



Ministry of General Education

National Learning Assessment Framework (NLAF)

NOVEMBER 2017

Foreword

The critical process of educational reform in Zambia continues and takes another significant step with the publication of the National Learning Assessment Framework (NLAF).

The main purpose of this document is to provide guidance on summative and formative assessments based on the 2013 Zambia Education Curriculum Framework (ZECF). Just as the ZECF puts learners at the heart of the curriculum, the principle behind this key document is that assessment should be learner-centred.

The NLAF covers the full range of assessments that take place in Zambia, from international surveys such as PISA and SACMEQ and national examinations through to the assessments that teachers use daily in their lessons.

This document gives some very clear information about assessment. It explains that assessment and teaching and learning are not separate but are parts of the

same process. The document also emphasises that assessment should be recognised as important, not simply for measuring outcomes at the end of a period of learning but for improving learning every day of the school year.

Zambia's future success lies in making the best of the talents and abilities of every one of our young people including those with special educational needs and those with outstanding ability. Using formative assessment to improve the learning of every individual is the key to making this a reality.

I commend this document to education practitioners all over the country and look forward to the successes that will stem from its implementation.

Henry Tukombe

Permanent Secretary
Ministry of General Education

Director's acknowledgement

The National Learning Assessment Framework has been developed as a result of a process involving Ministry of General Education, supported by a wide range of education professionals and organisations. The process has involved detailed consultation, drafting, redrafting, fine-tuning and validation.

The participation and cooperation of so many committed stakeholders in the process has contributed to ensuring the document is of such high quality. I express my gratitude and that of the Directorate as a whole to all of them.

Special thanks go to former Director Standards and Curriculum, Mrs. Cecilia N.M. Sakala for her tireless efforts in ensuring that the document comes to fruition.

I am also very grateful to UNICEF for supporting the Ministry with the cost of printing and distributing this document.

Dr. Sunday Mwape

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Abbreviations

CDC	Curriculum Development Centre
ECE	Early Childhood Education
ECZ	Examinations Council of Zambia
EGMA	Early Grade Mathematics Assessment
EGRA	Early Grade Reading Assessment
ESO	Education Standards Officer
DEBS	District Education Board Secretary
ICT	Information and Communications Technologies
MoGE	Ministry of General Education
NLAF	National Learning Assessment Framework
OECD	Organisation for Economic Cooperation and Development
PEO	Provincial Education Officer
PISA	Programme for International Student Assessment
PS	Permanent Secretary
PTA	Parents Teachers Association
SACMEQ	Southern and Eastern Africa Consortium for Measuring Educational Quality
TCIG	Teacher's Curriculum Implementation Guide
TESS	Teacher Education and Specialised Services
ZECF	Zambia Education Curriculum Framework

Assessment

Assessment is the process of measuring what learners know, understand and can do.

Key competencies

Key competencies refer to the wide range of abilities required to use knowledge, skills and attitudes in order to function effectively in learning and life. These include: critical thinking and problem-solving; creativity and innovation; entrepreneurship; self-management; communication; cooperation.

Continuous, classroom-based assessment

Continuous, classroom-based assessment refers to the wide range of assessments which a teacher conducts or organizes in the classroom to measure and report on the learning of all her/his students.

Curriculum

The curriculum is all the learning that it is intended should take place. This learning is usually set out in curriculum documents such as the National Curriculum framework and syllabuses.

Curriculum balance

If learners are to have a fully rounded education, they need a balanced curriculum that includes the full range of expected learning: subject knowledge, values, attitudes, skills, competences and knowledge of cross-cutting issues.

Diagnostic testing

Diagnostic testing is used to identify specific learning needs so that interventions can be applied to address them. Diagnostic tests can be used for any curriculum area but they often focus on literacy and numeracy as these are important for enabling learners to access the curriculum as a whole.

Formative assessment

Formative assessment involves a wide range of formal and informal assessment procedures (including diagnostic tests) conducted by teachers during the learning process in order to modify teaching and learning activities and so improve student outcomes.

School level and system level

Schools are the part of the education sector with which all stakeholders are familiar. However, the effectiveness of learning depends not only on schools but also on the work of education professionals in the ministry and in a range of other organisations at national, provincial, district, and zone levels. These professionals whose work is done outside of schools operate at system level.

Standardised, sample-based assessment

Standardised, sample-based assessment involves the measurement of the learning of a representative sample of students to generate a statistically reliable indication of the performance of the wider group they are drawn from.

Summative assessment

The purpose of summative assessments is to determine the level of learning achieved at the end of a particular learning period. This may happen at the end of a full education cycle, e.g. at the end of primary or junior secondary school, at the end of a school year or term, or at the end of a chapter, a module, or some other block of study. Summative assessment usually serves to guide some decision about the learner but can also be used to influence other decisions at system level.

Syllabus

The syllabus is a description of the learning objectives, the overarching concepts and skills that will be taught at a particular stage of education. It can also include the standards that students will be expected to meet.

Values

Values refer to the beliefs that determine attitudes and behaviours. Particular values are considered acceptable by defined groups of people. They may refer to such concepts as ambition, respect, empathy, faith, citizenship, a commitment to excellence, friendship, and many more.

