
***THEMATIC PRIORITIES IN GPE MEMBER STATES
WITHIN THE KIX AFRICA 19 HUB REGION***

SUMMARY REPORT

Volume 1: Report
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**GPE Knowledge and Innovation Exchange (KIX)
Africa 19 Hub, UNESCO-IICBA**

About the KIX Africa 19 Hub

The Regional Knowledge and Innovation Exchange (KIX) Africa 19 Hub is expected to facilitate the collection, generation and exchange of data, knowledge and innovation for education policy formulation and implementation in 18 GPE member states, including Eritrea, Ethiopia, The Gambia, Ghana, Kenya, Lesotho, Liberia, Malawi, Mozambique, Nigeria, Rwanda, Sierra Leone, Somalia (Somaliland and Puntland), South Sudan, Tanzania (mainland and Zanzibar), Uganda, Zambia and Zimbabwe.

The KIX Africa 19 Hub functions as a regional forum to facilitate inter-country knowledge exchange and mobilization, learning, synthesis and collaboration among key national education stakeholders. The overall objectives and responsibilities of the Hub include:

- Fostering the exchange of demand-driven regional knowledge and building capacity of Hub members to identify, use, share and mobilize evidence;
- Producing and disseminating relevant knowledge and evidence syntheses to relevant actors and
- Advancing effective regional mobilization and knowledge and evidence uptake.

The KIX Africa 19 Hub aims to improve policies and practice that will strengthen national education systems within GPE member states to accelerate progress towards Sustainable Development Goal (SDG) 4 for quality, equitable education for all and expedite the implementation of the African Union (AU)'s Continental Education Strategy for Africa (CESA).

The KIX Africa 19 Hub is managed by a consortium of three organizations:

- **United Nations Educational, Scientific and Cultural Organization (UNESCO) International Institute for Capacity Building in Africa (IICBA)** – UNESCO IICBA promotes international collaboration in education, sciences and culture to increase universal respect for justice, the rule of law and human rights, along with fundamental freedoms proclaimed in the United Nations Charter.
- **United Nations Children's Fund (UNICEF), Eastern and Southern Africa Regional Office (ESARO)** – UNICEF ESARO provides humanitarian and developmental aid to children around the world.
- **The African Union (AU)** – the AU is made up of 55 member states and encompasses the Association for the Development of Education in Africa (ADEA). ADEA, a pan-African institution built on partnerships between African ministries of education (MoE) and training and their technical and external partners, acts as a catalyst for reform and adoption of promising policies and practices by pooling ideas, experiences, lessons learned and knowledge.

About the Authors

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Disclaimer

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Acronyms and Abbreviations

| | |
|--------|--|
| ADEA | Association for the Development of Education in Africa |
| AU | The African Union |
| CESA | Continental Education Strategy for Africa |
| CPs | Consortium Partners |
| ECCE | Early Childhood Care and Education |
| ECD | Early Childhood Development |
| ESA | Education Sector Analysis |
| ESP | Education Sector Plan |
| EMIS | Education Management Information System |
| GPE | Global Partnership for Education |
| ICT | Information and Communication Technology |
| IDRC | International Development Research Centre |
| IICBA | The International Institute for Capacity Building in Africa |
| KIX | Knowledge and Innovation Exchange |
| LEGs | Local Education Groups |
| MOE | Ministry of Education |
| M&E | Monitoring and Evaluation |
| SDG | Sustainable Development Goal |
| SNE | Special Needs Education |
| SRGBV | School-related Gender-based violence |
| SSA | Sub-Saharan Africa |
| STEM | Science, Technology, Engineering and Math |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| UNICEF | The United Nations Children’s Fund |
| WASH | Water, Sanitation and Hygiene |

Executive Summary

In a globalizing world, knowledge and skills are the drivers of economic and social well-being. Ensuring universal participation in education has been the primary objective of the global education agenda in the past decades. In light of this, sub-Saharan Africa (SSA) has made strong gains in increasing access to primary education. However, the region continues to have the highest rates of exclusion globally: millions of children, particularly those from disadvantaged backgrounds, still remain out of school. Learning outcomes remain low even for students in schools, and only a privileged few complete secondary education. In its Continental Education Strategy for Africa (CESA), the African Union (AU) cautions that “the main challenge in Africa is to sustain access, while improving learning outcomes” (CESA 16-25).

Having realized such a situation in Africa, and the rest of the world, the Global Partnership for Education (GPE)- the world’s only multi-stakeholder partnership and fund devoted uniquely to education— has committed itself to bringing together experts and policymakers to identify key solutions to education’s main challenges in its member countries, including more than 40 countries in Africa. In particular, the GPE’s Knowledge and Innovation Exchange (KIX) thematic funding window has been created to support global and regional initiatives that use knowledge exchange, evidence and innovation to help member countries solve critical educational challenges (GPE, 2019a)¹. KIX will support capacity development and knowledge exchange, evidence and evaluation and innovation pilots, which include piloting of approaches, methods, tools or products that solve persistent educational challenges along six thematic priority areas: teaching and learning, learning assessment systems, early childhood education, gender equality, equity and inclusion and strengthening data systems. In this regard, investments will be guided by the priorities of GPE member states and allocated through a competitive process.

It is against this backdrop that the present study was carried out. The purpose of the In-depth country mapping was to provide up-to-date information on the major trends in data, evidence and issues impacting the education needs of countries in line with the six thematic areas prioritized by KIX, and beyond. To achieve this objective, the research team employed a concurrent mixed approach research design whereby both quantitative and qualitative research methods were used simultaneously. Data were collected from both primary and secondary sources using appropriate tools. The secondary sources were used as a springboard for designing seven tools to be used for collecting primary data.

Representatives from each of the 18 member states belonging to the KIX Africa 19 Hub responded to the data collection survey tools according to their specialty or job designations. The respondent member states include: Eritrea, Ethiopia, The Gambia, Ghana, Kenya, Lesotho, Liberia, Malawi, Mozambique, Nigeria, Rwanda, Sierra Leone, Somalia (Somaliland and Puntland), South Sudan, Tanzania (Mainland and Zanzibar), Uganda, Zambia and Zimbabwe. Their participation in the different tools has been summarized in Table 3, in Chapter 2 of this report.

The participants of this study are senior education officials who support one or more of the six KIX thematic areas in their respective ministries and/or their affiliates at the sub-country (provincial state) level. In addition, senior planning, monitoring and evaluation officers, as well as the KIX Africa 19 Hub

¹ Global Partnership for Education (GPE, 2019). Improving the teaching and learning: A Knowledge and Innovation Exchange (KIX) Discussion Paper.

focal points, designated by their ministries to support the KIX Africa 19 Hub, have participated in the study. Senior education specialists or development experts in LEGs and other strategic partners of the education ministries also participated in the study. In addition, essential strategic documents from each member state were reviewed and integrated with primary data during the analysis. The documents reviewed, among others, include education sector plans (ESPs), education sector analyses (ESAs), GPE thematic discussion papers, research papers and others.

The quantitative data were analyzed using descriptive statistics, such as frequency counts and percentages, while qualitative data were analyzed using content or thematic analysis. The results are summarized in tables and graphs and the report is organized under four chapters.

The aggregate analysis of the results has pinpointed the top priorities of the education systems in the region, which are described based on their priority rankings as follows:

1. Improving teaching and learning effectiveness as well as establishing a robust learning assessment system
2. Ensuring equity and inclusivity in education by paying particular attention to opening access to quality education for marginalized groups (i.e. rural children especially girls, children from low-income households, children living with disability or children requiring special needs education and children from minority ethnic groups)
3. Strengthening governance and management of the education system
4. Improving access and quality of early childhood care and education (ECCE)
5. Ensuring gender equality in education
6. Strengthening education data management systems, or the education management information system (EMIS)
7. Strengthening emergency preparedness and response mechanisms.

