learning.
- **Dynamic and adaptable** – encourages discussion of ideas and can be adapted to respond to particular learning needs.
- **Ongoing** – a continuous and regular part of a lesson. It can also be used for transitions between learning episodes and to structure learning with reference to the objectives woven through the lesson.
- **Versatile** – questioning, modelling and explaining can all be used as strategies to provide feedback.
- **Stimulating and motivating** – learners enjoy immediate feedback and quick improvements can be made as learning is fresh.
- **Personalised** – facial expressions and positive body language enhance constructive advice.

The effectiveness of oral feedback can be improved by:

- making feedback both positive and developmental
- relating feedback to the learning objectives – and making sure the objectives and outcomes have been explored thoroughly when introduced
- establishing a supportive environment for learning so that learners want to share their thinking process with others and recognise that self, peer and teacher feedback helps them to identify ways they can improve
- encouraging learners to take risks and welcome challenge so that they do not always choose the easiest option and recognise that making mistakes provides learning opportunities
- planning learner groupings in advance to support the use of oral feedback, e.g. using guided ability groups for giving feedback on previously completed written work; using paired work for peer assessment followed by teacher feedback
- building in 'wait time' before and after questions or responses to encourage learners to think deeply and to expand on their response – and let learners know that you will do this routinely. Often teachers, or other students, talk on behalf of students who are being questioned if they do not respond immediately
- providing red, amber and green flashcards for learners to indicate the extent to which they understand the current learning objective
- encouraging other learners to reflect and question or comment before the teacher responds, then to use the appropriate specific learning outcomes/success criteria to assess their own and other learners' responses
- using prompts such as, "Can you say a bit more about that?" in order to make the process developmental and to modify feedback as appropriate
- targeting questions at specific learners and not just responding to students who put their hands up to answer, thereby ensuring everyone participates
- planning questions and tasks carefully to encourage higher-level thinking and responses so that feedback also contributes to progress in learning
- building in time for giving extended or structured feedback to individuals or small groups with similar needs, as appropriate

1. In their study of oral feedback that examined 3000 reports, covering nearly 13 000 learners, Kluger and DeNisi (1996) found that oral feedback raised achievement in 60 per cent of cases, but in 40 per cent was ineffective. The challenge for teachers is to make their spontaneous oral feedback more specific and to encourage deeper thinking and learning.

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- encouraging learners to reflect on the feedback then to act upon it in the lesson, e.g. through revising their work, and giving them time to do this
- checking back on actions taken in response to feedback to make sure that learners have understood and are making use of what has been said
- using learners' work to exemplify feedback (examples are often easier to understand), and encouraging learners to do the same
- thinking about offering coaching sessions to individuals or small groups to follow up feedback.

Giving written feedback

Traditionally, teachers spend hours marking learners' written work, correcting spelling and grammatical errors, and providing marks and comments. What matters is the quality and nature of this marking. The value of much marking in many classrooms is very limited. It can even be counter-productive if learners find it difficult to make sense of the grades and comments, and become discouraged and unsure of themselves. Learners also tend to focus more on the mark or grade and ignore comments made by the teacher.

When marking learners' written work, providing selective high-quality, detailed and informative marking will improve learning much more than superficial marking for all learners on every piece of work. As Black and Wiliam concluded (1998, p. 9):

"Feedback to any pupil should be about the particular qualities of his or her work, with advice on what he or she can do to improve, and should avoid comparisons with other pupils", and "Feedback has shown to improve learning where it gives each pupil specific guidance on strengths and weaknesses, preferably without any overall marks."

Principles and practices that define expectations for marking and written feedback need to be developed as part of the school's assessment policy. These should stress that:

- The learning objectives and learning outcomes should be used as the points of reference for written feedback and so should be shared and explored before learners attempt the task. Include assessment criteria in schemes of work and unit plans. Teachers must check that learners understand these.
- Feedback is given in relation to learners' performance against learning objectives and assessment criteria, and not the work of others.