1. Introduction

The National Learning Assessment Framework (NLAF) is an overarching document setting out the principles that apply to all learner assessment in Zambia. These principles provide guidance to ensure that assessment processes are coherent, that they promote learning and that they contribute to ongoing improvements in teaching and learning. Other policy documents reflect the guiding principles and provide detailed guidance appropriate to assessment practice in different contexts.

The Zambia Education Curriculum Framework (ZECF) 2013 sets the overall vision and aims of the curriculum. The document also frames the expected learning outcomes in terms of the values, attitudes, competences, subjects and cross-cutting issues required for learners' personal development and to enable them to succeed as participants in the global economy.

The ZECF and the NLAF are closely aligned key documents that contribute to achieving the vision and the aims.

Assessment is the means of finding out about the effectiveness of teaching and learning strategies in the classroom, monitoring progress and evaluating the success of teaching and learning over time as learners progress through from Early Childhood Education to the end of secondary school.

The two overall purposes of assessment processes are to provide important information to:

- make judgements about the quality of learning and
- improve the quality of teaching and learning.

Teachers, as well as education practitioners working at system level (in zones, districts, provinces and nationally), rightly devote much time and effort to a wide range of methods of assessment. The National Learning Assessment Framework (NLAF) sets out how all assessment activities, at school level and at system level, operate together to serve these two purposes.

For this reason, the NLAF:

- provides guidelines on the different types of assessment and their uses;
- outlines the roles and responsibilities of education professionals at different levels regarding assessment;
- provides guidance on ensuring learners' experience of assessment is consistent, coherent and supportive of their progression;
- provides clear and consistent definitions and interpretations of terms and concepts for use across all levels;
- provides guidance relating to effective use of assessment information for improving teaching and learning in schools and for decision-making at system level; and
- provides guidance for diagnostic use of assessment information so that interventions are put in place to ensure no child is left behind.

Achieving the vision expressed in the curriculum framework (figure 1) requires developing learners' values, attitudes, skills and competences as well as their knowledge of cross-cutting issues and subjects. The fact that we value all of these aspects of learning must be reflected not only in learning activities but also in assessment.

Assessing learners' knowledge is much easier than assessing their attitudes, their skills and their competences. A key challenge for practitioners at all levels of the education system is to ensure that *we measure what we value rather than valuing what we can easily measure*. It is important to assess what learners know but, as we recognise the value of their attitudes and what they can do, assessments must also reflect these broader aspects of learning.

Figure 1. The vision for the curriculum in Zambia



2. Why do we assess? Purposes of assessment

As explained in section 1, assessment processes provide important information about learning that is needed for the two key purposes of making judgements about teaching and learning and bringing about improvements. It is important for education practitioners at all levels to understand the terms and concepts associated with these purposes.

The terms '*formative*' and '*summative*' relate to the place of assessment in the learning process and the impact of assessment on learners and learning.

Assessment is also described as being either for accountability or for improvement. Accountability focuses on those responsible for the effectiveness of learning.

The following sub-sections give the key purpose of each of these four categories of assessment as well as some of the ways in which each purpose is achieved.

2.1 Formative assessment

Formative assessment takes place during a period of learning and its purpose is to improve learning. Formative assessment is often referred to as *assessment for learning*.

This purpose is achieved by:

- ensuring learners focus attention on aspects of their learning that require improvement;
- highlighting learners' strengths and encouraging them to do even better;
- encouraging learners to take responsibility for their own learning;
- encouraging learners to work together as they learn and support each other in their efforts to improve;
- helping learners understand assessment criteria so they know what is expected of them and so perform well;
- encouraging parents and guardians to engage with their child's learning.

2.2 Summative assessment

Summative assessment takes place at the end of a period of learning and its purpose is to show how effective learning has been. Summative assessment is often referred to as assessment of learning.

This purpose is achieved by:

- showing how well individual learners performed;
- showing how well groups of learners have performed (boys/girls, ability groups, classes, schools, zones, districts, provinces or the nation as a whole);
- enabling good performance to be recognised through the award of certificates;

- providing evidence for use in:
 - selection of learners for next stage of education
 - advice and guidance with respect to appropriate pathways for learners to follow;
- providing information to parents and guardians as well as to other stakeholders.

Section 13 of the Teachers' Curriculum Implementation Guide (TCIG) provides helpful guidance to teachers on effective use of formative and summative assessment.

2.3 Accountability

Accountability involves using assessment data to hold practitioners to account for the effectiveness of the learning in their class, school, district, province or across the nation as a whole.

This purpose is achieved by:

- enabling managers and leaders at every level (from school through to national) to gain a clear picture of the performance of those in their teams and of those for whom they are responsible;
- enabling managers and leaders to hold those responsible to account for the learning outcomes of their classes, districts, provinces or the nation as a whole;
- encouraging practitioners throughout the system to take responsibility and to strive to perform to the highest standards.

2.4 Improvement

Assessment data is used to improve teaching and learning by highlighting and addressing underperformance and by identifying and sharing good practice at all levels.

This purpose is achieved by:

- providing managers and leaders with reliable evidence on which action to take to address underperformance and to reward success;
- enabling managers and leaders to allocate funding or to plan training in such a way that it should have the greatest impact on learner outcomes;
- providing leaders with evidence of barriers to improvement that may require changes in policy or practice at school or system level.

