THE REPUBLIC OF UGANDA

Ministry of Education, Science, Technology and Sports

Lower Secondary

Curriculum

Assessment Guidelines and Guidance

NCDC
NATIONAL CURRICULUM DEVELOPMENT CENTRE

School-based formative assessment

This booklet sets out guidance for schools and teachers on making assessments in support of the new national curriculum, and focuses on the school-based, formative assessments that are made as part of the ongoing teaching and learning process.

The new curriculum sets out clear 'Learning Outcomes' that focus on deeper learning, higher order thinking and generic skills. This booklet will help teachers make assessments in these terms.

Contents:

"Assessment is the process of gathering and discussing information from multiple and diverse sources in order to develop a deep understanding of what learners know, understand, and can do with their knowledge as a result of their educational experiences; the process culminates when assessment results are used to improve subsequent learning."

Assessing Learner Learning: Huba and Freed 2000

1.   What are the new expectations for learning?

The new curriculum sets new expectations for learning. There is a shift from Learning Outcomes that focus mainly on knowledge to those that focus on skills and deeper understanding.   The new Learning Outcomes require a different approach to assessment.

Knowledge can be assessed through written tests, but the assessment of skills and deeper understanding requires different approaches. Because of this, the role of the teacher in assessment becomes much more important. The teacher's role is not to write tests for learners, but to make professional judgements about learners' learning in the course of the normal teaching and learning process.

This booklet sets out how this should be done, and gives guidance on using the new approaches.

2) What is School-Based Formative Assessment?

Assessment is the process of finding out what a learner has learned. When this is carried out at the end of a year or semester, it is called "Summative Assessment" because it sums up how well the learner has done.

However, it is much better to find out how well a learner has done **before** the end of the year, because it is too late to do anything about it when the year is over.

It is most helpful for the teacher to know how the learners are doing during the course of the year, rather than waiting to the end. That way, the teacher is able to use assessment to decide what a learner should learn next, adjust their teaching to the learners' learning, help the learners as they go along, and so teach more effectively. This form of assessment is called "Formative Assessment".

> Formative assessments are ongoing, and part of the teaching and learning process

Teachers carry out formative assessments all the time as a natural part of their teaching. They ask questions, mark learners' work, and observe their learners in the process of learning. These everyday formative assessments are not necessarily recorded, but they help teachers to understand how well learners are learning and so to react to the learning needs of their learners.

We talk about "School-based" formative assessment because the assessments are made by the teacher as part of their work, and do not rely upon externally set tests or examinations. They are sometimes referred to as "Assessment for Learning" (AfL) or even "Assessment as Learning". These names suggest that assessment is very much part of the learning process, and an integral part of curriculum delivery.

The root of the word "assessment" is from the Latin *assidere*, which means "*to sit beside*."

The most effective formative assessments are "criterion-referenced". That means that the learners' learning is assessed against a specific criterion, which is usually a description of what is to be learned. This is much more valid and useful than giving a numerical mark (for example 8 out of 10), a position in the class or a grade (A, B or C etc.). These numerical marks, positions or grades are called "Norm-referenced". This norm-referenced information is useful for putting the learners into rank order, but not very helpful in deciding what they need to learn next, or what they need to do to improve, or how they need to be helped. For this, we need formative assessment information that is based on clear criteria.

Where we find these criteria, how we make these assessments against them, and what we do with this information once the assessments are made is what this booklet is about. But first we need to look at how it all fits together.

> Written tests made up by teachers are probably the least effective of all forms of assessment. They should be avoided.
>
> Prof Mick Waters

3) What is the Cycle of Assessment?

If formative assessment is to make a difference to teaching and learning, then teachers must use the information they gain from assessment to make some change to the teaching and learning process. If teaching and learning stay the same, there would have been no point in carrying out the assessment. The changes that can be made include decisions about:

- What needs to be learned next
- Whether an element of the syllabus needs to be taught again in a different way
- Changing teaching approaches if necessary
- Identifying learners who need more support, or who are making exceptional progress
- Enabling learners to understand what they have to do to improve

The process of teaching, making formative assessments and then changing the teaching and learning in some way can be seen as a cycle:
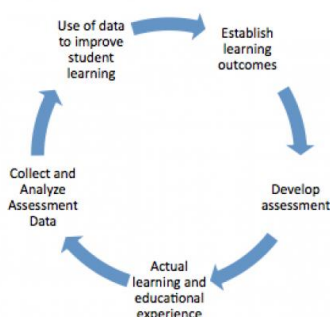
The formative assessment cycle

It is the use of the assessment data within this cycle to improve learner learning that is key to the success and impact of formative assessment.