In this mapping exercise, in addition to the six KIX thematic areas, two additional thematic areas, system strengthening and emergency response, were identified from the review of member states' strategic plans. The research team has further investigated to discover the key challenges and priorities set out under each thematic area. Accordingly, the following findings have been discerned:

1. For **improving teaching and learning effectiveness**, the key priorities include:
 - Provision of greater instructional leadership and teacher support
 - Better provision and quality of educational materials
 - Encouragement of students' interest towards learning
 - Teacher capacity building
 - Breaking down language of instruction barriers
 - Improvement to the quality of curriculum
 - Addressing teacher absenteeism
2. In relation to **strengthening learning assessment systems**, the key priorities include:
 - Utilization of assessment results for monitoring and evaluation purposes
 - Provision of evaluation feedback to learners
 - Improvement of national assessment systems
 - Use of learning assessments to inform school reforms
 - Adequate student preparation to participate in large-scale assessments

- Use of mixed and balanced (theoretical and practical) testing systems for admission decisions to secondary and tertiary education.

3. For **ensuring equity and inclusivity in education**, the key priorities include:

- Improving access to education based on sex, economic status, ethnicity and physical disability across all member states
- Better access and completion rates for children enrolled in special needs education (SNE);
- Improvement in the quality of SNE
- Improving the learning environment and providing the necessary educational support for SNE children
- Addressing the major causes of dropout for SNE children based on appropriate research
- Development of vocational skills development opportunities within SNE
- Greater access to non-formal educational opportunities within SNE
- Greater provision of education in community language for SNE.

4. For **strengthening the governance and management of education systems**, the key priorities include:

- Leadership and management capacity building among education officials at federal/central and state/provincial levels
- Promoting efficiency and effectiveness by establishing a well-functioning result-based management system in the education sector
- Creating greater transparency and accountability in the education system at all levels
- Development of the education sector plan based on a thorough sector analysis
- Institutionalization of efficient and effective school quality control systems, including setting standards for schools
- Improvement of system-wide monitoring and evaluation (M&E) systems
- Ensuring that planned activities have the required budget and resources
- Improvement in education data quality and analysis and timely dissemination of data to the general public
- Improvement of education infrastructure, including information and communication technology (ICT) equipment.

5. For **ensuring coverage and quality of ECCE**, the key priorities include:

- Improvement in the quality of teaching and learning, including ECCE curriculum
- Improvement and better provision of facilities and infrastructure
- Further capacity building and adequate qualifications system for ECCE staff
- Increasing access to appropriate ECCE schooling;
- Expansion of planning, implementation and M&E of the sub-sector.

6. For **ensuring gender equality in education**, the key priorities include:

- Ending school-related gender-based violence (SRGBV)
- Adoption of a multi-sectoral approach to ensure gender equality in education
- Implementation of gender-responsive curriculum
- Ensuring gender-responsive education plans are developed and implemented
- Adopting gender-responsive pedagogy in teacher training programs.

7. For **enhancing EMIS**, the key priorities include:

- Upgrading manual-based data collection to avoid delays and statistical errors

- Developing a strong ICT infrastructure (e.g. computers, tablets, internet) to ensure timely data collection
- Further capacity building among personnel using EMIS at central and local levels
- Developing appropriate data banks for all education related activities in a given country
- Creating a robust system to produce reliable, evidence based, comprehensive and timely data for decision-making and M&E support
- Developing EMIS policies and data collection guidelines
- Ensuring appropriate feedback mechanisms for schools following data analysis and reporting requirements.

8. For **coping with COVID-19, conflict and other emergency situations**, the key priorities include:

- Enhancing teachers' competence in ICT application for teaching and learning at all levels
- Improving the capacity of educational experts in designing competency-based curriculum and curriculum materials for e-learning
- Providing the necessary infrastructure (including computers and internet access) to schools
- Supporting, to the extent possible, a reliable supply of power and wide coverage of internet, telephone, radio and television services in rural areas.

Considering the priorities outlined above, the KIX Africa 19 Hub recommends the first four thematic areas be used as the basis for framing possible research and investigation areas either as standalone themes or derivatives of cross-sectional themes:

- **1st priority:** Improving teaching and learning effectiveness, as well as creating a robust learning assessment system across all sub-sectors. In both cases, the application of ICT and staff capacity strengthening in effective pedagogy and instruction received greatest attention among the study participants
- **2nd priority:** Ensure equity and inclusivity in education coverage by opening access to rural children (particularly girls), poor children, children with disabilities (special needs education) and children from minority groups
- **3rd priority:** Strengthening governance and management of the education system
- **4th priority:** Expanding pre-primary education coverage by providing quality ECCE.

1. Introduction

This study has been carried in order to take stock of the available innovations, best practices and challenges confronting the education systems in each GPE member country belonging to the KIX Africa 19 Hub. The regional mapping of country needs is considered an essential part of the Hub project as it provides a synopsis of existing knowledge and policy challenges within the region. The synopsis will serve as the basis for the development of the Hub's action plan. The action plan will guide the Hub's activities and relationships with key stakeholders, as well as support the identification of solutions in relation to the KIX thematic areas. The In-depth country mapping further aims to identify what is working and what is not working, the emerging issues in the region and the types of knowledge and innovations used in the education sector for evidence-based policy development and implementation. The mapping will also inform a high impact regional research call that will be launched by IDRC and GPE.

The report is organized into four chapters, beginning with an introduction, which comprises the objectives, scope and limitations of the study. The second chapter details the methodology by paying particular attention to research design, data sources and methods of data collection, procedures of data collection and methods of data analysis. The third chapter is devoted to the presentation and discussion of the mapping's key findings and the final chapter includes a conclusion and recommendations.

1.1 Objectives of the In-depth country mapping

The main objective of the In-depth country mapping is to provide up-to-date information on the major trends in data, evidence and issues impacting the education needs of member states in line with all six KIX thematic areas and beyond. The specific objectives of the mapping are:

1. Map existing evidence and systematically review existing literature from available education sector analyses and databases in the KIX Africa 19 Hub member states on education sector policies and interventions;
2. Identify key education challenges that are relevant at a country and regional level through a process of consultation, research and validation among national and regional stakeholders;
3. Map all the critical education sector stakeholders along the six KIX themes within the region and beyond;
4. Undertake in-depth assessment of country institutional capacity needs and gaps for the development of tailored member state capacity building assessment frameworks;
5. Generate an evidence-informed high-quality report with country factsheets for use and for discussion at regional technical consultation workshops for member states to validate the selected country priorities.

1.2 Scope of the study

This study is confined to the 18 African GPE member states from Eastern, Western and Southern Africa. The assessment focuses on collecting a fairly large amount of data in order to identify experiences, best practices, innovations and challenges, as well as emerging priorities and institutional capacity development needs on education section policy formulation and development along the six KIX thematic areas and beyond. The KIX thematic areas include:

- i. Strengthening learning assessment systems;
- ii. Improving teaching and learning;

- iii. Strengthening ECCE;
- iv. Achieving gender equality in and through education;
- v. Leaving no one behind (equity and inclusion);
- vi. Meeting the data challenge in education.