- Written feedback should provide clear evaluation of learners' strengths and identify areas for improvement. It should prompt learners into deeper thinking and identify the next steps they should take.
- Teachers need to identify the next steps for learners. Focus on two or three points for improvement that will help to bridge the gap between present performance and future targets. This will require a good understanding of subject progression, described in scheme of work documents.
- Teachers will need to diagnose learners' misunderstandings and difficulties. These are likely to require further action and support, which they need to facilitate or seek extra help for.
- Agree the frequency of detailed written feedback in the whole-school policy and share the timings with all learners and parents. Informative feedback on selective student work is better than limited feedback on all student work. Subject areas need to identify the key pieces of work they will focus on.
- Agree how feedback on progress is shared with parents in the whole-school assessment policy.

How marks or grades are used also needs to be agreed. Black and Wiliam (1998, p. 9) believe that when pupils are given a mark, their ego responds and they react emotionally to the score. A lower than expected mark is seen as failure, whereas a better than expected grade leads to students feeling elated and keen to find out if they have done better than their friends. Either way, they ignore the teacher's comments. One effective practice that helps prevent this is focusing on assessment criteria, rather than providing overall marks. Assessment rubrics (tables showing how the assessment criteria relate to levels of student performance) can be extremely effective at showing what excellence looks like and how the student's work measures up to the different criteria.

A key consideration is developing learners' awareness about what they can do to improve their own work. This can be supported by providing opportunities for learners to think things through for themselves, by giving prompts or outlining the process they need to follow. Providing the time and support for learners to discuss, correct and develop their work following initial feedback is a valuable process. However, a balance has to be struck – teachers need to be careful that they are not directing students too much so that the final work is in fact their own.

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5.6 Recording and tracking progress and achievement

How and when assessment information is recorded should be a whole-school decision described in the assessment policy. Schools also need to decide how often data should be collected for tracking purposes (sometimes referred to as monitoring). It is important to note that recording and tracking is not the assessment itself but simply a means to help record and recall learners' progress and attainment. Assessment is the *“accurate and usable knowing and understanding of children, not the quantity or form of recorded information”* (Dubiel 2014, p. 9).

Deciding what to track and record is an important decision that needs to be clarified in the school's assessment policy. It will not be easy to measure everything that the school values, identified in the mission or vision statement. The danger with not monitoring or reporting on these broader learning objectives is that they will be valued less. Outcomes that are easily quantified, such as grades, may be prioritised. The challenge for senior leaders, teachers and learners themselves is to decide how they can monitor and track each aspect of learner progress towards objective learning goals, or targets – not just the knowledge and understanding that can be easily assessed through summative testing. The broader the range of assessment evidence, the more valid the judgements will be and the more accurate and valuable the progress tracking.

Another danger is placing too much emphasis on records and reports that compare students with other students (mentioned in the previous section). Students tend to focus on their position and grade rather than on what they need to do to improve. No matter where in a class rank order a student is placed, they can always improve. The highest-placed student may think they are doing very well, when it might actually be the case that they are very able and could do much better. Students lower down the class ranking order tend to be demotivated. The most important function of tracking is to serve the learner's needs by making sure that appropriate support is given for continued progress.

Tracking is useful for:

- providing information on what has been learned, what needs more attention and what needs to be learned
- supporting teachers to plan learning experiences and activities that will meet each learner's needs

- identifying when a learner is not making expected progress so that this can be addressed
- providing teachers and school leaders with information about the progress of individuals, classes, groups and whole grades
- providing teachers, learners, parents and school leaders with information about whether learners are on track to meet age-related expectations
- providing teachers, learners, parents and school leaders with information about whether learners are on track to meet objective learning goals mapped against skills and knowledge, and based on high expectations.

Learners should be encouraged to use assessment data to monitor their own performance and identify their next steps. When learners are supported to use their own achievement data and track their progress, it helps them to take ownership of their own learning and become more independent. They improve their ability to reflect on what they have learned and recognise what they need to do to achieve their next steps. They also feel more in control of their learning outcomes. Teachers can help learners to do this by sharing clear learning objectives, making assessment data easy to understand and use, explaining expectations and assessment criteria clearly and providing specific and constructive feedback promptly.