There are five steps in the cycle shown above. This booklet focuses on three of these, and gives guidance on how to:
- Develop assessment
- Collect and analyse assessment data
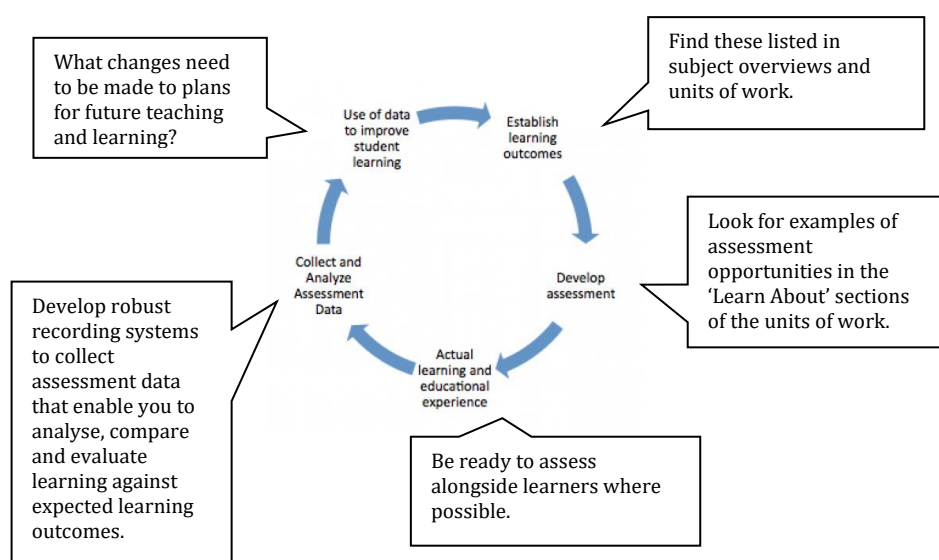- Use data to improve learner learning

The other two steps are fairly straightforward:
- Establish learning outcomes: this has already been done in the syllabuses (see Section 3 below)
- Actual learning and educational experience: are the lessons and other learning experiences that take place in school.

It is this cycle that enables formative assessment to impact on learning:
- The syllabuses set out the learning outcomes
- The lessons seek to achieve these outcomes
- Assessment finds out whether or not the outcomes has been achieved
- This information guides the next steps in learning and so sets new learning outcomes

And so the cycle goes round again.

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What changes need to be made to plans for future teaching and learning?

Find these listed in subject overviews and units of work.

Use of data to improve student learning

Establish learning outcomes

Collect and Analyze Assessment Data

Develop assessment

Look for examples of assessment opportunities in the 'Learn About' sections of the units of work.

Develop robust recording systems to collect assessment data that enable you to analyse, compare and evaluate learning against expected learning outcomes.

Actual learning and educational experience

Be ready to assess alongside learners where possible.

Formative assessment involves using all parts of the cycle.

4) Where do we find the expected learning?

In the new curriculum, the syllabuses set out the overall "Competency" and the more specific "Learning Outcomes" for each topic. The example below is from the S2 English Topic 2.6 on Tourism and maps. It can be seen that there is an overall statement of the intended learning in the Topic (the "Competency"; in this case, *"Learners should be able to give and follow directions to a given tourist site; research, read and talk about a visit; and understand the importance of tourism."* This is the key statement in assessing learning in the Unit.

This overall statement is supported by more detailed 'Learning Outcomes'. These are the criteria that are used to help make a judgement about the overall statement.

The "Sample Assessment Strategy" provides contexts in which the assessments can be made as part of the teaching and learning process. It also provides some help in applying the criteria; for example *"look for accurate use of facts, ability to describe and use of grammar".*

English. Senior 2 Topic 6: Tourism and maps

LEARNING OUTCOMES The learner should be able to:	SUGGESTED LEARNING ACTIVITIES	SAMPLE ASSESSMENT STRATEGY
a) understand brochures, guidebooks and other publicity materials and information in in digital format about tourism. (u) b) Use descriptive words (s) c) Use compound words (s)	**Ask learners to:** * Read and analyse local and national tourist websites, guidebooks for travellers/walkers and advertisements * Make a note of the types of information provided to tourists for different types of holidays * describe an ideal holiday and the special information required to choose it, using descriptive and compound words.	• When reading and researching tourist websites, assess learners' ability to find relevant and specific information, interpret map symbols and identify the language used for directions. • In role-plays, note learners' creativity and problem-solving skills as they give and follow directions and overcome differences between their planned and actual trip. • In learners' tourist publicity products, look for creativity, accurate use of facts, ability to describe and use of the grammar for this topic.
d) Understand texts, keys and scale on major maps and other materials related to tourism, (u)		• Assess learners' problem-solving skills as they plan a trip and try to foresee what could go wrong.