Along these thematic areas, the mapping dwells on basic education, with particular emphasis on pre-primary, primary and secondary education levels. The analysis of data has been made in light of pinpointing best practices and innovations that can be shared among the KIX Africa 19 Hub member states.

Given that the region covered by the KIX Africa 19 Hub has a number of countries affected by conflict, other context specific education innovations deemed pertinent to foster inclusivity in the member states, such as education for crisis-affected and displaced populations, including education for children on the move, are also included in the mapping so as to broach the overall goal of contributing to SDG 4 aspirations and the realization of GPE's strategy. In addition, the report addresses the effect of COVID-19 on education systems.

Error! Bookmark not defined.1.3 Limitations of the study

The study was conducted within the confines of the COVID-19 pandemic, which has severely affected the communication process, coverage of study locations, involvement of study participants and the volume of data collected. However, the research team has collected voluminous data and has used selective analysis to allow for a focused analysis related to GPE priorities within this report. The remaining data will be used to produce a series of subsequent reports, which will serve as the bases for the Hub's upcoming policy dialogues and webinar discussions.

2. Methodology

2.1 Research design

The study adopted a participatory approach involving key stakeholders from across the region's national education systems. It employed a mixed-methods design in order to capture all relevant data using quantitative and qualitative methods. Appropriate data collection tools were designed and applied in light of the six KIX thematic areas and strategic educational management issues. Alignment of qualitative and quantitative tools with the specific objectives of the evaluation ensured that all study objectives were addressed.

2.2 Data sources, samples and methods of data gathering

The study collected data from both primary and secondary sources. The secondary sources served as the basis for designing tools to be used for primary data collection. First, the secondary data were captured through desk reviews of essential documents, such as member states' latest policy and planning documents, education sector reviews or analyses reports, the KIX thematic area discussion papers, the KIX Africa 19 Hub rapid assessment report, research outputs relevant to member states, the GPE's partner country project evaluation reports, partners' education databases and so forth. The desk reviews were conducted based on a documentary analysis template designed by the KIX Africa 19 Hub.

Next, primary data were collected from carefully and purposefully selected institutions and individuals. These included: planning, monitoring and evaluation officers (directors) from each MoE and its affiliates down the line; senior technical officers (including KIX focal persons) from each ministry and provincial office; directors/officers in charge of each KIX thematic area (thematic leaders) from each ministry and its affiliates at local level; KIX Africa 19 Hub consortium members/education experts (GPE, UNICEF, UNESCO, AU) in each country and in regional offices; representatives of the LEG/key education partners in each country (e.g. World Bank, USAID, DFID, EU, AfDB, etc.); leading research institutions/universities across KIX Africa 19 Hub member states and others as appropriate.

The KIX Africa 19 Hub Secretariat drafted seven data gathering tools, each aligned with the six KIX thematic areas and strategic educational management issues:

- Tool 1: Education policy, planning and strategy survey
- Tool 2: Teaching and learning and learning assessment survey
- Tool 3: ECCE survey
- Tool 4: Gender equality through education survey
- Tool 5: Equity and inclusivity in and through education survey
- Tool 6: Education data management system survey
- Tool 7: KIX Thematic Area Survey for Education Partners/LEGs

Each of these tools is intended to provide up-to-date information on the major trends in data, evidence and issues impacting education needs in line with each of the six KIX thematic areas and beyond. The structure and contents of the tools are summarized in Table 1 below.

Table 1. Summary of contents measured under each tool

| Tool no. | Key thematic area | Contents covered and measured |
|----------|--|--|
| Tool 1 | Policy, planning & strategy | Deals with issues related to respondent background, national basic education policy, strategic planning, sector strategy, education structure, financing the education system, education partners, their impacts on education quality, innovations, challenges, capacity gaps and interventions sought. |
| Tool 2 | Teaching & learning, and learning assessment | Deals with issues related to respondent background, basic education curriculum design, required competencies, textbooks, teacher competencies (pedagogical & subject mastery level) and their development needs, working environment, application of ICT on teaching and learning, student learning experiences and their motivation, learning assessment methods, learning gain and student certification, repletion and progression, innovations, challenges, capacity gaps and interventions sought. |
| Tool 3 | Early childhood care & education | Deals with issues related to respondent background, national child development and pre-primary education policies, ECCE standards, monitoring and evaluation mechanisms, sectors involved to implement and monitor policy implementation, innovations, challenges, capacity gaps and interventions sought. |
| Tool 4 | Gender equality questionnaire | Deals with issues related to respondent background, legislative and policy instruments used to ensure gender equality, gender parity index, gender structure and its involvement level, funding mechanisms, gender responsiveness of curricula and educational establishments at all levels, capacity gaps and interventions sought. |
| Tool 5 | Equity and inclusive education questionnaire | Deals with issues related to respondent background, legislative and policy instruments used to ensure equity and inclusivity in education (discrimination based on sex, residence, poverty, ethnicity and others), gender parity index, treatment of SNE children, SNE structure and its involvement level, funding mechanisms, SNE responsiveness of curricula and educational establishments at all levels, innovations, challenges, capacity gaps and interventions sought. |
| Tool 6 | Education data management system | Deals with issues related to respondent background, legislative and policy instruments used to ensure the quality of education data management systems, type of data collected, competence of data collectors, key education indicators covered, quality control mechanisms, utility of data, availability of required facilities, funding mechanisms, innovations, challenges, capacity gaps and interventions sought. |
| Tool 7 | KIX Thematic Area Survey for Education Partners/LEGs | Deals with issues related to respondent background, legislative and policy instruments used to ensure quality of education in member states, level of participation and decentralization of education as exercised in the member states, best practices and innovations observed in the education systems of the member states, the roles played by the LEG to enhance quality of education, challenges confronting the education systems in light of the six thematic areas and initiatives by the government and partners to address challenges and any suggestions for improvement of the education system. |

Each KIX Africa 19 Hub member state’s MoE nominated a senior technical officer as the KIX focal point to support the Hub and its activities, these focal points were fully in charge of selecting the study participants based on the direction given from the KIX Africa 19 Hub Secretariat. The KIX Hub focal points played a liaison role to allow for the information exchange and flow between the Secretariat, the MoE and the LEGs. The KIX consortium partners also supported the distribution of the questionnaires to their national offices and LEG contacts.

The draft tools were validated by the Regional Technical Team and the KIX Africa 19 Hub Secretariat. Following the validation of the tools, they were upload onto the Google Forms online survey platform:

Table 2. Survey tools and online links

| Tool No. | Key thematic /technical area | Online link to the questionnaire |
|----------|--|---|
| Tool 1 | Policy, planning & strategy | https://forms.gle/K8E4gkkTWSiyiVDz5 |
| Tool 2 | Teaching & learning, and learning assessment | https://forms.gle/zVeRn1LcpxjaDQx7 |
| Tool 3 | Early childhood care & education | https://forms.gle/7weiXjDY5Gf4qbjXA |
| Tool 4 | Gender equality questionnaire | https://forms.gle/nrU5Tnecs1cmAvUq5 |
| Tool 5 | Equity and inclusive education questionnaire | https://forms.gle/T9frpQ5qFGC8pNBL8 |
| Tool 6 | Education data management system | https://forms.gle/DpDVgRu9dur7C5gZ7 |
| Tool 7 | KIX Thematic Area Survey for Education Partners/LEGs | https://forms.gle/irjerwz9sazh3XTm8 |

Responses secured

The links were kept open from July 14, 2010 to July 29, 2020. In this period, 101 responses were collected. Country response rates are summarized in Table 3 below.