It is important to recognise that there is overlap between these categories. For example, summative assessments are sometimes used formatively to plan changes to policy or practice. Whether these changes take place at school level or at system level, the key focus is to improve pedagogical approaches in classrooms and so enhance learner outcomes.

Accountability at school level and at system level is generally based upon outcomes of summative assessments.

A good understanding of all these purposes of assessment enables practitioners at every level to ensure assessment information is put to good use. Assessment data provides a wealth of information about learning. Improvement strategies across the whole education system are much more effective when they are carefully planned using assessment data.

2.5 Curriculum balance

The ZECF stipulates the breadth of learning covered by the revised curriculum. This includes subject knowledge as well as values, attitudes, skills, competences and knowledge of cross-cutting issues.

Assessment has a powerful influence on the way the curriculum is taught and on learning. This breadth of learning must be reflected in assessment at all levels so that the importance of all these aspects of learning is continually underlined. Assessments must reinforce the message that values, attitudes, skills, competences and cross-cutting issues are important elements of the curriculum.

3. How do we assess? A holistic approach

The purposes described in the previous section show the fundamental role of assessment in effective education. Learners engage in a diverse range of assessment: regular classroom assessment as well as assessment at school and national levels in addition to international surveys. However, these should not be viewed as isolated events but as parts of a planned and interconnected assessment strategy.

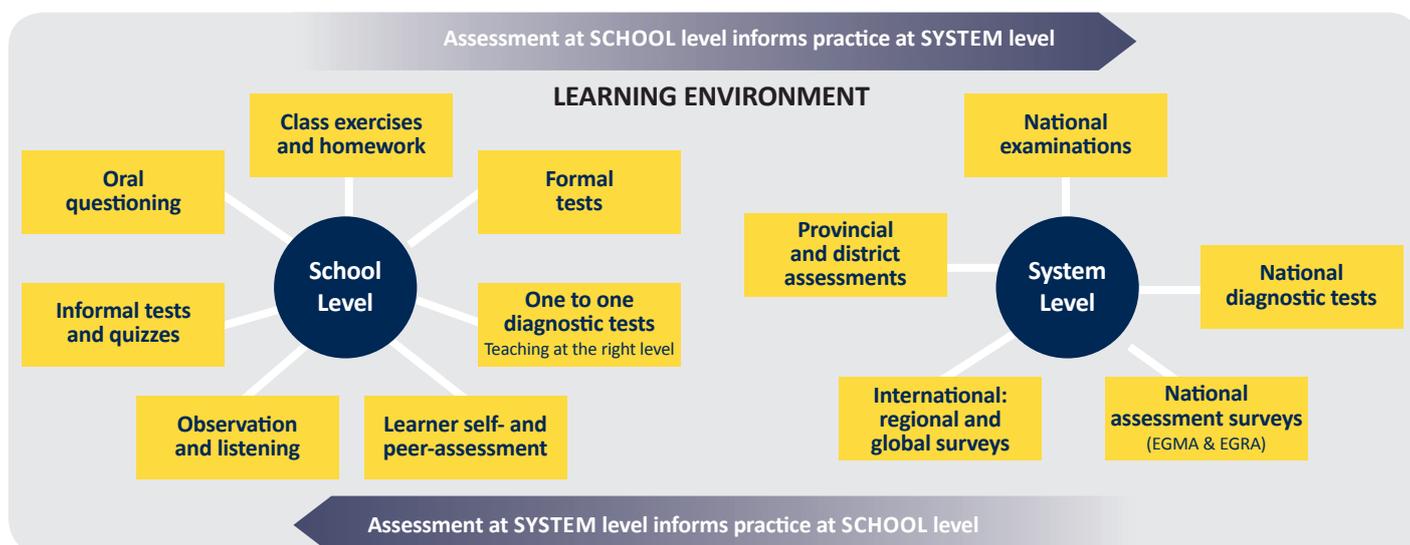
All assessment should support teaching and learning and contribute to improved learner outcomes. Figure 2 shows the range of methods of assessment and how assessment information from both school level and system level feeds back to improve learning.

Quality assessment information enables practitioners to make good decisions about how to improve the learning environment. As the arrows in figure 2 show, the assessment information from the school should not only be used within the school but should also be used by the whole education system. Similarly, the assessment data generated at system level should be used by teachers and administrators to improve practice

at school level. Some of the system level assessments are sample surveys that do not involve all the learners across the country. It is important that all practitioners, as well as the learners selected to take these tests, appreciate their importance. Sample surveys provide valuable information that is used to improve learning for current and future generations.

Mock examinations are a unique type of assessment in that they are designed to give learners an experience that closely matches that of taking the real national examinations. The key difference is that mock examination results are not taken into account in final outcomes. This means they provide learners with an opportunity to learn from their mistakes and do better when the real examinations take place. As the results of mock examinations are for use within schools they do not need to be standardised across the country like national examinations. There is no standard practice with respect to mock examinations. They can be set within the school or at zone, district or provincial levels.

