

The Use of Learning Assessment Data

Zambia



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Overview

Although the number of countries conducting large-scale assessments has increased significantly over the past two decades, this has not necessarily led to the effective use of learning assessment data in policy-making and planning. To better understand the reasons for this, the UNESCO International Institute for Educational Planning (IIEP) conducted a qualitative study in six sub-Saharan African countries that explored both how they use learning data in the education planning cycle and what influences their use. The study examines the use of data generated by national, regional, and international large-scale assessments as well as citizen-led assessments. When relevant, it also explores how it articulates with the use of other data, such as examination results.

IIEP's research team together with researchers from the University of Zambia conducted an in-depth case study in 2020. A number of interviews, observations, and focus group discussions were held with actors involved in the production and use of learning data at central and decentralized (i.e. provinces) administrative levels, complemented by documentary analysis. Drawing from the research data, this policy brief explores the main lessons for national policy-makers and planners as well as international actors.

Background

Zambia carries out a National Assessment Survey (NAS) in grades 5 and 9; Early Grade Reading Assessment (EGRA) and Early Grade Mathematics Assessment (EGMA) in Grade 2; the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SEACMEQ) assessment in Grade 6; and the Programme for International Student Assessment for Development (PISA-D) for 15-year-olds in Grade 7 or higher.



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Zambia has a long history of monitoring student performance. Public examinations were first conducted in 1928 and remain a prominent feature in the education sector (OECD, 2016). The creation of the Examination Council of Zambia (ECZ) in 1983 was a milestone in the development of a national assessment system. Zambia then became one of the founding members of SEACMEQ and it has participated

in all surveys since 1995. In 1999, the first NAS administration for Grade 5 students marked an important shift in the Ministry of General Education (MoGE) ‘from focusing on quantitative issues of education provision to those of quality’ (MoGE, 2015). In 2014 Zambia conducted EGRA and EGMA assessments, and in 2018 it took part in PISA-D.

Use of learning assessment data in the planning cycle

Education sector analysis (ESA) (2018)	Education and Skills Sector Plan (ESSP) (2017–2021)
<ul style="list-style-type: none"> – NAS, EGRA/EGMA, and SEACMEQ III assessment results were used to report on learning outcomes. Some of these results were disaggregated by sex, socio-economic status, and urban or rural location of pupils. – ESA links learning outcomes with variables influencing student results. However, it emphasizes that there is little follow-up on assessment results to improve learning outcomes. – The document relies mostly on the secondary analysis provided in assessment reports. – It recommends strengthening the analysis and dissemination of assessment results to improve education quality, equity, and efficiency. 	<ul style="list-style-type: none"> – ESSP gives learning assessments strategic importance. It ‘makes assessing learning outcomes a critical driver for decision-making over the strategy period’ (MoGE and MHE, 2018: 93) and it ‘will also be focusing on improving instruction in literacy and numeracy while placing emphasis on learning assessment to ensure remediation’ (MoGE and MHE, 2018: 99). The plan aims to improve assessment implementation as well as student results. – ESSP uses the latest NAS results to report on learning outcomes and elaborates on factors influencing them (e.g. socio-economic disparities, teacher skills, and oversight). – ESSP plans to implement a school readiness assessment at the early childhood education (ECE) level.
Implementation of ESP	Monitoring and evaluation of ESP
<ul style="list-style-type: none"> – Officers in provinces use NAS and EGRA/EGMA results to inform certain planning activities (i.e. mostly monitoring and evaluation, as well as teacher professional development activities). – School-based assessment data, produced by provinces, and examination results inform provincial strategic plans. 	<ul style="list-style-type: none"> – Learning assessments are largely used for monitoring education quality. – ESSP used NAS and EGRA/EGMA results to set the baseline for 2016 as well as targets for the strategic objective on improving learning outcomes.