Recording progress and achievement: Criteria referencing

To track the progress of a class or an individual learner all teachers will have mark books or electronic records of assessments of work set. In many cases these records are numbers, grades or percentages that are of limited use to teachers, or learners, in identifying what students need to do to improve. Grades alone do not help identify the complexity of a task. If a student receives a grade A for a short factual test and a grade C for a long and demanding piece of work, for example an essay, how should the teacher aggregate these? Some recording systems simply treat them as the same and give the student a misleading average – in this case a B – as the final grade reported at the end of a period of learning. For this reason alone recording grades should be supplemented, or better replaced, by more detailed records relating to student performance against specific assessment criteria and learning objectives.

Cambridge teachers will become familiar with the assessment objectives and criteria used. These are described in syllabuses and mark schemes. Attending subject-specific training workshops is also important, particularly for teachers new to Cambridge.

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These will help them understand how the criteria are used to derive final marks and ultimately grades. Classroom assessment results should record students' performance and progress against the criteria, which the teacher can then track. Using assessment rubrics can be particularly helpful. These describe a set of criteria and standards linked to assessment objectives and describe different levels of performance in relation to these. The teacher can show the student their performance on the assessment rubric.

The teacher can record marks for performances against different assessment objectives and criteria, and then convert them into a grade at the end of a term or when reports are due. Students and parents will then receive marks relating to the assessment objectives and an explanation about how these are converted into a final grade. They will then understand how the final grade comes from a combination of assessment objectives and related criteria. In this way students can appreciate their relative strengths and weaknesses and understand what they need to do to improve.

Record keeping needs to be manageable, and performance does not need to be recorded after each activity in the classroom. Decisions about how much, as well as what, to record will be described in the assessment policy. It's vital to balance the right amount of information (avoiding excessive bureaucracy/time) with the need to monitor and evaluate the progress of each learner. Many schools will want to record the positive, constructive comments and advice teachers have given to each learner for improvement against the learning objectives and success criteria they have set. One way of doing this is for the teacher to keep a copy (paper or digital) of assessment rubrics returned to students which have been annotated by the teacher with comments.

There are a number of ways to record assessments. Some are more appropriate to specific subjects, and schools need to decide which to use:

- marks derived from assessment criteria relating to assessment objectives recorded in a teacher's mark book or electronically
- assessment rubrics with annotated comments
- a portfolio of a learner's work that has been assessed by the teacher
- the teacher's summary of marks, comments, next steps and advice for improvement
- a summary of achievement and progress, including marks and comments, against learning and assessment objectives. This might include comments by the learner. This would be completed periodically – monthly or termly, even weekly if this can be achieved without taking up too much time.

Processes chosen need to be easily understood by teachers, parents and learners and applied consistently across the school. Records need to clearly relate to what was assessed. They must also help judge achievement against clear criteria and help make comparisons between individual learners and between different groups of learners.

5.7 Standardising teacher assessments within subjects

Standardisation is a process designed to make sure that teachers' assessment of learners' work is fair, consistent and accurate. When used effectively, it leads to a shared understanding between all teachers in a subject area – they know what standards are required in that subject at a particular stage of learners' development, or their age. The most common method for standardising teacher assessment involves using samples of learner work. These help teachers agree on the levels of learning reached against the assessment criteria.

Creating robust systems for standardising teachers' assessment helps to make sure that:

- assessment of learning and attainment is accurate
- each teacher understands the criteria for assessment and applies those criteria fairly and consistently
- the approach to assessment within the subject is consistent as a result
- teachers, learners and parents have confidence in teacher assessments
- assessments are reliable and allow teachers, learners and parents to track learner progress with confidence
- target-setting processes can build on the reliability of learning assessments.

How can teacher assessments within subjects be standardised?

1. **Develop assessments and standards criteria collaboratively.** When writing schemes of work or unit plans, it is important to link assessment objectives with learning objectives and establish clear assessment criteria. Involving subject teachers, led by experienced colleagues, in developing and agreeing the standards criteria is a good first step. This will ensure that teachers understand and know the criteria, and agree the expectations of learner performance. Cambridge's published guidance helps with this.