Table 3. Overall response summary

| Tool | Theme | Responses | Response countries |
|---------------|---|-----------|---|
| Tool 1 | Policy, planning & strategy | 15 | Ethiopia, Kenya, Lesotho (2), Liberia, Malawi, Nigeria, Rwanda, Sierra Leone, South Sudan, Tanzania (Mainland & Zanzibar), Uganda, Zambia, Zimbabwe (2) |
| Tool 2 | Teaching & learning and learning assessment | 14 | Ethiopia, The Gambia, Kenya (4), Malawi, Nigeria, South Sudan, Uganda (4), Zambia |
| Tool 3 | Early childhood care & education | 13 | Kenya, Lesotho, Liberia (2), Malawi, Nigeria, Rwanda (3), Somalia (Somaliland & Puntland), Uganda (2), Zambia |
| Tool 4 | Gender equality questionnaire | 9 | Ethiopia, Kenya (2), Malawi, Nigeria, Rwanda, Sierra Leone (2), Uganda |
| Tool 5 | Equity and inclusion | 10 | Ethiopia, Ghana, Kenya, Lesotho (2), Malawi, Nigeria, Rwanda, Sierra Leone, Uganda |
| Tool 6 | Education data management system | 12 | Ethiopia (3), Kenya, Lesotho, Malawi, Nigeria, Rwanda, Somalia (Somaliland & Puntland), South Sudan, Uganda, Zambia |

| | | | |
|---------------|--|-----|---|
| Tool 7 | KIX Thematic Area Survey for Education Partners/LEGs | 28 | Eritrea (3), Ethiopia, The Gambia (6), Kenya (2), Lesotho, Nigeria, Rwanda (8), Sierra Leone (2), Somalia (Somaliland & Puntland), Uganda, Zambia, Zimbabwe |
| | Total responses | 101 | |

2.3 Validation of the findings

The report’s key findings were presented to the KIX Africa 19 Hub members via a webinar organized by the Hub Secretariat on August 11, 2020. The meeting intended to discuss the findings, capture additional ideas and comments and validate the report. As expected, the validation meeting helped the research team collect ideas, and an online poll was conducted to gauge participants’ agreement with the ranking of priorities. Those who responded to the poll expressed their full agreement with the ranking. Due to technical difficulties, the KIX Hub focal points were asked to send their priority ranking through email following the meeting. During the discussion, there was a suggestion to consider gender inequality and data management challenges as cross-cutting themes. In addition, participants also suggested that tranche system for grouping the priority rankings be reformulated.

On a separate occasion, the key findings of the report were presented to the IDRC technical team, which also provided valuable comments.

Based on these and other comments, the research team integrated Hub members’ and the IDRC technical team’s comments and revisited the rankings in the process of finalizing the report.

2.4 Methods of data analysis

The KIX Africa 19 Hub Secretariat reviewed the online data thoroughly to check any missing and inconsistent answers. A summary excel spreadsheet was extracted from the sources to undertake further quantitative and qualitative analyses. Accordingly, frequency tables, charts and bar graphs were used to summarize the quantitative data using relevant descriptive statistics, such as counts and percentages. Content and thematic analyses were employed to produce qualitative data summaries. Both sets of data have been combined to produce an integrated comprehensive report.

3. Key findings

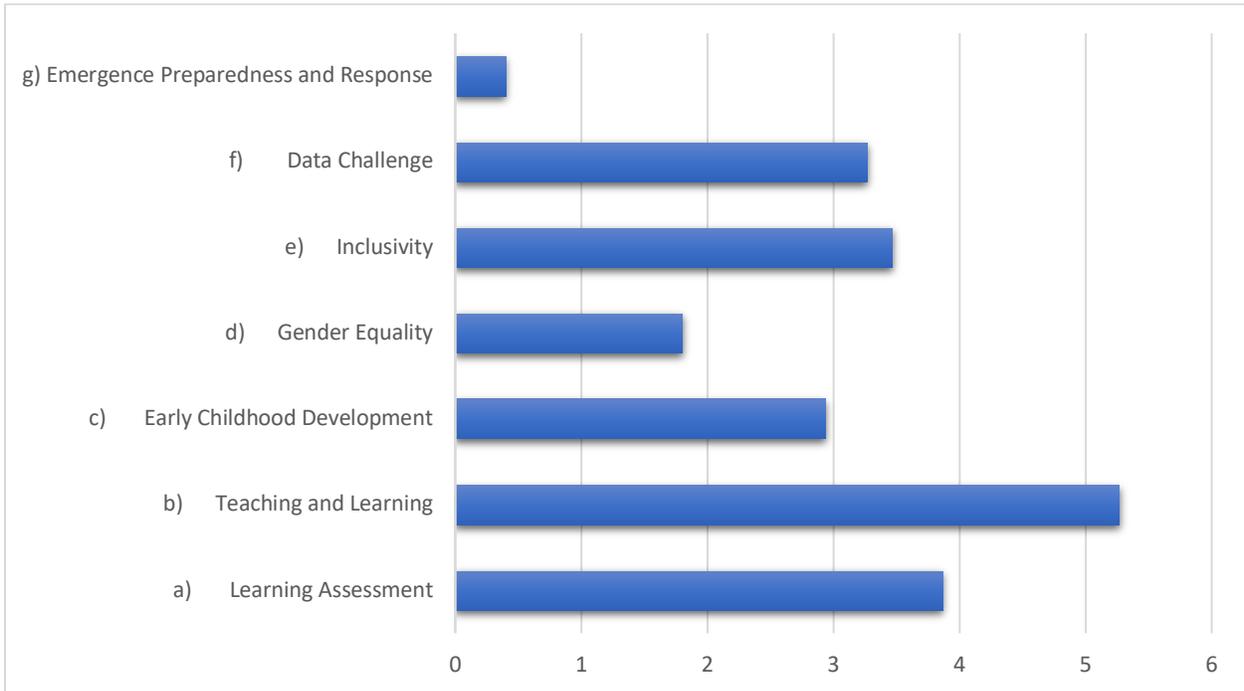
This section is devoted to the presentation of key findings along the six KIX thematic areas across the region and at country level. The findings contained in this report have originated from a large data set collected through seven tools and a document review, as outlined in the previous chapter. Because of its practical significance, this report is limited to present key findings in relation to the major challenges and priorities of the education system across the KIX Africa 19 Hub member states. The remaining data will be used for producing thematic discussion papers, which will aim to guide subsequent dialogues and discussions involving the Hub's key stakeholders.

3.1 Education system challenges and top priority needs of member states

Despite the concerted efforts of the KIX Africa 19 Hub member states' respective governments and their partners to improve their respective education systems, there are still barriers that obstruct their success. These barriers, also called challenges, can emanate from the system itself (internal factors) and/or outside of the system (external factors). Taking both internal and external factors into account, the Hub's member states have completed a ranking of their education system priorities. It is understood that these priorities will contribute to improved quality of education in response to the unique context of each member state.