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Summary

- Although the National Learning Assessment Framework (NLAF) sets comprehensive guidelines for the management and use of learning data, it has not yet been implemented and many actors are not aware of it.
- Although some training needs have been identified, the ECZ already has the key capacities to manage learning assessments; lack of capacities is more obvious at the decentralized level.
- Although NAS reports provide detailed analysis of student learning outcomes, an in-depth examination of how different factors influence student performance remains unsystematic.
- Cooperation with international partners allowed the strengthening of a national assessment system, as they have been important advocates for a stronger culture of evidence.
- NAS is not representative at district level and the focus on school-level analysis remains weak.
- Cooperation among structures involved in the management of learning data (i.e. the ECZ, the Department of Planning and Information [DPI], and the Department of Standards and Curriculum [DSC]), is not always optimal, but efforts are being made to ensure they work better together.
- A lack of a detailed strategy for the dissemination of assessment data leads to ad hoc dissemination modalities; although assessment reports manage to reach central-level officials, this is not the case for all actors in provinces, districts, and schools.
- Communication between central-level units and provinces on assessment results remains somewhat limited. Although provincial resource centres participate in the collection of learning data, they are not actively involved in the analysis of results.
- Availability of funding is not stable over the years, which creates financial difficulties (e.g. delays in assessment implementation).

Key findings and recommendations

1. Institutional framework

Although it has not yet been implemented, NLAF (MoGE, 2017) is an overarching document that defines the principles that apply to all student assessments in Zambia. It defines the intended use of learning assessment data both in general and for specific actors. It outlines the responsibilities of actors, as well as existing types of assessment, and demonstrates how they articulate with each other. It provides consistent definitions of the key concepts linked to assessments. The document also provides guidance for diagnostic use of assessment information to plan remedial action. Most importantly, it sets out conditions for effective decision-making using assessment results, such as the timely availability of data.

NLAF articulates well with two other key policy documents, the Zambia Education Curriculum Framework (ZECF) and the Teacher Curriculum Implementation Guide (TCIG). Moreover, based on these documents, teacher training modules on assessments have been developed recently but are not yet in place.

Recommendations

- Widely disseminate NLAF at central level, provinces, districts, and schools. The dissemination process should include workshops for officials on how to use the NLAF guidelines and how to put them into practice in their work.
- Implement teacher training activities on assessments to familiarize them with the existing regulatory framework and assist them in its implementation.

NLAF has not yet been implemented and respondents showed little awareness of the regulatory framework linked to learning assessments (e.g. only one officer mentioned NLAF). There seems to be a lack of ownership of NLAF among actors at central level and in the provinces. However, interviewees were aware of the intended use of learning assessment data, albeit in quite general terms.

2. Data analysis and dissemination

2.1. Assessment design and quality of the analysis

NAS reports provide an in-depth analysis of student achievements. They disaggregate results by different school and student characteristics, such as sex, province, geographical location (urban or rural), and type of school (public, private, grant-aided, community) (ECZ, 2019). Reports analyse results by subject areas and examine the change in student learning outcomes over time. They also include analysis and recommendations on different pedagogy-related elements.

However, they do not systematically examine how different factors influence student performance. NAS background questionnaires, which replicate the SEACMEQ questionnaires,

have not changed significantly since 1999 and more detailed background information (e.g. on teachers and schools) is available from the annual school census results (OECD, 2016). Moreover, several actors noted that there is a lack of analysis at school level, which impedes the use of learning data by teachers and principals.

Several shortcomings linked to the assessment design have been identified:

- Although ESSP (2017–2022) anticipates a school readiness assessment, NAS does not cover the ECE level.
- NAS results are not statistically representative at district level (MoGE, 2015) and the current budget does not allow for an increase in the district sample (ECZ, 2019).

However, efforts are being made to make NAS inclusive. As the World Bank report underlines, ‘accommodations or alternative assessments are provided for students with disabilities, and special plans are made to ensure that the NLSA [National Large-scale Assessment] is administered to students in hard-to-reach areas. The NLSA is also offered in the language of instruction for almost all student groups’ (World Bank, 2009: 7).