With these criteria, there is no need for tests or for special activities in order to assess learners' learning. Assessments made by teachers against these criteria will become part of the normal, everyday teaching and learning process. It will be "**Assessment for Learning".**

This form of assessment, made in the actual context of the learning is often referred to as "Authentic Assessment" and is considered much more valid and valuable than setting written tests.

> Assessments will be made by teachers in terms of the Learning Outcomes of the syllabuses, and in the context of the learners' learning.
> .

5) How do we use the "Learning Outcomes" to make assessments?

To make the overall judgement about the competency, teachers need to look at the "Learning Outcomes".   In the above example from English:

Do learners understand:
- brochures, guidebooks and other publicity materials and information in in digital format about tourism? (u)

Are they able to use:
- descriptive words? (s)
- compound words? (s)

Do they understand:
- texts, keys and scale on major maps and other materials related to tourism? (u)

To help make each of these assessments, teachers need to look at the "Sample Assessment Strategy". For example, *When reading and researching tourist websites, (are learners able) to[1] find relevant and specific information, interpret map symbols and identify the language used for directions?*

Using these criteria to make judgements is a much more valid and "authentic" method of making assessments than a written test.

> Formative teacher assessments are <u>criterion referenced</u> against the Learning Outcomes of the syllabuses.

You may have noticed that the "Learning Outcomes" have "u", "k" ,"s" or "a" against them. What does this mean?

6) What is the difference between knowledge, understanding and skills?

The "Learning Outcomes" in the syllabuses are set out in terms of:
- Knowledge (k)
- Understanding (u)
- Skills (s)
- Attitudes (a)

This is what is referred to by the letters *k,u,s & a* in the Learning Outcomes.

It is not possible to assess attitudes in the same way as knowledge, understanding and skills because they are more personal and variable, and are long-term aspirations. This does not mean that attitudes are not important. It means that we must value things that we cannot easily assess.

So this guidance booklet focuses on knowledge, skills and understanding. Each has its own implications for learning and assessment:

Knowledge	The retention of information
Understanding	Putting knowledge into a framework of meaning – the development of a 'concept'.
Skill	The ability to perform a physical or mental act or operation

So, to assess each of these we need to look for different things.

Knowledge is the easiest to assess because it is fairly straightforward to find out whether or not a learner has retained some information: a simple questing can usually find this out. We ask them to name something, or state something, or label a diagram. For example:

1. Name the capital city of Kenya
2. Label the parts of a flower
3. State the elements found in water

Assessing deeper understanding is much more difficult, so we usually ask learners to explain, compare or outline a process. This will give us some idea of the extent of their understanding. For example:

1. Outline the process of photosynthesis
2. Explain what is meant by 'metabolism'
3. What is the difference between current and static electricity?

Skills are the ability to perform so we shall always be looking for some action on the part of the learner: are they able to do something, can they carry out an operation? For example:

1. Calculate the area of a circle with a diameter of 5cm
2. Investigate the resistance of different materials in an electric circuit
3. Control the variables in a physics experiment

Each of these examples starts with a key **verb.** These sorts of words help us to make assessments, and you will find them in the 'Learning Outcomes' of the syllabuses.

Knowledge	state, name, list, describe, label, write, recall ….
Understanding	explain, compare, contrast, outline …
Skill	construct, perform, predict, investigate, interpret, carry out …..

Higher Order Thinking Skills

The new curriculum has been written to encourage learners to develop 'Higher Order Thinking Skills'. These have been built into the syllabuses, and are illustrated in Bloom's Taxonomy which divides learning into six ascending levels. The lowest level is remembering (which refers to knowledge) and the second is understanding. To reach the higher levels, learners have to use a skill to apply their learning in some way. This is illustrated in the diagram below:
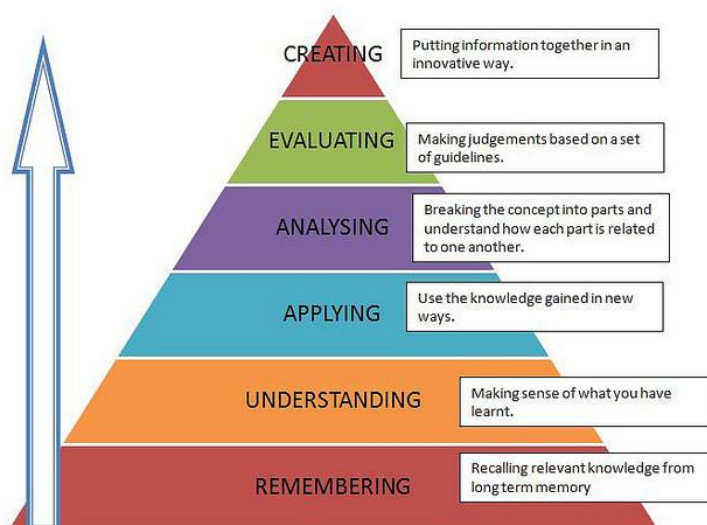
Bloom's Taxonomy

The new curriculum is aiming for the higher levels of Bloom's Taxonomy, so assessment must be made at these levels. The key question is, "Are the learners applying their knowledge and understanding?" Without this application, they will never reach the even higher levels.