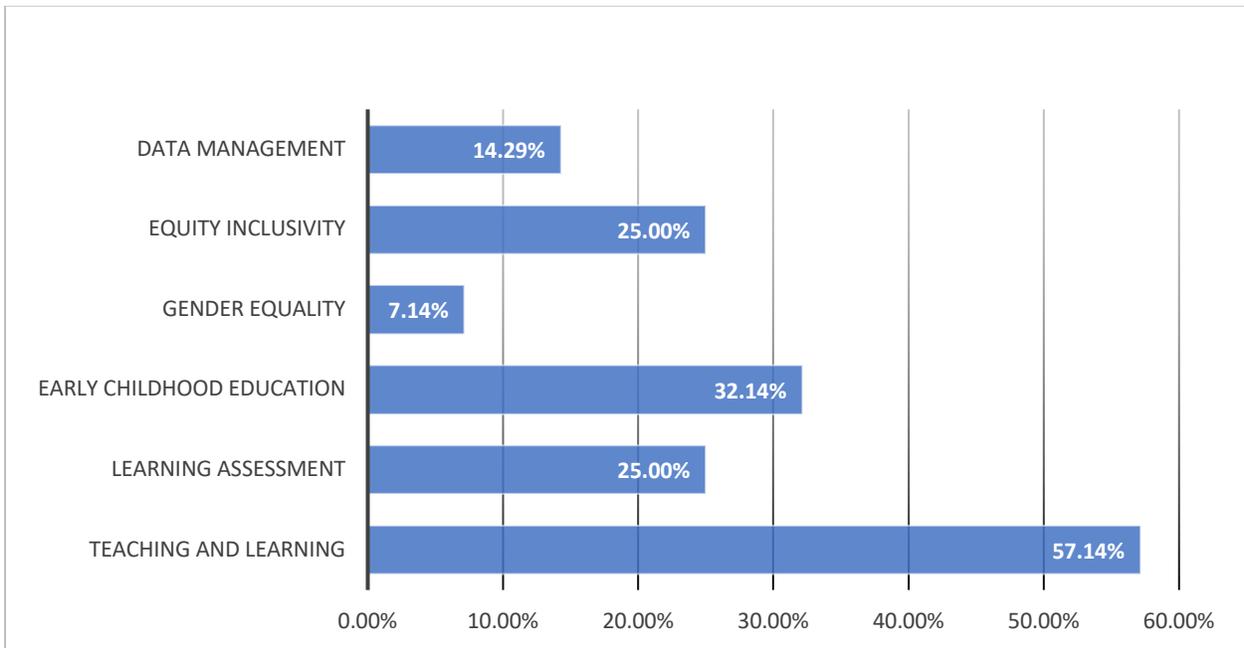
This study has incorporated member states' reported priorities into an overall priority ranking of the education system's components. This overall ranking is based on the cross-section of data obtained from three sources: the Rapid country assessment, which polled the KIX Hub focal points, performed at the onset of the KIX project (see Fig. 1); the LEGs' observations regarding national education challenges, as drawn from the seventh survey tool (see Fig. 2) and the desk review of the strategic priorities set by the Hub's member states (see Fig. 3). The three sources indicate more or less similar findings regarding the KIX thematic area priority rankings, except slight variations, in some instances, and selection of additional thematic areas by the countries, as drawn from the desk reviews. These are presented under Figures 1, 2 and 3 below.

Figure 1. Rapid priority ranking of six KIX thematic areas (N=15)



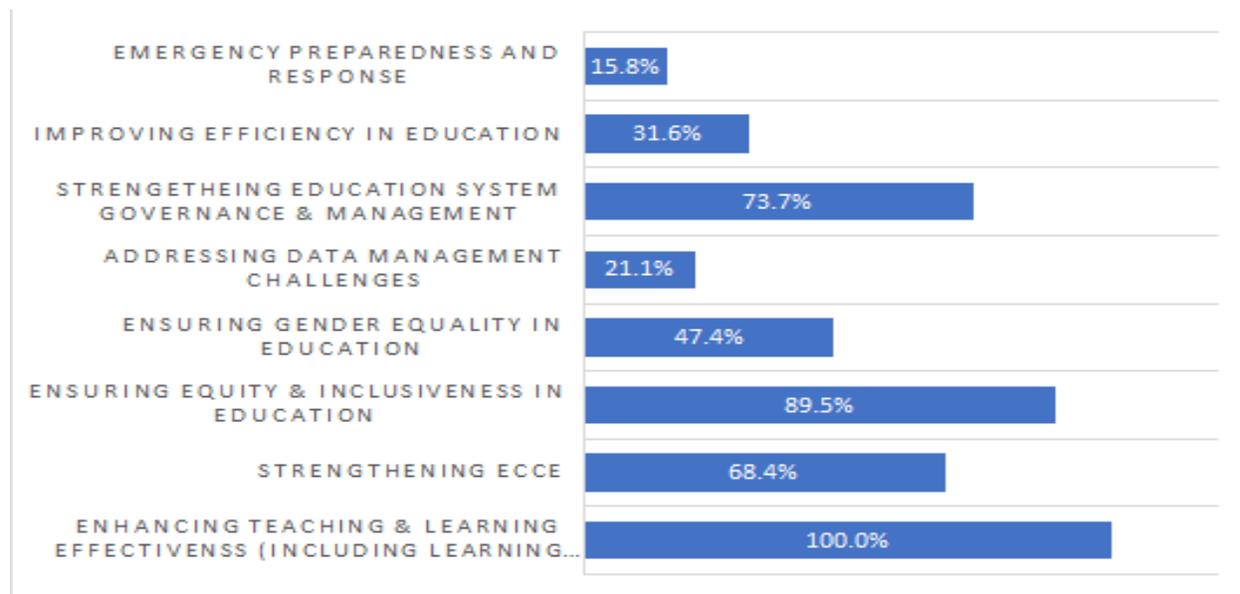
Source: Rapid assessment of the KIX Africa 19 Hub member states (May 2020), KIX Hub focal points.

Figure 2. In-depth priority ranking of six KIX thematic areas (N=28)



Source: In-depth country mapping, questionnaire: KIX Thematic area Local Education Groups (LEG) partner survey (July 2020)

Figure 3. Strategic priorities set by member states: desk review results (N=18)



Source: Desk review of national education sector strategic plans (July 2020).

Figure 1 displays the responses of KIX Hub focal points from the Rapid country assessment, while Figure 2 displays the results of the LEG and partner survey responses as part of the In-depth country mapping (Tool 7). Figure 3 displays the results of document analysis from reviews of each country’s respective ESP. All three figures depict teaching and learning as the leading priority to be immediately addressed by the Hub, garnering about 57% of the LEGs’ choice and 100% of the member states’ choice. In particular, all countries whose ESPs were reviewed incorporated teaching and learning as one of the key challenges set to be addressed in the span of the ESP implementation. This illustrates alignment between documented priorities and country and partner survey responses. In the case of strategic priorities set by the member states, as witnessed from their respective sectoral strategic plans, learning assessment is combined with the teaching and learning process and by doing so, it is considered one of the upmost priorities.

While ECCE has come out as the second priority (with 32.14%), strengthening learning assessment systems has gained equal vote with ensuring equity and inclusivity in education (each sharing 25% of the vote) as a result of the In-depth country mapping data collection (see Fig.2). Education data management and gender equality in education are ranked in fifth and sixth place with 14.3% and 7.1% respectively (see Fig. 2). On the other hand, the results of the Rapid country assessment revealed that learning assessment, equity and inclusion in education, education data management, ECCE and gender equality occupied rankings ranging from second to sixth, respectively (see Fig. 1). Both the Rapid country assessment and the In-depth country mapping show consistent results regarding the first and the sixth ranked education system components, with slight differentiation in the rankings ranging from the second to fifth place.