2.2. Dissemination

Although dissemination efforts have been well documented for the period before 2012 (ECZ, 2019: 14), recently the dissemination process seems to have become more restricted. NAS and other assessment reports reach central-level units, but actors in provinces, districts, and schools do not systematically receive analysed assessment results. Sometimes data arrive long after their publication. Although some of the more recent NAS and EGRA/EGMA reports are available online, this is not systematic.

In addition, there is no detailed strategy on the dissemination of assessment results, which leads to ad hoc dissemination modalities. Nonetheless, the ECZ and the DPI have started to work together to build a common dissemination plan. In addition, a new strategy was developed to involve key stakeholders in the discussion of assessment results and their implication for policy (OECD, 2018). In addition, joint annual reviews are a social dialogue structure where learning assessment results are discussed, and officers from districts as well as provinces take part in these discussions.

Recommendations

- Develop a common communication framework for all directorates and implement the two-way communication that NLA calls for (i.e. a flow of assessment information from national level down through provinces, districts, and zones to schools, and in the reverse direction). Coordinate dissemination efforts with provincial units so that learning data can reach districts and schools promptly.
- Ensure stable funding for dissemination activities and ensure data are released on time.
- Gather learning assessment data into one database to make them more easily accessible for different actors. This work could build on the activities of the World Bank-led project to enhance EMIS, as part of the wider Zambian Education Enhancement Project.

Learning data from different assessments are not available from one single database. The ECZ database for assessment results is not part of the education management information system (EMIS). Some data are also stored with third parties (i.e. DevTech and MSI for EGRA/EGMA data), other units (i.e. DPI for SEACMEQ data), or the Zambian National Data Centre.



3. Capacities and resources

3.1. National capacities

The ECZ has considerable experience in conducting and analysing assessment surveys. Its staff have received several training sessions over the years and acquired capacities to manage learning assessments. However, certain skills remain to be strengthened, as documented by the PISA-D Capacity Needs Analysis (OECD, 2014).

Interviewees noted that the MoGE faced difficulties in replacing and upskilling its human resources after more than 20 years of conducting large-scale assessments. More recently, the need for capacity building in database management and the establishment of a common data infrastructure to support communication and information sharing became more important (OECD, 2014). In addition, it was noted that there are further capacity needs for advanced statistical analysis, programming, and dissemination strategies.

Many decentralized-level officials expressed reservations in relation to their capacities to manage learning data, and many others were not satisfied with their units' skills. A number of specific issues were raised, such as the fact that capacity-building activities on learning data were not effective and not of an equal quality and frequency to those conducted at central level.

3.2. Financial resources

Learning assessments in Zambia are funded by a combination of national and external resources depending on assessment. The MoGE has been gradually increasing its financial contributions to NAS activities, although resources for assessments (i.e. NAS, EGRA/EGMA) have also been mobilized using the

Zambia Education Sector Budget Support Programme (ESBS). The World Bank Group's Russia Education Aid for Development (READ) Trust Fund programme funded PISA-D (OECD, 2016), whereas SEACMEQ financing mostly came from loans or external donors.

However, certain financial challenges have been identified. EGRA and EGMA were only conducted once and did not take place as planned in 2016 due to financial issues (only partial data collection was completed that year). NAS was also subject to delays due to a lack of resources at ECZ. In addition, although the ESSP plans to fund assessment activities, many interviewees pointed to the inconsistency between the planned budget and the budget actually allocated. Furthermore, the financial resources that are available do not allow the ECZ to engage in research projects using learning data. Financial difficulties might also be linked to the fact that some partners withdrew from the country as learning outcomes stagnated (i.e. Irish Aid and the UK Department for International Development) (Universalia, 2019: 97).

