Knowledge hub
-
Collection of best practices

Summary of the best practice

1. Title of the best practice (e.g. name of policy, programme, project, etc.) *

Building a Functional Education Management Information System (EMIS)

2. Country or countries where the practice is implemented *

NAMIBIA

3. Please select the **most relevant** Action Track(s) the best practice applies to *

- ☑ Action Track 1. Inclusive, equitable, safe, and healthy schools

- ☑ Action Track 2. Learning and skills for life, work, and sustainable development

- ☑ Action Track 3. Teachers, teaching and the teaching profession

- ☐ Action Track 4. Digital learning and transformation

- ☐ Action Track 5. Financing of education

4. Implementation lead/partner organization(s) *

   MINISTRY OF EDUCATION, ARTS AND CULTURE

5. Key words (5-15 words): Please add key descriptive words around aims, modalities, target groups etc. *

   1. Evidence-Based Planning and decision-making
   2. EMIS Decentralization
   3. Data Must Speak to all

6. What makes it a best practice? *

   Transformation from Paper-based to Web-based system

Description of the best practice

7. Introduction (350-400 words)
   This section should ideally provide the context of, and justification for, the
   practice and address the following issues:
   i) Which population was affected?
   ii) What was the problem that needed to be addressed?
   iii) Which approach was taken and what objectives were achieved? *

> By independence in 1990, Namibia did not have an integrated EMIS, and each of the 11
> education authorities kept hard copies of their own records and no credible database. In 1992,
> the Ministry of Education and Culture established unified EMIS to cater for the whole country
> and with the mandate to:
>> collect and edit quantitative and other information;
>> compare and analyze the information collected;
>> develop and interpret alternative courses of action and their likely consequences; and
>> present information to decision makers and to the education community more generally.
>
> EMIS started operating in 1992, but without any regulatory framework, except the aspirations of
> "Towards Education For All" (Namibia. Ministry of Education and Culture, 1992) which was later
> supported by the formal establishment document of the Education and Culture in 1993
> (Namibia. Ministry of Education and Culture, 1993).
>
> In the initial stages EMIS was predominantly based on paperwork which schools filled in and
> send to Head Office for processing. Errors detected were referred back to schools for
> rectification and the process was tedious and time consuming. Equally, data coding was also
> done manually followed by centralized data capturing that would last for about 8 months as
> only 4 data capturers were available centrally. At times the Ministry had to hire external data
> capturers and was not cost effective and at times resulted in more errors in data.
>
> Data collected was limited to number of schools, learners, teachers, supports staff, education
> infrastructure, and basic services supply. These traditional EMIS data did not answer some
> important developmental questions. Furthermore, as the education system evolved, more data
> gaps were identified, such as the need to align our data collection indicators to regional and
> global standards, the need to include new data indicators that respond to contemporary needs
> and challenges in education and the need to collect disability inclusive data. As the country was
> gearing more into educational quality issues (instead of just access) there was a need to relook
> at the data that would respond to issues of the time, e.g. Orphans and Vulnerable children,
> dropout and causes, HIV and Life Skills data, etc. These indicators will not only allow the Ministry
> to attend to the needy learners, but also assisting in budgeting and financing the needy areas.
>
> These are basically some of the recommendations made in the Continental Education Strategy
> for Africa (CESA), as far as transforming EMIS is concerned.

8. Implementation (350-450 words)

Please describe the implementation modalities or processes, where possible in relation to:

i) What are the main activities carried out?

ii) When and where the activities were carried out (including the start date and whether it is ongoing)?

iii) Who were the key implementation actors and collaborators? (civil society organizations, private sector, foundations, coalitions, networks etc.)?

iv) What were the resources needed (budget and sources) for the implementation?

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To address the challenges face, EMIS engaged on the decentralization of the system in 2011 by building a computerized web-enabled system that could be accessed from anywhere (in and out of the country), as well as allowing schools to collect data on soft copies. Database enhancement is ongoing and is dictated by educational needs and updates of the curriculum and other developments.