A close look into the member states’ ESPs and allied documents (e.g. education sector analyses reports)² reveals that different countries identified different priorities to be tackled during their strategic plan

² The study team had reviewed the latest education sector plans, education sector analysis reports, and other relevant documents whose details are presented under the references section.

period. These include: increasing access to and equity (inclusivity) in basic education, improving the quality of education by enhancing teaching and learning effectiveness (including strengthening learning assessment), increasing pre-primary education access and quality, ensuring gender equality in education, improving educational management information systems, enhancing governance and management of education systems, improving efficiency in education (reducing dropout and repetition rates) and strengthening emergency preparedness and response. The priority mapping of the KIX thematic areas from the document review asserts the following ranking:

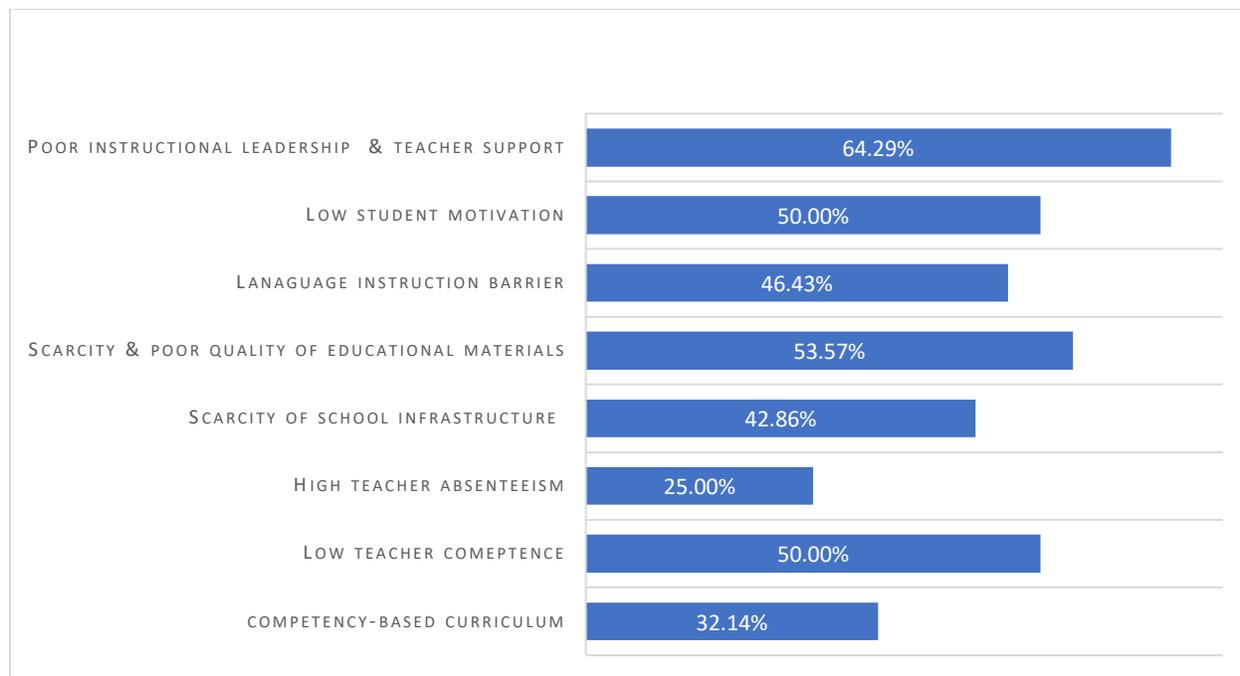
1. Teaching and learning (including learning assessment)
2. Opening access and ensuring equity in education
3. Education system governance and management strengthening
4. ECCE strengthening
5. Ensuring gender equality in education
6. Improving efficiency and enhancing EMIS
7. Enhancing emergency preparedness and response.

Analysis of questionnaire responses and the document review has identified the key challenges in educational systems across the region. Each challenge will be described in the sub-sections that follow.

3.2.1 Challenges confronting the teaching and learning process and recommended actions

A wide range of factors affect the teaching learning process at school and student learning outcomes. Figure 4 below illustrates the key challenges reported by the KIX Africa 19 Hub’s member states:

Figure 4. Key challenges of teaching and learning (N= 28)



Source: *In-depth country mapping, questionnaire: Teaching & learning, and learning assessment (July 2020)*

The study's participants pinpointed the critical challenges confronting the teaching and learning process. The most critical challenge was poor instructional leadership or inadequate school leadership capacity (64.29%), followed by scarcity and poor quality of educational materials such as textbooks, teacher guides, reference materials, teaching aids (pedagogical materials) and so forth (53.57%). 50% of respondents indicated that two factors, low teacher quality (or teacher competence) and low student motivation, present challenges to student learning. Other challenges include language of instruction (46.43%), lack of appropriate school infrastructure (such as buildings, classrooms, separate toilets for boys and girls, library, laboratory, pedagogical centers, etc.) (42.86%), lack of competency-based curriculum (32.14%) and high level of teacher absenteeism (25%).

The document review also revealed that in some countries the curriculum is developed centrally and does not involve inputs from de-centralized levels or from teachers. In the majority of countries, teachers do not have adequate qualifications and do not meet the minimum standards set for different levels. Classroom pedagogy is largely teacher-centered, rather than student-centered. Quality of education is largely affected by the number of professional teachers per pupil, which varies starkly by region; in many cases the ESPs identified a need to address teachers' unwillingness to work in remote and inhospitable areas through the development of human resource policies for teachers.

In terms of teacher capacity building, pre and in-service training must be strengthened. For example, in Liberia, there is a lack of professionally certified teachers (only 51% are certified), and there is little to no opportunity for in-service training that could provide certification. Some promising pilot programs (e.g. FHI 360's Liberia Teacher Training Program II) have been implemented and could be assessed for scale up in the country and more broadly across the region. Further, teachers do not receive support or feedback on their pedagogical methods, which presents difficulties in relation to performance reviews and determination of appropriate salary. In some countries (e.g. Eritrea), several pre-service, in-service, distance learning and short-term trainings conducted have not led to desired results and there is still a shortage of qualified teachers to meet the demand for middle and secondary school teachers. As a result, students without an education specialization are recruited temporarily as teachers. The recruiting of non-education students to be deployed as teachers temporarily has negatively affected the quality of education, as well as the social status of teachers.

In addition, the data reiterated that principals and senior level education officers have a severe skill and knowledge deficiency to lead and manage instructional activities effectively and efficiently. As a result, there is no standardized monitoring and evaluation system to support and provide feedback to teachers, and additionally, learning materials are not distributed in a timely fashion, nor are they widely available. Student engagement is also reportedly low; methods for inciting greater participation and shifting to student centered pedagogies should be further explored.

Any effort to enhance the teaching and learning process must take the above factors into consideration. More specifically, the participants of the In-depth country mapping have proposed the following possible interventions:

- a. **Strengthening instructional leadership and teacher support:** through assignment of educational leaders and managers based on their competence in leading instructional activities, resource mobilization, planning and organizing, coaching and mentoring, appraising teachers and providing constructive feedback, motivating staff and so forth. Any school leadership development programs must consider these factors and design appropriate curriculum to build the competencies of the

leaders accordingly. In support of this idea, studies have shown the significance of school leadership in shaping the teaching and learning process in schools or institutions and leadership's contribution to stronger student academic performance.

