

Assessment

Objectives

By the end of this session teachers will:

- understand the nature of formative and summative assessments;
- have begun to plan assessment activities to incorporate into day-to-day lessons.

Resources

For the trainer

- Computer with data projector, Microsoft PowerPoint and Presentation 10.ppt
- Whiteboard or flipchart
- Spare copies of the evaluation form for Day 3
- *Sample lesson plans for mathematics: Grades 1 to 12*
- *Curriculum Standards for mathematics: Grades K to 12*

For each teacher

- *Teacher's pack*
Evaluation form for Day 3
- *Sample lesson plans for mathematics: Grades 1 to 12*
- *Curriculum Standards for mathematics: Grades K to 12*

Session outline

Assessment for learning Slides 10.1–10.3	Whole group presentation and discussion Task 1: Providing feedback	15 minutes
Planning assessment activities 1	Whole group presentation Task 2: What counts as an assessment activity? Task 3: Studying a lesson plan	25 minutes
Recording achievement and setting targets Slides 10.4–10.5	Whole group presentation and discussion Task 4: Setting targets	15 minutes
Planning assessment activities 2	Task 5: Planning for implementation Paired work	20 minutes
Conclusion	Summary	5 minutes

Assessment for learning

15 minutes

Explain that this session is about assessment for learning and not about tests. It will focus on how to develop activities for assessment that will inform the planning cycle and help raise achievement. Use **slides 10.1 and 10.2** to introduce the session's objectives and define the purposes of assessment.

Before the session starts, brief any interpreter about the key points of the session.

Load **Presentation 10.ppt**.

Objectives

By the end of this session you will:

- understand the nature of formative and summative assessments
- have begun to plan assessment activities to incorporate into day-to-day lessons

10.1

Purposes of assessment

- diagnostic
- formative
- summative
- evaluative

10.2

Make these points.

- Diagnostic assessment finds out what students do not know. It is used by the teacher to inform planning and by the student to seek help.
- Formative assessment finds out what students can do with and without help from the teacher. It is used by the teacher to inform planning and by the student to set targets.
- Summative assessment finds out what students can do independently at the end of a period of teaching. It is used to measure progress and inform teachers, parents and others about the achievements of the student.
- Evaluative assessment can be a combination of all three above. It is used to evaluate the teaching and learning process. It can be used to compare teachers, students, classes and schools.
- Assessment for learning primarily uses diagnostic and formative assessment.

Explain that research indicates that improving learning through assessment depends on some key factors. Show **slide 10.3**.

Evidence from research

Improving learning depends on **five key factors**:

- provision of effective feedback to students
- the active involvement of students in their own learning
- adjusting teaching to take account of results of assessment
- a recognition of the profound influence assessment has on students' motivation and self-esteem
- the need for students to be able to assess themselves and understand how to improve

10.3

Background notes for trainers

- Students need feedback that will help them move on in their learning. Too much attention paid to providing marks or grades can lower students' self-esteem. It is better to provide advice and help for improvement.
- Students are more likely to respond to assessment if they have been actively involved in the process. They need activities that will give them time to reflect on their own learning so that they can set themselves targets for improvement.

- When assessment activities indicate that students are competent in a subject, teachers need to make adjustments to their teaching. Learning is only taking place when the teaching moves ahead of development. However, when assessment identifies gaps in learning, teachers need to plan additional teaching to take account of students' needs.
- Assessment often takes the form of asking questions verbally. Poor questioning techniques can lead to students losing confidence and subsequently their motivation and self-esteem.
- Students need assistance in how to assess their own learning and how to set themselves targets. Taking ownership for their own learning is a key factor in raising achievement.

Task 1: Providing feedback

Ask teachers, in small groups, to consider the first point about giving effective feedback and ask them how they provide feedback to students. What form does it take? Is it oral or written? Is it planned for or does it happen by chance? Allow 4 to 5 minutes.

Take feedback to share ideas around the group.

If possible, the groups should include teachers from different schools.

Planning assessment activities 1

25 minutes

Explain the importance of planning lessons to include activities for the purpose of assessment. At the start of any topic it is essential to identify any gaps in knowledge as well as finding out how competent students might be. The pace of a lesson will be determined by the teacher making adjustments to take account of how well the students are responding.

Task 2: What counts as an assessment activity?

Ask teachers, in small groups, to consider what assessment activities they do as part of their everyday teaching.

Take feedback to share ideas around the group. Write teachers' ideas up on the flipchart. Add the following to the list if they have been omitted:

- observation of students as they work;
- conversations with students;
- listening to students describing and explaining mathematics;
- written and verbal questions;
- marking written work;
- tests.

Explain that the purpose of assessment for learning is to find out what students can do on their own when they are working independently. A second purpose is to find out what they can do when they are working in pairs or groups or with help from the teacher. Teaching students with at least some level of competence is different from teaching students with no knowledge, skills or understanding.