Figure 2. The ways learning is assessed at school and system level are part of a coherent national assessment strategy



4. Assessment at school level

As mentioned in the previous sections, the primary purpose of classroom or school-based assessment is to improve learning. The methods of school level assessment shown in figure 2 provide teachers and school leaders with information that is meaningful, rich, and valuable for making decisions about learning, both at the level of individuals and at the level of groups of learners. The term *continuous assessment* is used to reflect the way teachers use assessment regularly and frequently in order to promote and deepen learning.

Assessment information may be used to improve any aspect of a school's practice, including, for example, teaching approaches, the curriculum, the timetable, grouping of learners, how progress is monitored and how learners are supported to overcome barriers to learning.

Summative assessment has its place at school level but the great majority of classroom and school-based assessment serves formative purposes. Quality continuous assessment ensures that teachers and learners are constantly focusing on what needs to be done to improve learning.

This section gives brief details of the roles and responsibilities of teachers and school leaders with respect to each of the methods of school level assessment shown in figure 2. All of these methods can make a strong contribution to learners' progress and teachers should be careful to use an appropriate balance of approaches. There is more detailed guidance for teachers about the use of formative and summative assessment in the Teacher's Curriculum Implementation Guide (TCIG).

4.1 Methods of school-level assessment

4.1.1 Observation and listening

This form of assessment involves the teacher observing or listening to learners, drawing conclusions about their learning and providing help and guidance with respect to how to improve. Teachers routinely use observation and listening and offer informal formative feedback as learning activities take place in classrooms. However, this form of assessment is essential when teachers need to evaluate an end product, for example, when learners are required to cut a piece of metal in a technology lesson or perform drumming in a music lesson.

Skills and competencies are at the heart of the curriculum. Observation is often the best way for teachers to gauge learners' progress in relation to skills and competences. Sometimes teachers may need to

keep formal records of these assessments, indicating their evaluation of the learning they have witnessed with a description or a scale of grades or numbers. Informal listening to learners engaged in a discussion task may also inform the teacher about attitudes and values, although schools should carefully consider whether to make attitudes and values the focus of any form of formal assessment.

4.1.2 Oral questioning

High quality questioning forms a key element of successful lessons because it challenges learners to think and organise their ideas. Skilful questioning engages all learners in an active and dynamic style of learning. In the process, teachers evaluate understanding and adapt their questions and associated learning activities accordingly. Effective questioning also makes learners think about what they have learned and what they need to do to deepen their learning. At its best, oral questioning is an excellent formative assessment technique that promotes communication, critical thinking and confidence.

4.1.3 Self- and peer-assessment

To make the best progress, learners should be fully engaged at all times and should take responsibility for their own learning. Through effective self-assessment, they review their learning and think carefully about their progress. Making these evaluations of their own performance depends on learners understanding the criteria against which progress is judged. Teachers therefore need to become skilled at providing learners with clear assessment criteria. As a result of self-assessment, learners have a good overview of what they know, understand and can do. Learners also gain an awareness of any gaps in their learning, and can take steps to address them.

Peer-assessment involves learners working together to assess each other. The power of self- and peer-assessment lies in the fact that learners have to become familiar with evaluating progress against assessment criteria. This experience builds a deep understanding of the process of self-assessment against expectation and consequently helps learners perform well.

Self- and peer-assessment do not replace teacher assessment. Experience of quality teacher assessment is vital to enable learners to develop the skills they need to be able to assess themselves and their peers. As well as improving their learning and building their assessment skills, self- and peer-assessment help learners develop their perseverance, diligence, analytical skills and honesty.

4.1.4 One to one diagnostic tests

One to one diagnostic tests, such as those involved in the *Teaching at the Right Level* programme, are designed to identify learners' strengths and weaknesses so as to facilitate planning for remediation. These tests help to trigger interventions that are matched to the specific literacy and/or numeracy needs of the individual learner. As a result learners catch up with their peers and their barriers to learning are overcome.

4.1.5 Formal tests

This type of assessment is designed to establish the extent to which learners have achieved the learning objectives over time. Formal tests are taken periodically, for instance at the end of the month, term or year. They are normally scheduled well in advance so that learners are aware of when they will take place and so they can prepare for them throughout the course. Formal tests usually serve purely summative purposes such as reporting to parents and making decisions about each learner's future.

4.1.6 Informal tests and quizzes

Informal written tests and quizzes are used throughout periods of teaching and learning. They should focus on what learners know and understand as well as on their skills and competences. Such assessments are important because of their formative value. They provide ongoing feedback that is specific, meaningful and timely and that can be used to support improved learning and achievement.

4.1.7 Class exercises and homework

Routine marking of learners' work has the potential to make a real difference to learning. Good quality feedback that relates specifically to each learner and what needs to be done to improve has a real impact on both motivation and outcomes. The expectations relating to each assessment task and the criteria against which performance is to be judged should be made clear to learners from the outset. This approach makes feedback more meaningful to learners so that they can understand and act upon it. It also helps learners develop a strong sense of responsibility for their own learning.

It should be noted that, for the best impact on learners' achievement, feedback should have a qualitative focus (descriptive statements). Quantitative feedback in the form of marks and grades can distract learners from valuable improvement advice.

4.2 Effective management of assessment

4.2.1 Integrating assessment

The term 'continuous assessment' is often used to reflect the fact that teachers use all of these methods of assessment routinely as part of the process of teaching and learning in their classrooms. Assessment is continuous in that it is an integral part of the work of every teacher. However, it should always be borne in mind that assessment should serve learning and not dominate learning.