- b. Improving teacher competence and motivation:** Teachers play an indispensable role in shaping the quality of learning in schools. Thus, each country needs to craft a comprehensive teacher management strategy that covers all key activities from recruitment to separation. The strategy should ensure fair recruitment and deployment of teachers to different locations and school settings. There is also a large need to overhaul the teacher training institutions and the certifications awarded to teachers. Teachers need greater support to teach the curriculum. Accordingly, there should be continuous professional development for teachers in practical and effective delivery of the competency-based curriculum. Teachers should also be allowed to participate in developing and reviewing curricula. To this end, teachers need more training and support when new curriculum is implemented, as well as training on assessment methods of new curriculum (including formative assessment techniques) and child-centered approaches, as suggested by Zimbabwe. Where pre- and in-service training is implemented, adequate teacher training materials should be developed, especially in relation to special education. Given the current context of the COVID-19 pandemic, face-to-face or traditional classroom-based instructional activities have been reduced. As a result, a blended learning approach has been applied, for which teachers need training and support on ICT applications. In addition, governments should offer further support to teachers and provide appropriate incentive packages in order to attract the best minds and retain them in the sector. Some actions, such as housing provision in rural areas, access to banking services, involvement of the community, performance reviews and celebration of teacher achievements and professionalization efforts, are suggested to motivate teachers and encourage them to stay in their jobs. On the other hand, appropriate disciplinary measures need to be taken to address negative actions, such as absenteeism. A Kenyan participant has also suggested that teaching should be highly regulated and made as competitive as possible. This can only happen through policy pronouncement, improved salary and working condition and registration of teachers with a regulating body.
- c. Undertaking curriculum reform to make it relevant and competency-based and increasing the supply of learning materials:** The literature on curriculum reform and relevance highlights the importance of an effective and coherent curriculum system for promoting sustainable development. Nevertheless, Rwantabagu (2010) argues that the whole system of curriculum, assessment, examinations and certification can be disorganized and obstruct pupils' chances both to learn and to demonstrate their competencies in order to progress to future opportunities. Curriculum reform and the integration of competency-based modules relevant to the world of work is needed, as well as an adequate supply of instructional materials (i.e. textbooks, teacher guides and reference materials). In this regard, some countries (e.g. Ethiopia) have taken aggressive steps to address the scarcity of instructional materials, by ensuring a 1:1 ratio of textbooks to students for almost all subjects at primary and secondary levels. The quality of materials is also improved by upgrading materials from black and white into color, as has been the case with an initiative sponsored by the World Bank and other partners. In addition, Kenya has produced a new competency-based curriculum. The competency-based curriculum also entails a move from an 8-4-4 (eight years of primary school, four years of secondary and four years of tertiary) to a 2-6-3-3 (two years pre-primary, six years primary, three years lower secondary and three years upper secondary). Kenya tested the first stage of competency-based curriculum implementation in 2018-19. As evidence obtained from Liberia indicates, institutional capacity building is needed to establish and deploy a national curriculum development and research body to manage textbooks,

curriculum revision, indigenous language teaching and learning. Similarly, in the case of Tanzania, availability of appropriate grade-level textbooks and learning materials is needed, especially in the sciences at secondary level. To improve STEM education, schools need better materials for science labs and ICT teaching and learning methods. Digitalizing textbooks and reference materials is an important option for creating access to learning in the era of COVID-19, provided that the digital divide is bridged through a collaborative spirit and approach. The participants (e.g. from Tanzania, Ghana, Ethiopia) cautiously noted that where e-resources exist abundantly, the very limited internet connectivity dissuades teachers from accessing these resources. Therefore, mechanisms should be designed in order to increase internet accessibility in member states. A potential innovation is to allow teachers to develop and receive compensation for textbook development. In addition, some countries have suggested to include or strengthen comprehensive sexuality (life skills) education in school curriculum.

d. **Boosting the motivation of students towards learning:** The findings revealed that student motivation for learning is increasingly low due to the following factors, presented from highest to lowest by survey response rate:

1. Family burden (household chores)
2. Poor mastery of instructional language
3. Distance from home to school is too great
4. Loss of interest in education due to gloomy employment prospects
5. Lack of study habits
6. Limited and out of date curriculum materials
7. Inability to pay tuition fees
8. Lack of uniform and/or learning materials
9. Lack of time management skills
10. Health related problems
11. Lack of peace and security
12. Engagement in bonded labor
13. Addiction to alcohol or drugs.

Thus, countries need to address these challenges in order to boost the interest of their learners towards learning. Further, students should be encouraged to pursue sciences and math, and teachers need greater support and training in these areas. Best practices in parent and community engagement should be determined in order to improve student learning outcomes and motivation.

e. **Addressing other challenges:** The findings also reveal the need for a significant infrastructure improvement at pre-primary, primary and secondary levels to enhance the existing quality of the teaching and learning process and ultimately, the quality of education. This includes building additional classrooms to reduce the student-classroom ratio to be close to 45:1; providing adequate separate toilets and water, sanitation and hygiene (WASH) facilities for boys and girls; supplying the necessary pedagogical materials (teaching aids) for each school and building ICT infrastructure and strengthening ICT utilization by addressing problems related to power and network interruptions and skills gaps of teachers on ICT utilization for instructional purposes. As suggested by participants from Tanzania, increased use of indigenous language in the classroom is needed, especially at early levels. Rwanda suggests thorough study regarding the effect of using indigenous language in boosting learning gain. The transition to English language only instruction in upper primary needs further support (Tanzania-Mainland). More innovative and responsive research and development in relation to community challenges should also be encouraged as a community outreach service in educational institutions.

3.2.2 Challenges confronting learning assessment systems and recommended actions

One indicator for judging the quality of an education system is through assessment of student learning outcomes, or learning gain, by students. This is done through a combination of classroom and standard evaluations. Respondents to tool 2 were asked to provide their accounts of the level of achievement of the majority of students at primary and secondary levels. The results are summarized in Table 4 below:

Table 4. Proportion of the student population securing average and above average scores (n=14)

| Proportion | Primary | Secondary |
|--------------|------------------|------------------|
| Below 40% | - | 2 (14.3%) |
| 40-49% | 1 (7.1%) | 3 (21.4%) |
| 50-74% | 9 (64.3%) | 6 (42.9%) |
| 75% & above | 4 (28.6%) | 3 (21.4%) |
| Total | 14 (100%) | 14 (100%) |

Source: In-depth country mapping, questionnaire: Teaching and learning, and learning assessment (July 2020)

Table 4 shows that the majority of the students in both cycles (50-74%) have secured average and above average scores when transiting from one level to another or from lower grade to higher grade as witnessed by 64.3% and 42.9% of respondents for primary and secondary level, respectively. On the other hand, some of the respondents confirmed that as low as below 40% of secondary students score below average. Building on these findings, responses from the LEG survey (Tool 7) revealed that about 43% of the respondents view primary and secondary students in the member states as low achievers while only 14.3% of the respondents for primary and 3.6% of the respondents for secondary confirmed that the respective students are high achievers (see Table 5).

Table 5. Extent of overall achievement of students (n=28)

| Education cycle | High | Medium | Low | Uncertain |
|-----------------|-------|--------|-------|-----------|
| Primary | 14.3% | 39.3% | 42.9% | 3.6% |
| Secondary | 3.6% | 50% | 42.9% | 3.6% |

Source: In-depth country mapping, questionnaire: KIX Thematic area Local Education Groups (LEG) partner survey (July 2020)

The specific country-based desk reviews have also confirmed that a majority of students are not achieving learning outcomes at the desired level. For instance, in Eritrea, a significant proportion of learners failed to attain the expected minimum mastery Level in learning achievement (MoE, 2016), which are essential for their continuity to the next school level and/or for their future social and economic livelihood. The international trend also shows that despite an increasing level of schooling access available to the school-aged population across the globe, and the accompanied diverse learning assessment approaches or modalities applied to students, the majority of students are not achieving expected results, especially in mathematics, science and language studies. Researchers in sub-Saharan Africa (e.g. TALENT, forthcoming 2020) investigating learning outcomes across the region are documenting a profound learning crisis: more children are accessing primary and secondary education, but learning outcomes are not improving, with millions of children failing to meet curricular standards in literacy and numeracy. For example, Liberian

students take the West African Examination Certificate (WAEC) at Grade 9 and Grade 12. Student pass rates are below targets, at 60 and 47% respectively. Similarly, Sierra Leone uses the West African Senior Secondary School Certificate Exams (WASSCE) assessment at the end of senior secondary education, yet only 30% of students pass. Nigeria has an annual national Monitoring of Learning Achievement (MLA) assessment. The 2017 results showed students scored on average below 50%. In the case of Tanzania (mainland), there is a high dropout rate witnessed for students who do not pass Standard IV and Form II exams.