Bloom did not see levels as relating to the age of the learner. Even the youngest learner in P1 can reach the higher levels. What makes it easier for them is the simpler context of the knowledge that they are applying. Younger learners think about and apply simple things, older learners think about and apply more complex things.

We must take account of these levels of expectation in our assessment, and look for examples of learners operating at the higher levels.

> The new curriculum is aiming for the higher levels of learning, so assessment must be made at these levels too.

7) How do we assess the Generic Skills?

As well as Learning Outcomes for each of the subject topics, the new syllabuses set out a set of five Generic Skills:

Critical thinking and problem-solving	**Creativity and innovation**
• Plan and carry out investigations	• Use imaginations to explore possibilities
• Sort and analyse information	• Work with others to generate ideas
• Identify problems and ways forward	• Suggest and develop new solutions
• Predict outcomes and make reasoned decision	• Try out innovative alternatives
• Evaluate different solutions	• Look for patterns and make generalisations
Communication	**Co-operation and Self-directed Learning**
• Listen attentively and with comprehension	• Work effectively in diverse teams
• Talk confidently and explain things clearly	• Interact effectively with others
• Read accurately and fluently	• Take responsibility for own learning
• Write and present coherently	• Work independently with persistence
• Use a range of media to communicate ideas	• Manage goals and time

Numeracy and ICT Literacy
• Use numbers and measurements accurately
• Interpret and interrogate mathematical data
• Use mathematics to justify and support decisions
• Use technology to create, manipulate and process information
• Use technology to collaborate, communicate and refine their work

The very nature of "Generic Skills" means that they apply across the Learning Areas. They are not found in one Learning Area only. In the very nature of **skills**, they have to be acquired and deployed in a context. The Learning Areas provide these contexts. They can therefore be assessed within the context of what is being taught; for example, was the learner able to "plan and carry out an investigation" in Science or "Write and present coherently" in Social Studies?

Because the Generic Skills have already been built into the Subject syllabuses, there is no need to assess them separately. They are already covered by the "Learning Outcomes" and the "Sample Assessment Strategies".

However, teachers should be aware of the Generic Skills and should:
- Promote their development within the learning activities
- Look for contexts in which they are deployed

Examples of the generic skills in increasingly complex contexts can be found in Annex 2

> **Generic Skills do not have to be assessed separately.**

8) How do we find the opportunity to make formative assessments?

School-based formative assessment is a part of the normal teaching and learning process, and so the assessment opportunities will also occur during this normal process. It is not something that needs to be added on after learning; it is an integral part of it.

These opportunities occur in three forms. Dr Anne Davies (Making Classroom Assessment Work 2011) called these:

- Observation – watching learners working (good for assessing skills)
- Conversation – asking questions and talking to learners (good for assessing knowledge and understanding)
- Product – appraising the learner's work (writing, science report, maths calculation, presentation, map, diagram, model, drawing, painting etc). In this context, a "product" is seen as something physical and permanent that the teacher can keep and look at, not something that the learner says.

When all three are used, the information from any one can be checked against the other two forms of assessment opportunity (eg evidence from "observation" can be checked against evidence from "conversation" and "product"). This is often referred to as "triangulation".

Observation

Triangulation

Product   Conversation
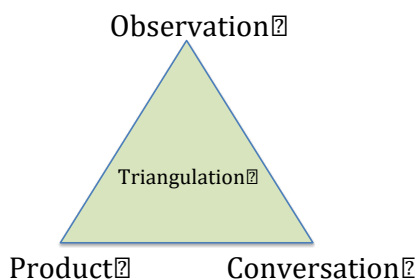
Triangulation of assessment opportunities

To find these opportunities, look at the Sub-Strand section of the syllabus units. These set out the learning that is expected and give 'Exemplar Activities", and in doing so they contain a range of opportunities for the three forms of assessment.

Here is an example of Topic from Senior 1 Physics:

Physics. Senior 1 Term 3
TOPIC: NATURE OF LIGHT, REFLECTION AT PLANE SURFACES   16 PERIODS

Competency: The learner should investigate how some objects emit light resulting in light and shade, while other objects, such as a mirror, simply reflect light, and understand the applications of light/shade and reflection.