Task 3: Studying a lesson plan

Refer teachers to lesson plan 7.1 in the *Sample lesson plans for mathematics: Grades 1 to 12*.

For primary teachers, choose a different lesson plan but use it in a similar way.

Take them through the lesson plan step by step to show how activities have been designed with assessment in mind.

- Objectives are shared with the students at the beginning of the lesson to enable them to understand the lesson's purpose and to have something by which to measure their success.
- The starter activity has been designed to find out whether students are beginning with sound knowledge of prior learning. Look at the standards for Grade 6 and see what students ought to know on the subject of percentages. See how the questions have been framed to check that knowledge. Each set of questions begins with a teaching point so that students do not have a cold start. Students use mini-whiteboards so that the teacher can check every student at a glance.

Decision point 1: If students demonstrate a lack of knowledge at this point in the lesson the teacher will have to do some further teaching or revision to ensure that the rest of the lesson can build on strong foundations. *All* students should be able to do this early work before moving on.

- Note that the main teaching activity is divided into sections. Each section involves students in responding to questions and discussing the methods used.

Decision point 2: By observing students and listening to their responses the teacher will need to decide for each section whether the work is (a) too easy, (b) just right, or (c) too hard, and adjust the pace and content appropriately.

- Further related activities should be set according to the teacher's judgement on how well the students are doing.
- The consolidation part of the lesson is crucial to ascertain whether the students have understood the objectives. Consider whether the questions are suitable. What further questions might you ask?

Decision point 3: Consider whether the students are ready to move on to the next stage or whether they need further reinforcement.

Recording achievement and setting targets

15 minutes

Teachers may collect a mass of information on their students without making use of it to improve learning. Use **slide 10.4** to explain what teachers need to consider.

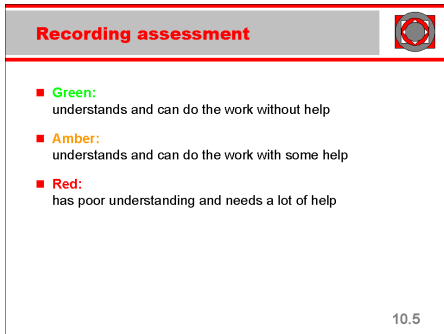
Points to consider

- How will you measure achievement?
- How will you record achievement?
- How will you involve your students in self-assessment?
- How will you use assessment records to help set targets for learning for individual students or classes?

10.4

Explain that it is not expected that teachers will answer these questions at this stage but that they will go away and discuss ideas with colleagues. Remind teachers that the more students involve themselves with the process, the greater will be their understanding of how to improve their own learning.

In addition to the usual way of awarding marks and grades, one idea that has been used successfully by teachers and students is a traffic light system. During the consolidation phase teachers and students consider the lesson objectives and decide which colour to assign each student, using the criteria on **slide 10.5**.



If colours are recorded against a list of students it will provide a quick visual image of overall attainment. This will help teachers with their planning. Teachers can also compare their assessment of the student with the student's self-assessment.

Task 4: Setting targets

Explain that it helps students of any age to be set a small number of specific targets for their learning over the next few weeks. Ask teachers, in small groups, to consider the ideas that have just been considered and to discuss how they might set targets for individual students. For example, they might write comments in books or give verbal feedback on what students need to do to improve their work. They may also want to set targets for the whole class. A further point to consider is how students might set targets for themselves.

Take feedback to share ideas around the group. Write teachers' ideas up on the flipchart.

Planning assessment activities 2

20 minutes

Task 5: Planning for implementation

Refer teachers to the sample lesson plans. Use lesson 2.1 for primary and lesson 9.2 for secondary. Show **slide 10.6** and ask teachers, in pairs, to go through the lesson plan and do the tasks set on the slide.

Study the lesson plan and ...

- use the **standards** to decide what students should already know
- study the **starter activity** to see how it is used to assess prior knowledge
- study the **main activity** and consider how the teacher can assess as they teach
- look at how the **consolidation section** checks whether the objectives have been met

10.6

Take feedback to share ideas around the group.

Summary

5 minutes

Ask participants the meaning of:

- diagnostic assessment;
- formative assessment;
- summative assessment;
- evaluative assessment

Highlight the importance of using diagnostic and formative assessment as an integral part of teaching.

Suggest that teachers follow up this session after the end of the workshop by:

- studying the sample lesson plans in more detail to see how they have been designed to include assessment activities; and
- discussing with colleagues how they will record students' achievement, involve students in assessing their own progress and setting targets for students and classes.

Round off the day. Remind everyone that they will need to bring the *Teacher's pack* to Day 4, and their scheme of work and main textbooks. They will also need examples of lesson plans that they have developed themselves (one per teacher up to a maximum of three per school group).

Thank everyone for their contributions during the day. Invite them to complete the evaluation form for the third day and to give it to you before leaving.