Recommendations

- Ensure stable national funding for NAS and other assessments that would cover not only data collection and analysis but also their dissemination and research activities. Make sure a planned budget reaches actors in charge of the management of learning data on time.
- Upskill the ECZ staff, especially when it comes to training in database management, advanced statistical analysis, and dissemination, to improve its efficiency when handling learning assessment data. Conduct customized training for decentralized-level officials on the production and use of learning data.

4. Cooperation among actors

4.1. Cooperation among national actors

Cooperation between the main structures involved in learning assessments (i.e. ECZ, DPI, and DSC) is not always optimal. ECZ operates as a semi-autonomous government agency under the DSC (OECD, 2016). However, in reality the ECZ is quite autonomous in its activities and has its own operations strategy as well as some independent funding. ECZ and DPI share responsibilities when it comes to learning assessments: ECZ leads NAS and EGRA/EGMA, whereas DPI is in charge of PISA-D and SEACMEQ (MoGE, 2017). However, their exchanges remain limited, although informal meetings are set up to allow them to improve planning together.

Some institutional mechanisms are in place to foster cooperation among national actors. For instance, the National Assessment Technical Committee (NATC), which includes members



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Recommendations

- Continue building on the positive cooperation between partners, especially when it comes to capacity development activities in the production and use of learning data.
- Organize regular meetings or workshops between ECZ, DSC, and DPI to facilitate communications. Further strengthen committees such as NATC and PITC.
- Make sure the ECZ and DPI coordinate their efforts to ensure coherence among different large-scale assessments, as well as the sharing of common expertise.
- Create spaces of exchange and dialogue on assessment results between ECZ and the provinces to engage decentralized units with assessment practices in a more critical way.
- Further strengthen awareness regarding the importance of the use of learning data among policy-makers and senior civil servants in education to foster their use in the education planning cycle.

from both ECZ and DSC, is responsible for reviewing and monitoring data collection procedures and instruments. The Policy Implementation Technical Committee (PITC) is also an opportunity for different actors to raise concerns or discuss assessment results. Members of the committee also include non-governmental actors.

4.2. Cooperation at decentralized level

There is a lack of communication between ECZ and the provinces regarding learning assessment data. Provincial resource centres participate in data collection, which often appears to be a routine exercise, but they are not involved in the analysis of results. Consequently, officers at this level do not engage with the assessments and analysis of their results in an analytical and critical way. Some provincial officials felt excluded from various data management phases. Furthermore, respondents noted that they are only invited to the central level to discuss learning outcomes when there

is noticeable poor performance in their area. In addition, some officials in provinces seem to communicate more directly with the ECZ without necessarily sharing the information with other units in their province.

Some teachers expressed resistance to the use of learning data. Their main issue was that they did not trust the accuracy of assessment results and they did not consider that learning assessment data reflected the situation they were witnessing in classrooms.

4.3. Cooperation with international partners

International partners played an important role in the development and strengthening of the national assessment system and its regulatory framework. For example, partners were highly involved in the development of the NLAF. Their cooperation with national counterparts is smooth, as ECZ and other units have been in regular contact with the Organisation for Economic Co-operation and Development (OECD) and the US Agency for

International Development (USAID), as well as other partners that support the national assessment system.

International partners have been promoting the culture of using evidence in policy and planning. They use learning data when referring to quality education indicators. In addition, they use assessment data to inform their decisions and activities, mostly projects aiming to improve learning outcomes in Zambia. However, partners tend to rely more on externally designed assessments, such as EGRA, EGMA, PISA-D, or SEACMEQ, rather than national assessments. National officials at decentralized level, on the other hand, question the design and relevance of regional and international assessments for the national context.

[See the IIEP Information Sheet on Zambia and more information about the study and its methodology on the IIEP-UNESCO website: www.iiep.unesco.org/en/our-expertise/use-learning-assessment-data-planning.](http://www.iiep.unesco.org/en/our-expertise/use-learning-assessment-data-planning)

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