LEARNING OUTCOMES The learner should be able to:	SUGGESTED LEARNING ACTIVITIES	SAMPLE ASSESSMENT STRATEGY
a) identify illuminated and light source objects in everyday life (u) 🔲 b) understand how shadows are formed (u) c) understand how the reflection of light from plane surfaces occurs and how we can make use of this (u, s) 🔲	• In groups, learners brainstorm prior learning about natural and artificial sources of light and the formation of shadows, and explain using diagrams. 🔲 • In pairs, learners apply prior learning to investigations of a pinhole camera and use it to explain magnification and image, using diagrams. 🔲 • In pairs, learners investigate the characteristics of images formed by plane mirrors and research and explain angles of incidence and reflection, recording findings with (ray) diagrams. 🔲 • In pairs, learners apply their knowledge of reflection to design, make and report on a device (periscope) using card and mirrors which would allow a person to see over a wall. 🔲 • In pairs, learners use their knowledge about how light travels to explain in diagrams how light from the sun reaches the Earth and how eclipses are formed. 🔲	• Listen to pair discussions and ask learners (<u>conversation</u>) to use diagrams to explain the formation of shadows, and magnification, image in the pinhole camera. 🔲 • <u>Observe</u> pairs and groups engaged🔲in practical activities and check that investigations are well understood. 🔲 • Evaluate learning through <u>products</u>: diagrams and designs. Assess these in terms of the learning outcomes: Would their design of a periscope enable someone to see over a wall? Do their diagrams explain how light reaches the Earth from the Sun?

You will note that the "Sample Assessment Strategy" column sets things out in terms of "Conversation, Observation and Product". The 'conversation' and 'observation' take place <u>during</u> the "suggested learning activities", and the "product" is the outcome of those activities.

The column also gives some guidance on how to make the specific assessments; for example *"Do their diagrams explain how light reaches the Earth from the Sun?"*

> **It is the use of <u>all three</u> of observation, conversation and product that gives us a rounded picture and a more valid assessment.**

There are more examples of the "Observation, Conversation, Product" approach in Annex 3.

10) Self and Peer Assessment

Self-Assessment

Self-assessment is an important part of enabling learners to be active participants in their own learning. This enhances learning and is very much part of the 'learner-centred' approach of the new curriculum. It does **not** mean that learners are expected to award themselves marks or grades. The purpose is to:

- Involve learners actively in their own learning
- Enable learners to make a judgement about their own achievement against a set of key success criteria.
- Provide an opportunity for learners to identify their own errors, asking honest questions about progress and understanding, appreciating that mistakes are an opportunity to learn
- Give learners some independence to improve and adjust their work according high expectations of achievement.
- Encourage learners so that they develop intrinsic motivation – a true desire to learn and improve.

Self-assessment needs to become part of ongoing classroom-based assessment activities. Learners need to be trained in order to do this effectively, and also need to be aware of the Learning Outcomes of the curriculum and of the criteria for success. The use of self-assessment will help build independence in learning and prevent learners always relying on support and guidance from the teacher.   Learners need to be shown strategies by which they can find things out for themselves and improve their work.

Teachers should model the assessment process by explaining their own thought processes when they make judgements about quality and success. This will help learners to self-assess.

Peer-Assessment

Another powerful aid to self-assessment is for learners to discuss their work with fellow learners (peers).

We need to shift away from the idea that exploring the work of other learners is 'copying' or 'cheating'. It is better to create a culture in classrooms where collaboration and communication are celebrated as ways of enhancing learning, because by exploring what others have done and by explaining to others what we have done, we are able to deepen our understanding of topics and specific aspects of learning

Peer-assessment is the process of learning discussing their self-assessment with each other for comment and corroboration. It is **not** intended that fellow learners take the place of teachers and award marks and grades. The process of discussion

Peer assessment is an opportunity to further develop many of the generic skills, becoming a 'critical friend' for example. Checking another learner's work against set criteria is also an opportunity to check again own understanding.

> **Self-assessment that is shared with the teacher and other learners is powerful part of formative assessment in support of ongoing improvements in learning.**

11) How do we use Assessment Information?