Data capturing is done at all levels in education (Schools, Circuits, Regional Offices), thereby improving the efficiency and timeliness in the EMIS Cycle. This has therefore enabled EMIS to provide reports in a short period of time and while data still matter.

Data collecting tools were realigned to include among others: Orphans and Vulnerable Children data, Learners and teachers with disabilities and the degree of their disabilities, availability of disability user-friendly services in schools, Information and Communication Technologies availability (including internet accessibility), home languages (to support language policy and look and the marginalized groups interventions), participating in School Feeding Program, as well as Life Skills Based HIV and Sexuality Education Programs.

The EMIS database was restructured in such a way that there are built-in constraints what would allow data cleaning at the point of data capturing, cutting the time spent on data cleaning. Data consistency, reliability and therefore accuracy and timeliness are improved.

To curb out claims of ghost employees, EMIS has included the payroll scheme which enables the verification of employees captured by EMIS against the Ministry of Finance's payroll.

To ensure that EMIS is operating on concrete legal basis, EMIS Policy was crafted in 2019. This policy spells out the guiding principles, vision, mission as well as goals and objectives.

The policy makes the implementation of the EMIS Cycle easier as it addresses issues of roles and responsibilities at every level (schools, Circuit, etc.) which were not outlined. This also enhances the accountability and ownership of the process at all levels.

With decentralization, more implementers came on board and this, as earlier mentioned, boosted efficiency and effectiveness of data collection. These implementers include Administrative staff at Schools, Circuits and Regional Offices (Already on the Ministry's payroll), teachers, school principals, Inspector of Education and Regional Education Planners.

Furthermore, EMIS has also formed smart partnerships and Memorandum of Understanding (MoUs) with organizations such as UNICEF, and Global Fund, Millennium Challenge Account-Namibia (MCA- N) and SILNAM IT Solution. With these partnerships, EMIS benefits greatly from technical and financial support as well as capacity building for its staff, which those organizations

provide.

9. Results – outputs and outcomes (250-350 words)
   To the extent possible, please reply to the questions below:

   i) How was the practice identified as transformative? (e.g., impact on policies, impact on management processes, impact on delivery arrangements or education monitoring, impact on teachers, learners and beneficiary communities etc.);
   ii) What were the concrete results achieved with regard to outputs and outcomes?
   iii) Has an assessment of the practice been carried out? If yes, what were the results? *

   EMIS now has around 500 users who can log onto the system and capture data, and around 40 users who can do intermediate system administration work. Administrators can now monitor the individual data capturer's work and immediately intervene to correct any errors or omissions, thereby also mentoring the colleagues in the process. Data capturing and cleaning process is therefore reduced from about 8 months to 2 months.

   There is evidence-based decision- making in respect of activities such as budgeting and resource allocation as data is availed timely, with the up to date production of the EMIS reports.

   Aligning of EMIS data collection tools with international commitments not only enable the Ministry to benchmark EMIS to SADC and AU Norms and Standards, but also report in line with SDG4, Washington Group on Disability Statistics, response to COVID-19 pandemic and UNESCO Institute of Statistics among others.

   EMIS is now positioned to collect data that can be used to monitor progress in achieving SDG4, the delivery and quality of Life Skills-based HIV and Sexuality Education.

   During the Development of the SADC EMIS Norms and Standards Framework in 2011, Namibia was used as a pilot and was found to be above average in most of the norms.

   A formal Assessment was done by the Association of the Development of Education in Africa (ADEA) in 2016 (), prior to the piloting of the Innovations for Monitoring Teacher and Learner Attendance (2017/8).

   ADEA's findings, among others were that the Ministry of Education, Arts and Culture in Namibia has a clear commitment to EMIS, as a critical success factor in the bid to collect, analyse and use data and information as key ingredients for an effective education system (ADEA, 2017). Another finding was that there is a well- established EMIS within the Ministry of education, Arts and Culture's organizational structure, with institutionalized processes. Also, a conducive environment existed within the Ministry, for EMIS to flourish and this was demonstrated by a commitment and support to ensure legal, regulatory, human resources and infrastructural capacity for EMIS.