All assessments should be carefully planned to relate to the curriculum expectations, the learning goals and, as far as possible, the interests, learning preferences, needs and experiences of all learners. It must be emphasised that assessment at school level should be on-going, varied in nature and administered over a period of time to provide multiple opportunities for learners to demonstrate and develop the full range of their learning.

4.2.2 Roles of teachers and school leaders

Teachers should recognise the central role of assessment in learning and should plan and implement assessment strategies as a routine part of the teaching and learning process. Most of the assessment activities teachers engage in are formative, helping them to shape teaching and learning approaches and adapt to learners' specific needs. Although assessments are planned by teachers, the information they provide should be used routinely by both teachers and learners to improve learning.

Additionally, teachers and school leaders should use evidence from assessment to effectively communicate and report on learners' achievements and progress. This summative use of assessment is particularly important for engaging parents and guardians whose influence on learners' progress can be strongly positive.

Schools leaders should ensure that they develop their own school policies on assessment, based on this National Learning Assessment Framework (NLAF). They should have procedures in place to develop and support high quality assessment practice in schools with a view to improving teaching and learning and learner outcomes. School leaders should also make sure they have systems for analysing assessment information so that it can be used to support teacher self-evaluation. This encourages and challenges teachers to reflect on their classroom practice and how it influences learning. Additionally, school leaders should ensure that they have a plan for professional development on assessment practices to help all teachers use assessment effectively to continually improve learning.

5. Assessment at system level

As figure 2 shows, assessment is carried out not only at school level but also at system level. The bodies responsible for these assessments operate at three levels: sub-national (provinces and districts), national and international.

- Provincial and district education offices are responsible for setting and conducting sub-national assessments. These include occasional surveys relating to priorities and issues of concern that arise from time to time. In some parts of the country, mock examinations are organised at provincial or district level rather than by schools themselves.
- The Curriculum Development Centre (CDC) produces national literacy and numeracy competence assessments.
- The Examinations Council of Zambia (ECZ) is responsible for national examinations and national surveys as well as for administering international assessment surveys.
- International bodies are responsible for organising and distributing global and regional assessment surveys to participating countries. The Organisation for Economic Cooperation and Development (OECD) is responsible for the Programme for International Student Assessment (PISA) tests. These tests are taken by learners in many countries around the world. The Southern and Eastern Africa Consortium for Measuring Educational Quality (SACMEQ) produces assessments for fifteen countries in these parts of Africa.

System level assessments fall into three categories: surveys, diagnostic tests and examinations. Surveys are essentially system level formative assessments, used to monitor and evaluate how well the system is performing so that changes can be made if necessary. The purpose of diagnostic tests is also to provide information that can be used to bring about improvement. These national diagnostic tests are taken by whole cohorts of learners rather than by a representative sample. National examinations provide the formal results that show to what extent learners, individually and collectively, have succeeded in meeting the expectations set out in the curriculum. The results of national examinations are made public.

5.1 Methods of system-level assessment

5.1.1 Surveys

Surveys are sample-based assessments conducted using groups of learners who are randomly selected to form a representative cross-section of the population. The careful selection of representative groups allows conclusions to be drawn that can be taken to reflect the whole population, without the cost of involving whole cohorts. The important data these surveys provide is used to draw conclusions about the effectiveness of the system. This information is used for monitoring and evaluation and to develop policy and practice.

The Examination Council of Zambia has the role of organising PISA tests within the country. The Planning and Information Directorate of MoGE conducts the SACMEQ tests. The assessment bodies themselves (OECD and SACMEQ) set the tests, analyse the results and feed the information back to Zambia and the other countries involved.

Zambia also conducts its own National Assessment Surveys. ECZ takes responsibility for setting the tests, for national level planning for conduct of the tests, and for carrying out all the analysis and dissemination of findings.

The Southern and Eastern Africa Consortium for Measuring Education Quality (SACMEQ) conducts its assessments periodically. In recent years SACMEQ has been targeting grade 5 for participating countries across the region.

PISA tests involve 15 year olds and focus on reading, science and mathematics. The first round of PISA tests was in 2000 and they take place every three years. The number of participating countries is growing. Zambia joined in 2015.

The Early Grade Reading Assessments (EGRA) and the Early Grade Mathematics Assessments (EGMA) are surveys used to monitor progress of learners in Grade 2. In Zambia, these surveys are organised by MoGE and administered in schools by teachers. They are also used in other countries.

5.1.2 Diagnostic tests

The Curriculum Development Centre sets literacy and numeracy tests for all learners in Grades 1 and 4. Implementation of these diagnostic tests was phased. It began with Grade 1 in 2014, with this same cohort of learners taking the first Grade 4 tests in 2017. The

results are used formatively to identify ways in which standards of literacy and numeracy can be improved at all levels from that of individual learners through to national policy.

The purposes of these tests include: finding out whether individual learners have acquired expected literacy and numeracy skills at the start and at the end of lower primary; identifying and overcoming any barriers to gaining literacy and numeracy skills; improving classroom practice; improving teaching and learning materials; improving teacher training (both pre-service and in-service); improving national policy in relation to literacy and numeracy.