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- 2. Planned standardisation sessions.** Giving teachers time to work together for frequent and regular sessions focused on standardising assessments helps to embed standardisation throughout the school. One effective use of these sessions is for subject leaders to photocopy two or three unmarked pieces of work and distribute a set to each subject teacher together with the assessment criteria. Each teacher assesses each piece independently, identifying the characteristics of the criteria that the work illustrates. The whole team then reviews and evaluates the assessments and comments, before agreeing the refined assessment.
- 3. Setting learners a common assignment.** One strategy that can be used for standardisation is for all subject teachers to set learners in the same grade the same assignment at the same point, for example, at the end of a unit. Teachers mark the assignments of their own teaching group (or of a different teaching group) against the agreed criteria. The subject leader or experienced teacher then checks the marking for consistency.
- 4. Use the experience and expertise available.** In many schools, there are some teachers who have years of experience of assessing learners' work in their subject. There may also be some who have had training or experience in examining or moderating outside the school, for Cambridge or for other examining bodies. Wherever there are teachers with such experience, they can take the lead and help other teachers in their subject by, for example, assessing and commenting on pieces of work collected from different learners across a grade or year group. These assessments can be reviewed, discussed, and, where appropriate, refined with the subject team. This will help teachers to understand and agree the standards expected and the feedback that should be provided to learners. They can then be used as exemplar pieces for future assessments.
- 5. Build up exemplary assessment material.** It can be very helpful to teachers and to learners to build up exemplars in the form of subject standardisation portfolios. These can include samples of assessed work, annotated with teacher comments that demonstrate which aspects of the work characterise the assessment criteria. Teachers can use examples from the portfolio with learners in lessons to help them understand how to meet standards set. They can also 'post' copies on the learning wall when appropriate.
- 6. Use subject development time to share examples of work.** One effective use of subject development time is to share examples of learner work and to assess these pieces collaboratively. This will help to reinforce a common approach and consistent application. It will also give each teacher confidence in their ability to assess in line with other subject teachers.
- 7. Develop a best practice guide.** To support and encourage a consistent approach to assessment across the school, as well as within subjects, it is worth considering developing a guide to good practice in assessment for all teachers. The guide could give detailed information on assessment processes in the school and in each subject area. It would also encourage teachers to share more detailed information than in the assessment policy.

5.8 Using assessment data for school evaluation and target setting

Assessment data should be used as one input into the school evaluation and development planning process. It can help schools understand their students, with a view to improving teaching and learning for all. Assessment data can compare performance over time and identify areas needing improvement. Target setting should be used to support whole-school, subject, and teacher plans to improve learners' performance. This should include:

- using quantitative and qualitative assessment data to focus plans on raising learner performance
- making sure learners' attainment is built upon, with a high level of value added at each stage
- identifying underperformance (of learners or subjects or grades) and focusing teaching on addressing this
- supporting improved learning outcomes for underachieving groups of learners and/or individual learners, and for extending high-performing students.

Curricular target setting helps to achieve this through focusing on areas of the curriculum that need development and setting targets for improved student learning. A curricular target expresses in words a specific aspect of the curriculum as a focus for improvement. It is supported by data. Targets may relate to groups of learners, a class or a whole grade, and be established over medium or longer-term horizons. The target

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might focus on quantifiable outcomes, for example: '100 per cent of Grade 11 learners will achieve Cambridge IGCSE English First Language A*–G; 70 per cent will achieve A*–C'. Or, it might refer to more qualitative outcomes, for example: '90 per cent of Grade 7 learners are able to select and justify the appropriate software for presenting information'.

Targets need to be translated into meaningful actions. This will make sure it is clear how they will be achieved and who is responsible, as described in Chapter 2. They will also need to result in changes to the planned written curriculum, schemes of work, and be appropriately resourced.

5.9 Using assessment data to report to parents and other stakeholders

Reports for parents

A school's stakeholders are, in the broadest sense, anyone who has an interest in the school and what it does. Beyond learners, teachers and parents, the governing board and/or school owners will want to know how well the school is doing. The reporting policy, which should be part of (or cross referenced with) the assessment policy, will clarify how reporting will operate. It is important to question the purpose and audience for reports when deciding how they should be designed.