The cycle of assessment will only be complete if the information gained is used to improve the learners' learning. The keeping of assessment records enables teachers to monitor learners' learning and progress. But monitoring does not improve learning by itself. There has to be some intervention by the teacher made on the basis of the assessment information.
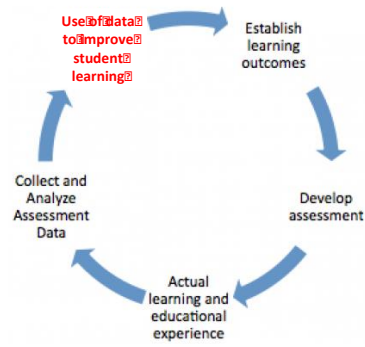
There is a range of ways in which assessment information can be used, and these interventions be made:
- Amending programmes or teaching approaches where necessary
- Identifying learners needing more support to meet the expected Learning Outcomes,
- Enabling learners to understand what they have to do to improve
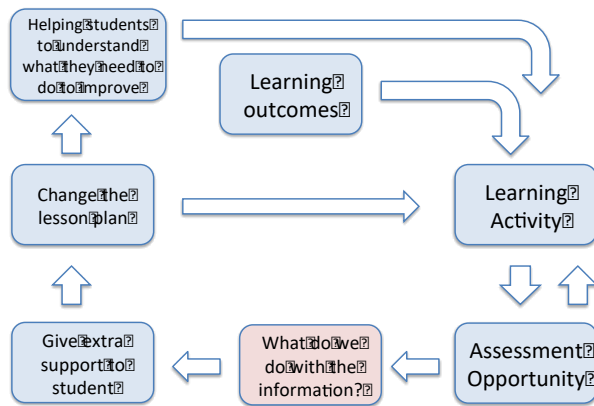
Making use of assessment information

The <u>extra support to learners</u> includes:
- Further explanations and clarifications
- Practice sessions
- Re-grouping
- Mentoring

The ways in which the <u>lesson plans or approaches</u> can be amended include:
- More lessons on the topic
- Different materials or tasks
- Different lines of questioning

Enabling learners to <u>understand what they have to do to improve</u> involves giving them some <u>feedback</u> on how well they are doing and what they need to do next.

> **If we do not use assessment information effectively, then there is no point in making assessments.**

12) How should we give feedback to learners?

Feedback to learners is a key aspect of "Assessment for Learning'. If learners understand how well they are doing and what they need to do next, they will learn better. Feedback can take three forms:
- Marking learners' work and giving written comments
- Making general comments to the class
- Holding a conversation with individual learners

It is the last of these that is the most effective.

Whether written or oral, feedback should be directed at:
- Enabling the learner to realize where they are in relation to the "learning outcomes"
- Clarifying misunderstandings, and filling gaps in learning
- Helping learners to understand what they have done well
- Clarifying what they need to do next

It is important that feedback should be honest and clear – but it should not be discouraging to the learner. The feedback should come as soon as possible after the assessment *(immediate)* and be specific about what the learner can do to improve. After the feedback, the learner should know what they need to do to improve – this is often called "actionable feedback".

Feedback should be:

| Encouraging | Specific | Immediate | Honest | Actionable |

Effective feedback leads to better learning
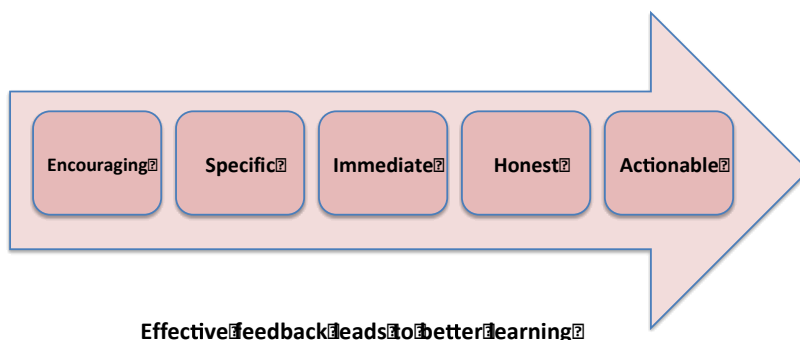
> **Feedback should be encouraging and help the learner understand what they need to do next.**

13) What Assessment Records should be kept?

Keeping detailed records of learners' individual progress is always difficult with very large numbers of pupils. For the purposes of school-based formative assessment, it is not even always necessary to keep such detailed records anyway. If feedback is give immediately and action is taken, then learning is changed and the record would soon become out of date and redundant.

Most formative class-based assessments are dynamic in that they feed straight back into the teaching and learning process. Therefore detailed records of these are not appropriate.

What is needed is record of assessments of learners' learning made in terms of each <u>Topic</u>. This means recording the on-going summative assessments in terms of the overall **competency** of the Topic. There is no need to make separate records of each of the <u>Learning Outcomes</u> because this would be very time-consuming and also unnecessary because they all add up to the overall competency. It is much more useful to make an overall assessment about whether or not each learner met the competency for each topic as a whole.

Each Topic competency is made up of a number of Learning Outcomes. Therefore teachers need to consider all the Learning Outcomes when making an overall judgement about the Topic as a whole. It is not always necessary for every individual Learning Outcome to be achieved for the Topic as a whole to be achieved. This will vary with the subject and topic.