5.1.3 Examinations

The Examinations Council of Zambia sets standardised national examinations that are taken by learners in Grades 7, 9 and 12. The results of these examinations are reported to parents and guardians. The main purpose of these examinations at system level is summative. They are used in three ways:

- to determine which learners should progress to the next level;
- for certification of learners; and
- for evaluating school performance.

National examinations assess learning reflecting all aspects of the curriculum: the knowledge, understanding and competencies of every individual. Analysis of the results can also provide information that can be used formatively at system level to improve teaching and learning across the country. Weaknesses in particular topics or aspects of learning may suggest that changes are necessary in terms of curriculum, pedagogy, resources or teacher training.

In some provinces, mock examinations are set and conducted at school level but in others education officers at provincial or district level take on this responsibility. All mock examinations are used to give learners a realistic experience and to gauge the preparedness of the candidates for the final examinations. The mock examinations which are set centrally at provincial or district levels also serve as a measure of the performance of individual schools, districts and provinces. The results of the mock examinations, like those of any other assessment, should contribute to evaluation of the quality of teaching and learning and so provide information that will help with improvement strategies.

5.2 System-wide responsibilities

Some provinces and districts assess particular grades in specific competencies such as literacy, using a locally developed tool. Such assessments should be encouraged provided they make a significant contribution to improving teaching and learning.

The school, zone, district and province have responsibilities for ensuring that system level assessments are carried out effectively and used for the learners' benefit. Those responsible for education at national level should also receive assessment information from all other levels so that the ministry can formulate policy based upon the big picture of performance at all levels.

The zones should be able to analyse and use data from their schools to compare performance and provide interventions for their schools. The districts should use the same data to determine what kinds of interventions are required by their zones and schools. The same applies at provincial level.

As figure 3 shows, there should be a flow of assessment information from national level down through provinces, districts and zones to schools. There should also be a free flow of information in the reverse direction. Assessment information is a powerful improvement tool but only if it is made available to everyone, at all levels, who can use it to improve learning. This 'two-way traffic' of assessment information ensures that all practitioners are able to play their part in providing appropriate feedback and implementing interventions.

It is important to note that system-level assessments, like those that take place at school level, should be organised, conducted and analysed with the understanding that their primary purpose is to improve learning. System-level assessments inform practice at classroom level and policy development at higher levels.

The roles of practitioners in the zones as well as at district, provincial and national levels should include collection and analysis of data so that it can have a timely impact on performance at school level.

Figure 3. The flow of assessment data through all levels of the education system



6. Analysis and use of assessment data for improving learning

All the methods of assessment detailed in the framework provide data relating to the effectiveness of education. The important information revealed by this data can inform education practitioners about performance at every level from each individual learner through to the national system as a whole. Assessment data is used to hold practitioners to account for performance at each level but it also provides the key to improving learning.

Assessment data contributes to improvement at every level by:

- revealing where improvement is most needed (so that challenges can be addressed);
- highlighting where best practice is taking place (so that it can be shared and replicated);
- providing evidence of the effectiveness of policies and interventions that have an impact on learning;
- revealing trends in performance that may require action.

As it contributes to improvements in policy and practice, assessment data can have a powerful impact on learning, on learner outcomes and on the future of the nation.

There are three key requirements for assessment data to have such an impact:

- a) Quality data must be produced and carefully analysed so that it provides useful information;
- b) The analysis of the data must be made available to colleagues in a position to use it to make a difference;
- c) The information must be acted upon without delay.

Practitioners at all levels must play their part in ensuring these three requirements are met so that the education system as a whole is responsive and fast improving.

It is important for education practitioners at every level to have an overview of the assessment data that is needed throughout the system, why it is important and how the data is made available.

6.1 At school level

6.1.1 In the classroom

Data needed

Teachers need data that gives them a clear picture of the strengths and weaknesses of each of their learners. This information enables teachers to provide learning activities that suit the needs of individuals and groups of learners (e.g. boys/girls; rural/urban). As a result,

teachers are equipped to ensure that no-one is left behind, no-one is held back and all learners make progress at every stage of their education.

Assessment information should also be available to teachers that will help them to improve their teaching and learning strategies and to address any shortfalls in aspects of learning identified at school, district, provincial or national levels.

Sources of data

Teachers gain much of the assessment information they need through their own assessment-for-learning activities in the course of their routine teaching.

Teachers also need assessment information relating to their learners from any national examinations or diagnostic (catch-up) tests they may have taken.

Relevant assessment data from sample surveys (at any level from district through to international) that could help them to improve their classroom practice should be made available to teachers.

Data from national examinations may reveal weaknesses in learners' understanding. For example, particular aspects of literacy or numeracy may need closer attention, or there may be common misconceptions in science.

6.1.2 At whole school level

Data needed

School leaders need learner performance data that gives them information to help them lead and manage their schools more effectively. With this information, school leaders can share the good practice of teachers whose classes perform particularly well and they can develop strategies to address underperformance. They can also use data to identify where there is good practice nationally and internationally from which they can learn.

Sources of data

School leaders can gather and analyse data from internal assessments carried out within their own schools, such as end of year tests and from teacher assessments carried out in the classroom.

Data from external assessments, both national examinations and sample surveys (from local through to international), should also be used.