   However, it was further found that EMIS functions have been clearly understood due to the absence of EMIS policy and that EMIS was not integrated as different dirrectorates and units within the Ministry were undertaking individual EMIS related activities without proper coordination. This had resulted in high redundancies, fragmented databases and duplication of meagre resources as well as overlapping roles and responsibilities. It was also found there was low data-driven culture within the Ministry.

10. Lessons learnt (300 words)
    To the extent possible, please reply to the following questions:
    i) What were the key triggers for transformation?
    ii) What worked really well – what facilitated this?
    iii) What did not work – why did it not work? *

Firstly, the need to transform education for socio-economic advancement is a national priority for Namibia as a nation. This is both in terms of education delivery, planning and management as well as capacity building. This is enshrined in our Vision 2030 and National Development Plans. A great need therefore exist for EMIS to transform, to ensure that relevant data is collected, in an efficient manner to support planning and decision-making.

Secondly, Namibia is party to numerous regional and international cooperation and agreements such as the AU's agenda 2063 and Continental Education Strategy for Africa (CESA), the UN's Sustainable Development Goals and many others. Therefore, transforming of EMIS is necessary to respond to the regional and international commitment as far transforming education is concerned.

What helped in bringing EMIS where it is today were consultations with relevant stakeholders, both internal and external.

There is always a close cooperation between EMIS and Namibia Statistics Agency (NSA), which was always available to scrutinize the crafted and advise if they addressing the national priorities.

The National Planning Commission has also assisted a great deal in pairing EMIS data to National Development Plans (NDPs) and Vision 2030.

Various departments within the Ministry, through the EMIS steering Committee, have brought in the dimension of various policies and together, assisted in crafting the results framework and reporting formats.

Close cooperation also existed between development partners, the Ministry and private companies entrusted to assist in building capacity within EMIS. The said development partners and private companies also form part of the Steering committee and this made integral part of EMIS transformation.

EMIS also enjoys the support of the Ministerial leadership and management who ensure that needed resources are availed for the smooth operation of the division.

Despite the above breakthrough, there were also some hiccups that hindered the EMIS transformation process. Among those are the unavailability of electricity and internet connectivity in many schools that still have to compile data manually.

As much as more users are identified annually, there are limited funds accommodating all of them during annual EMIS trainings. There is thus a need to train as many users as possible at both regional, circuit and school levels.

Another challenge is poor record keeping at school level. There are various registers at schools that need to be updated on regular basis as some of them record the attributes/ characteristics of learners. Education authorities therefore need pay more attention on these.

11. Conclusions (250 words)
    Please describe why may this intervention be considered a "best practice". What recommendations can be made for those intending to adopt the documented "best practice" or how can it help people working on the same issue(s)? *

    This transformation ensures that Namibia is upholding the principle of "Data Must Speak". This is because more accurate data can be provided on time and is of better quality and reliable.

    Planning and decision-making are also being done with data as evidence at hand.

    The added interpretations to the tables in the EMIS reports ensure that the general public and not only statisticians can easily understand what is presented.

    The data collected covers wide areas that are not only quantitative but also those that are qualitative in nature. For example, collecting data on teachers, their age and qualifications and the subjects and grade they are teaching enabled quality assurers to intervene when the desired learning outcome is not achieved.

    Since 2015, the EMIS reports have consistently been produced within a reasonable timeframe and are shared with stakeholders and the general public.

12. Further reading
    Please provide a list and URLs of key reference documents for additional information on the "best practice" for those who may be interested in knowing how the results benefited the beneficiary group/s. *

    Namibia. Ministry of Education and Culture (1992). Towards Education For All: A Development Brief. Windhoek: Gamsberg Macmillan.

    Namibia. Ministry of Education and Culture (1993). Establishment of the Ministry of Education and Culture.

    ADEA (2018). Project Implementation Report: Namibia Pilot Project.

    ADEA (2017). Education Management Information System (EMIS): Situation Analysis Report, Namibia.

    Namibia. Ministry of Education, Arts and Culture. (2019). Education Management Information System Policy Statement.

    Southern Africa Development Community (SADC). (2011). Education Management Information Systems Norms and Standards Assessment Framework.