By looking at the Learning Outcomes within each topic, it is possible to identify four broad groups of learners in terms of their achievements:

Descriptor
All LOs achieved – achievement of the competency with ease
Most LOs achieved, enough for overall achievement
Some LOs achieved, but not sufficient for overall achievement of the competency
No Learning Outcome (LO) achieved

There is no need to set a test to find this out. These overall assessments should be made on the basis of the many formative assessments that the teacher has made during the course of teaching the unit. If teachers have been working with the learners over the course of the unit, they will be able to make a broad judgment about which learners have achieved or have failed to achieve the unit's overall Learning Expectation. These "Authentic Assessments" will be more valid and valuable than a test set by the school.

Recording these overall assessments will be simple, manageable and yet valuable, and can be recorded on a sheet such as the one below in which the categories are indicated with a number.

Although a very simple process, these four categories will give rich data when a comparison is made between the learners in each category for different subjects and units. They will also identify easily those learners who need extra support or who may not be ready to move on to the next grade at the end of a year.

14) How do we make end-of-year summative assessments?

<u>The problem</u>
Written tests are seldom effective for assessing the deeper understanding, generic skills, and higher order thinking that are at the heart of the new curriculum. This is especially the case for tests made up by individual schools. It is possible to set questions that address higher order thinking and deeper understanding, but the techniques for doing so are very specialized, the questions generally require open-response answers and the marking schemes are very complex.

Written tests are popular because they are easy to administer to large groups, but they do not actually test the sort of learning that is required in the new curriculum

<u>The solution</u>
If records are kept of the learning outcomes of each syllabus unit through the year (Section 10, above) then there will be no need for an end of year test. Teachers will already have a record of those learners who have met the learning outcomes, and those who have not done so. Therefore teachers will know if there were any learners not ready to progress to the next grade.

An overall record should be made of the individual unit assessments by subject in terms of the 4 categories in Section 10. If numbers (0-3) are used as identifiers, then it will be possible to arrive at an overall number for a year by aggregating the identifiers for each unit.

Descriptor
All LOs achieved – achievement of the topic competency with ease
Most LOs achieved, enough for overall achievement of the topic competency
Some LOs achieved, but not sufficient for overall achievement of the competency
No Learning Outcome (LO) achieved

In the example below, the table shows the end-of-unit assessments for six learners.

English										
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10
Learner A	3	3	2	3	3	3	3	2	3	3
Learner B	2	2	3	2	3	2	2	2	3	2
Learner C	1	1	2	1	1	2	2	3	2	3
Learner D	1	1	2	1	1	2	1	1	2	1
Learner E	0	1	2	1	0	1	0	1	2	1
Learner F	0	0	1	0	0	1	0	0	1	0

This method will give much more information than using a tick. For example, at a glance it can be seen that learners A & B are achieving much higher than learners E & F. It can be seen that Learner C has improved during the year. We can even see that more learners achieved success in Unit 9 than Unit 7. All of this is very valuable assessment information and can be used to improve learning.

If this table is kept throughout the year it will enable schools to identify learners who:
- Are doing well in one subject but not another
- Are doing well in one unit but not another
- Started off well but have not maintained their progress
- Are doing very well overall
- Need extra support or guidance

End of year summative assessment
For end-of-year summative purposes, it will be possible to add up the identifiers for each unit and come to an overall score. If numbers (0-3) are used as identifiers, then it will be possible to arrive at an overall number for a year by aggregating the identifiers for each unit, and dividing by the number of units. In the example below, the table shows the end-of-unit assessment for six learners. The range will always be 0-3.

	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	Total
Learner A	3	3	2	3	3	3	3	2	3	3	2.8
Learner B	2	2	3	2	3	2	2	2	3	2	2.3
Learner C	1	2	2	1	1	2	1	3	2	3	1.8
Learner D	1	1	2	1	1	2	1	1	2	1	1.3
Learner E	0	1	2	1	0	1	0	1	1	1	0.8
Learner F	0	0	1	0	0	1	0	0	1	0	0.3

The Subject Records can be averaged on an Overall Record as below. The Total for each subject will need to be divided by the number of units. If necessary, an overall achievement score could be set. If it were set at 1.0 in the above example, then Learners A to D would be seen as achieving whilst Learners E and F would not.

For reasons of space, this example shows only the seven compulsory subjects in S3&4.

Compulsory Subjects in S3&4								
Class list	English	Maths	Hist	Geog	Bio	Phys	Chem	Total
Learner A	2.8	2.4	3.0	2.7	3.0	2.8	2.6	19.3
Learner B	2.3							
Learner C	1.8							
Learner D	1.3							
Learner E	0.8	1.0	1.4	0.9	1.6	0.8	1.1	7.6
Learner F	0.3							

If the totals are aggregated, the range will be 0-21 for the n seven compulsory subjects in S3-4 (The Maximum would be 3 for each subject – and so a maximum total of 3x7=21 for all 7 subjects). In reality, very few learners would ever attain 3 for every Learning area.) If end-of-year summative assessments are being used to decide whether or not learners should progress to the next grade, then a "pass" mark can be fixed (say, 14 in the above example).