6.2 At system level

6.2.1 Districts, provinces and the Ministry

Just as school leaders are responsible for the performance of teachers within their schools, District Education Board Secretaries (DEBS), Provincial Education Officers (PEO) and the Permanent Secretary (PS) in the Ministry of General Education (MoGE) have responsibilities for performance at the appropriate level.

Analysis of assessment data is essential to allow the DEBS, PEOs and the PS to carry out their respective roles effectively. Improving learning in the nation's schools is the overarching objective of everyone in the education system. Assessment data enables improvement strategies to be applied where they will make the most difference and be most cost-effective.

The amount of data available from all the different methods of assessment that are used across the education system is considerable. There is too much information for DEBS, PEOs, MoGE colleagues and the PS to take account of everything as they carry out routine monitoring and evaluation of the effectiveness of the system.

To overcome the challenge of this high volume of data, an agreed set of key performance indicators should be used.

The performance indicators should:

- provide enough information to give a good overview of standards and learners' progress;
- be limited enough that the information can be easily understood and acted upon;
- allow performance to be compared fairly
 - across schools, districts and provinces
 - from year to year;
- cover performance across the curriculum such that
 - no key curriculum areas are overlooked
 - there is a focus on all elements of the competency curriculum and not just knowledge.

Changing priorities over time may lead to changes in the indicators but they should be kept to a minimum. The key information in the performance indicators is taken from the national examinations at grades 7, 9 & 12 and decisions have to be made about what other data to include.

There should be mechanisms in place at every level of the system for routine review of assessment data.

Data needed

Each DEBS requires assessment data relating to the performance of learners in all schools in the district.

Each PEO requires data relating to the performance of learners in all schools in all of the districts in the province.

MoGE colleagues and the PS require data relating to the performance of all learners in all of the schools in all of the provinces.

This information enables DEBS, PEOs, MoGE colleagues and the PS to identify both where good practice exists that can be shared, and where interventions are needed to improve learning.

DEBS, PEOs, MoGE colleagues and the PS also need information about any shortcomings that apply across the whole system that might require system-wide change.

Sources of data

National examinations are standardised so they provide consistent assessment information about performance in every school, district and province.

Sample surveys provide information relating to a wide range of aspects of learning across the curriculum.

Detailed analysis of performance in national examinations can provide information about learning in relation to particular elements of the curriculum. For example, the analysis may show weaknesses in composition in English, in understanding of decimals in mathematics or in knowledge of a particular period of Zambian history. This valuable information should be provided to colleagues at appropriate levels of the system so that it leads to improvements in teaching and learning or to adaptation of the curriculum.

Standards Officers at district, provincial and national levels have access to information that staff collect in schools through their own internal assessment strategies. They can bring this extra data source to the attention of DEBS, PEOs, MoGE and PS.

6.2.2 The Examinations Council of Zambia (ECZ)

High quality data is central to the role of ECZ. Their task is to set tests and examinations that provide data that is valid, reliable, consistent and useful.

- i. National examinations at grades 7, 9 and 12 are described as 'high-stakes' because the results have an impact on the future pathways and life chances of learners. The outcomes of these examinations are also used to hold education practitioners to account at all levels of the system. National examinations involve all learners in each of these three cohorts.
- ii. Sample surveys are designed to provide information about the effectiveness of particular aspects or parts of the education system. National surveys

focus on different issues over time to reflect changing priorities and concerns. The PISA international surveys are administered by ECZ. Sample surveys involve a randomly selected group of learners rather than whole cohorts. This approach gives results that provide information that shows what is happening across the country without the time and expense of involving every learner.

All levels of the system rely on the quality of the assessment information that ECZ provides.

Sample surveys provide information that may be used for improvement in terms of policy, planning or practice at any level of the system.

Apart from the summative data that national examinations provide, fine analysis of examination results can give detailed information about learning. This information can be used formatively to improve the curriculum, teaching and learning in schools or policy and practice at different levels of the system.

7. Other key issues

7.1 Balancing learning time and assessment time

Assessment for learning is a key part of daily teaching and learning in classrooms. It is formative and its purpose is to ensure learners remain focused on improving their learning and so make good progress. The importance of assessment of learning – or summative assessment – is not in question but there is a balance to be struck between the time allocated to learning in classrooms and time devoted to examinations.

When learners are taking summative formal tests and examinations they show what they have learned but they cannot continue to learn while they are involved in this type of assessment. A farming analogy is often used to explain the issue in relation to summative assessment: Weighing the animal does not make it fatter.

As summative assessment time has an impact on learning time in lessons it is important to plan carefully for tests and examinations so that learning time is maximised.

Strategies for reducing lost learning time include:

- Scheduling formal tests less frequently;
- Reducing the number of subjects tested;
- Reducing the number and length of examination/test papers;

6.2.3 MoGE's Planning and Information Directorate

The SAQMEC international surveys are used annually with Grade 6 learners. They are administered by the Planning and Information Directorate of MoGE and they provide the Ministry with valuable information for use in strategic planning. Member countries collaborate to agree joint priorities and so the focus of the survey each year.