Parents' main concern will be to understand how much progress their child is making. They want to see their child's achievements over the period, and compare their performance to others in the year group and against national and international standards and benchmarks. They will also want guidance on what they, as a parent, can do to help their child improve. Cambridge schools are expected to ensure that parents, as well as learners, understand the curriculum. It is equally important to make sure that parents are involved in and understand the progress that their children are making in school, both academically and more broadly.

As parents will want information related to their own children, the subjects they take and the teachers who teach them, the report will be focused on the individual learner. In addition to reports on individual subjects, include an overall summary commenting on progress across the curriculum. This may be provided by the class or grade teacher and endorsed by the principal. For the report to promote learning, this needs to be

followed by advice and guidance for the learner on what they need to do next to improve further. If the assessment policy is being effectively implemented in classrooms, these 'next steps' will not be a surprise to the learner – they will be taken from the most recent feedback given by and discussed with the teacher.

If they have a report that gives sufficient and quality information, learners and parents will be able to ask key questions at face-to-face meetings or through conference telephone or video calls. For example, they will be able to check that a teacher is providing good enough support for a learner to make good progress in a particular subject. If a learner is not doing as well in geography as in history, the learner and parent should have that information. They can then try to find out why that is the case and what the teacher and school are doing to improve the situation. In other words, they can hold the teacher and the school to account.

Reports for the governing board

The governing board and/or owner will want to know how well all students are doing. They may well be the first to congratulate the school on its successes. They may also be ambassadors for the school to the local community and beyond. However, they should also challenge the school on whether or not it is providing an excellent education. Reports to governing boards should provide them with the information to do this. Even if the board is not interested in too much data, the school's senior management (as part of the self-evaluation process) should be. Data should allow for comparisons across grades and over time – for example how well learners in Grade 10 are doing in mathematics compared with their performance in physics. It might be of interest to compare whether boys are making as much progress as girls in each grade. If your assessment data is recorded electronically, it should be straightforward to compile the data. The school, and its governing board, might also be interested in comparing attainment against local, national and international standards.

A good report for stakeholders should include all the information that the reader will want to know and understand. It should be brief and to the point.

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Data alone will not answer all the questions that stakeholders may have. For instance, a member of the governing board might notice that the attendance of learners in Grade 6 was better in term 3 than term 2. What they cannot tell is why this might be the case and, most importantly, what the school is doing to prevent the same issue arising in the next academic year. It is therefore important that data is accompanied by an analysis of what it is suggesting. The reader can then form a clear picture of what is going particularly well in the school and where there are areas of concern. Often too much importance is attached to performance in examinations. This can vary from cohort to cohort. Value-added measures are more reliable and helpful measures of progress over time.



Table 7: Some principles for reporting to parents

1. Make sure that the report is easy to understand. Use plain, everyday language. Avoid using technical terms that are only familiar to teachers.
2. Summative grades or marks are not informative unless they are accompanied with an explanation of what they mean a learner can do. It is good to:
 - a. include objective information about what has been taught
 - b. summarise learners' current knowledge, skills and understanding
 - c. include areas for development (specific next steps or targets)
 - d. consider, where relevant, referring to a portfolio of work that can be seen and discussed at a face-to-face meeting and/or include scanned or word-processed pieces of assessed work.
3. Show what progress a learner has made over the period since the last report (achievement). Focus on learning and progress rather than judgements.
4. Include what is expected of learners at a particular grade level. This will help parents check how well the learner is doing in comparison with others in the same grade.
5. Provide information about all areas of the learner's development. How well are they progressing socially as well as academically? Do they have the skills to work on their own? Can they concentrate for extended periods of time? Do they work and interact well with other learners? Do they have positive attitudes to learning and behave well?
6. Recognise effort and levels of engagement, as well as attainment.
7. Make it clear what parents can do to support their child's learning.
8. Include what teachers are doing and plan to do to support the learner(s) to make good progress.
9. Include data for attendance and punctuality.
10. Provide an opportunity for a face-to-face or video-conference discussion of learners' progress and of this report.