This unit-by-unit approach is a more effective way of assessing learners' learning than an end-of-semester or end-of-year test. This form of "continuous assessment" also has the advantage of emphasizing to learners the importance of each unit and maintaining their motivation.

15) Controlled Assessment Tasks

During Senior 3 and 4, learners will undertake a range of "Controlled Assessment Tasks" (CATs). These will enable assessments to be made of skills and deeper understanding that are not possible through the more usual multiple choice processes. They are particularly helpful in assessing the generic skills. The tasks will take from several hours to a day or more and will enable the learner to demonstrate their understanding of the subject but also their **ability to apply their learning** in different situations. The CATs will be marked by the school against a common marking rubric. The CATs will be developed by the Examinations Council in collaboration with NCDC.

Over time, CATs will be developed for S1 and S2 to help teachers make end of year assessments.

School-based formative assessments are made as part of the normal teaching and learning process. They take account of a range of information to assess learners' learning and use this information to improve teaching and learning.

Annex 1
Assessment Records

Example of Subject Attainment Records

English								
Class list	**Unit 1**	**Unit 2**	**Unit 3**	**Unit 4**	**Unit 5**	**Unit 6**	**Unit 7**	**Unit 8**
Learner A								
Learner B								
Learner C								
Learner D								
Learner E								
Learner F								
etc								

Maths								
Class list	**Unit 1**	**Unit 2**	**Unit 3**	**Unit 4**	**Unit 5**	**Unit 6**	**Unit 7**	**Unit 8**
Learner A								
Learner B								
Learner C								
Learner D								
Learner E								
Learner F								
etc								

Overall Record

Class list	Eng	Mat	Hist	Geo	Phy	Che	Bio	RE	Agr	Kis	ICT	Ent	E 1	E2	E3	Total
Overall Record Secondary 1																
Learner A																
Learner B																
Learner C																
Learner D																
Learner E																
Learner F																
etc																

Annex 2
Key Points from the Assessment Policy

PART 1: Summary of Assessment Policy

1. School-based formative assessment
Teachers are expected to make and record assessments of their learners' learning on a regular basis. Assessments should be made of learning within each syllabus topic. The information from these assessments will be used by the teacher to support learners' learning.

2. Criterion-referenced assessment
School-based formative teacher assessments will be based on the Topic "competency" statements. Teachers will use the "Learning Outcomes" set out in the new syllabuses. to help them make these assessments

No other criteria should be used apart from the Learning Outcomes of the syllabuses.

3. A range of evidence
Teachers should look for a range of evidence of learners' learning, and not rely upon a single answer to a question or a single piece of work. Teachers are recommended to use the "observation, conversation, product" approach. Written tests designed by the teacher should not be used to make these assessments.

4. Controlled Assessment Tasks
During Senior 3 and 4, learners will undertake a range of "Controlled Assessment Tasks" (CATs). These will enable assessments to be made of skills, deeper understanding and the ability to apply learning that are not possible through the more usual multiple choice processes The CATs will be marked by the school against a common marking rubric. Over time, CATs will be developed for S1 and S2 to help teachers make end of year assessments.

5. Generic Skills
It is not necessary to assess the Generic Skills separately. They have been built into the subject syllabuses, and will be assessed as an integral part of the formative assessment. The Generic Skills will be developed within the context of the tasks given by a teacher, and so they should be assessed within these same contexts.

6. Using assessment information to support learning
Teachers should use assessment information to:
- Identify learners needing more support to meet the expected Learning Outcomes,
- Enable learners to understand what they have to do to improve
- Amend programmes or teaching approaches where necessary

7. Keeping records of assessments
Teachers do not need to record assessments of every "Learning Outcome". It will be sufficient to record against the overall topic competency statement.

The assessment for each Topic should be made and recorded in one of four categories for each learner:

Descriptor
All LOs achieved – achievement of the topic competency with ease
Most LOs achieved, enough for overall achievement of the topic competency
Some LOs achieved, but not sufficient for overall achievement of the competency
No Learning Outcome (LO) achieved

8. Cumulative formative assessment for summative purposes
Teachers should base their end-of-year summative judgements on their cumulative record of formative assessments. This will require an aggregation of identifiers for each unit.

There is no need for further end-of-year tests.

9. School Leaving Certificate
Teacher assessments will contribute to the final grade on the School Leaving Certificate.

Annex 3
Examples of Learners' Work

Annex 4
Triangulation Examples

Annex 5
Progression of Generic Skills