6.2.4 Teacher Education and Specialised Services (TESS)

Assessment data informs TESS policy and practice. A key objective of teacher education, both initial and in-service, is to empower teachers to enable learners to achieve higher standards in their assessments. Teacher education should focus on good practice, both in Zambia and internationally. Analysis of assessment data shows where good practice takes place and this should be incorporated into training programmes.

- Reducing or removing study time before examinations/tests;
- Ensuring lessons continue as far as possible (for all Grades) up to and during examination periods and resume as soon as examinations end;
- Minimising or avoiding the use of classrooms so that lessons are not disrupted;
- Making use of alternative spaces in the community for examinations or for teaching during examination periods.

7.2 Management of assessment information

For assessment information to be used effectively for improvement, whether at school or system level, it must be readily available to the practitioners who need it. Unused data results in missed opportunities for improvement.

Those in a position to use the information to make a difference and improve the quality of education should not have to work hard to understand it, nor should they have to wait too long so that the information loses its value and becomes irrelevant. This requires efficient and effective systems for collecting data, for analysis and presentation of useful information and for distributing the information to all users. It is the role of school leaders and of leaders at system level to ensure that these systems are in place, to monitor their operation and to intervene as appropriate when improvements are needed.

Electronic information management systems can process high volumes of data very quickly and they clearly have a key role in the process. It is important that practitioners at all levels in the system work together to ensure that assessment information reaches everyone who needs it in good time. In those schools where electronic systems may not be available, efficient paper-based alternatives need to be in place.

7.3 Monitoring standards of all learners

Assessment information can be used at all levels of the system to monitor performance. As has been stated above, assessment data can be regarded as management information that is used to decide upon and implement steps to make improvements.

For these improvements to have an impact on the full range of learning and on the full range of learners, it is important that assessment information provides all the information necessary. For example, if assessment information focuses only on knowledge, it will not lead to improvements in the way learners develop skills and competences. Similarly, if assessment information relates only to the highest levels of achievement it cannot be used to improve learning for learners of all abilities.

It is therefore important to review assessment systems periodically to evaluate the extent to which they are contributing as fully as possible to improvements in learning.

7.4 Assessment of performance of learners with special needs

School leaders and teachers should ensure that all learners can participate in assessments that give

everyone equal opportunities to demonstrate the extent to which their learning meets expectation. One-size-fits-all approaches to assessment are not always appropriate. Some methods of assessment put learners with special needs at a disadvantage so that they cannot demonstrate their learning. This can result in failure to recognise the abilities of learners with special needs and so in valuable human resources being underutilised.

Special provision should be considered for any learner with a specific education need. Strategies for such special provisions should be put in place in all cases where learners' capacity to participate in an assessment may be negatively affected. Learners who may be in need of special assessment provisions include those with a disability or impairment as well as those suffering from an illness or seriously affected by personal circumstances such as a bereavement.

ECZ makes access arrangements for candidates who, because of a special need, cannot cope with the demands of an examination paper. These arrangements allow these candidates access to the examination and an opportunity to demonstrate their ability. These arrangements include:

- a) extra time allowance;
- b) provision of specially adapted papers e.g. braille, large print and adapted English;
- c) assistance with reading or writing.

The role of the school in relation to external assessments is to act on behalf of the learner and make the necessary arrangements with ECZ. In the case of school-based assessments, the school should establish the eligibility of learners for special provision and take appropriate action at school level. As a result schools are prepared to provide ECZ with the information they need about individual learners when it comes to external examinations.

8. Conclusion

This document is Zambia's *National Learning Assessment Framework*. The terms *learning* and *assessment* are used throughout the document emphasising the important contribution that assessment makes to learning. The guidance provided in this framework should be used by practitioners to optimise this contribution and so improve the effectiveness of the education system.

This relationship between learning and assessment is also reflected in the alignment of the NLA and the Zambia Education Curriculum Framework (ZECF). These should be regarded as sister documents, the ZECF setting out expected learning and the NLA providing

guidance on how that learning should be assessed. A third key document that draws on both the ZECF and the NLA is the Teacher Curriculum Implementation Guide (TCIG). This contains guidance about classroom practice for improving learning in relation to both pedagogy and assessment. It is therefore important that the NLA is not considered in isolation.

As this framework makes clear, assessment serves a number of purposes and there is a wide range of different methods of assessment used in schools and at system level. These purposes and methods have been detailed in order to give all practitioners an overview of assessment and so enable every individual to

understand both the big picture and the importance of their own contribution.

This understanding of the assessment system as a whole is also important so that practitioners at school and system level can collaborate to ensure that assessments are coordinated and have a positive, coherent impact on learning.

Effective assessment produces a wealth of data that can inform strategies for improvement across the whole spectrum, from individual students up to the whole education system. The roles of practitioners across the system in relation to data are detailed so that everyone can make the best use of data for improving learning.

Finally, guidance is provided regarding key aspects of management of assessment to boost its impact on learning. These key aspects are balancing the time devoted to learning and to summative assessment, the timely provision of data to practitioners, and strategies for ensuring assessment serves the best interests of all learners including those with special needs.

Ensuring that assessment at every level helps to improve learning and contributes to system improvement is a considerable challenge. Careful attention to the guidance provided in this framework will ensure that the nation's assessment system operates in harmony with teaching and learning in schools for the benefit of every learner and of Zambia.

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About ZESSTA

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