The underlying causes for low level achievements can be attributed to multiple, interrelated factors. According to a study conducted in sub-Saharan Africa, despite all the progress made in terms of assessing learning, it is hard to show that assessments can effectively improve education policies in sub-Saharan Africa (TALENT, 2020). Some of the main barriers to effectiveness of learning assessment include:

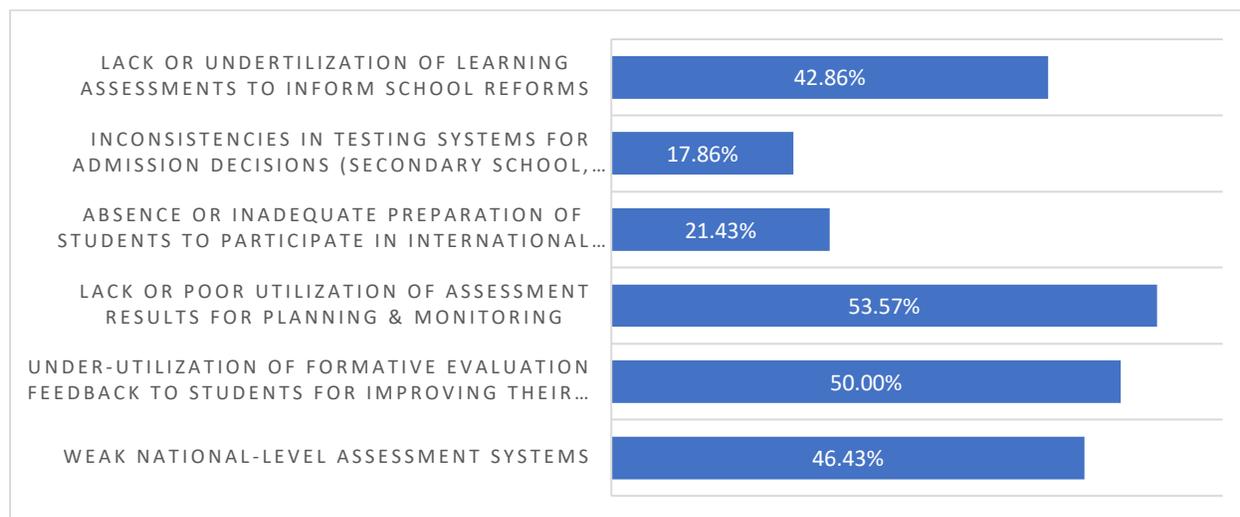
- Lack of institutionalization of standardized examinations and scarcity budget
- Delayed release of the analysis of assessment results in published format
- Loose or poor link between the assessment department and the policy and process sections, as well as the education administration sections
- Lack of integration between standardized exams results and formative assessment results
- Deterrence of large class size to management of quality assessment. This is partly due to liberal promotion (100% transition) in basic education, which leads to overburdened infrastructure (e.g. Kenya).

In addition, teacher shortage, conflicts, limited options for children from nomadic pastoralist families, insecurity, dependence on commercial tests by schools, reporting formats that encourage ranking of learners and an inability of schools to leverage examination feedback reports are also taken as barriers to the effectiveness of learning assessment systems. Some of the country-specific barriers highlighted from the In-depth country mapping primary data collection include:

- Inconsistencies in the application of continuous assessment at primary and secondary levels and the prevalence of large classes (**Malawi, Uganda**)
- Emphasis on summative assessment by national examination bodies e.g. Uganda National Examinations Board (UNEB); limited use of assessment results to improve teaching and learning; lack of training of teachers in methods of assessment and limited innovation among teachers in relation to different assessment strategies (**Uganda**)
- Lack of standardization of exams (**Zimbabwe**)
- Large differences in student achievement between rural and urban areas and based on gender.
- Teachers are not equipped to conduct formative and summative assessments (**Ghana**)
- No formal comprehensive assessment policy (**Ghana**).

Study participants identified the top priorities for addressing learning assessment challenges as displayed in Figure 5 below:

Figure 5. Key challenges for the learning assessment thematic area (N=28)



Source: In-depth country mapping, questionnaire: KIX Thematic area Local Education Groups (LEG) partner survey (July 2020)

The greatest challenges in learning assessment include poor or under-utilization of assessment results for monitoring and evaluation purposes, absence of evaluation feedback provided to learners and a weak national assessment system (see Fig. 5). In addition, lack or underutilization of learning assessments to inform school reforms, absence or inadequate preparation of students to participate in international (regional, sub-regional and global) large-scale assessments were identified as key priority challenges to be in the 4th, 5th and 6th position respectively. Lack of consistent application of testing systems for admission decisions to secondary and tertiary education was also pointed out as another critical challenge to be addressed.

With the purpose of addressing the above challenges and improving the effectiveness of learning assessment, respondents recommended capacity strengthening interventions for teachers and educational leaders. These are suggested per their degree of significance or priority as follows:

1. Training and coaching on educational measurement and continuous assessment methods
2. Training and technical support on Integrating ICT with student assessment
3. Training and technical support on effective instructional leadership
4. Training and coaching on effective pedagogy and active learning methodology
5. Training on student motivation and boosting learning outcomes
6. Training and coaching on action research
7. Training and coaching on comprehensive student attendance and examination policy and strategy.

Thus, countries should be supported in the implementation of these interventions as much as possible depending on their applicability and the respective member state context.

3.2.3 Challenges confronting equity and inclusive education and recommended actions

The issue of equitable and inclusive education encompasses a multitude of factors related to poverty, gender, ethnicity, conflict and different abilities. In this study, an attempt was made to assess the prevalence of exclusion from education based on the above-mentioned inequity factors. Accordingly, the results show that disparity and segregation of children from schools were observed in terms of:

- **Sex (in favor of boys or males)** in Eritrea, Ethiopia, Kenya, The Gambia, Rwanda, Sierra Leone, Somalia, Uganda and Zambia
- **Economic status (neglecting the poor):** in Eritrea, Ethiopia, Kenya, Lesotho, The Gambia, Rwanda, Sierra Leone, Somalia, Uganda, Zambia and Zimbabwe
- **Ethnicity (neglecting minorities)** in Eritrea, Rwanda, The Gambia and Nigeria
- **Location of residence (disfavoring rural residents, remote locations or nomadic people)** in Eritrea, Ethiopia, Kenya, Lesotho, The Gambia, Rwanda, Sierra Leone, Somalia, Uganda, Zambia and Zimbabwe
- **Students with special needs** in Eritrea, Ethiopia, Kenya, Lesotho, The Gambia, Nigeria, Rwanda, Sierra Leone, Somalia, Uganda, Zambia and Zimbabwe

The University of Cambridge (2019) conducted a review of equity and inclusivity issues in education and found that access to education is highly correlated to economic status of families³. Most ESPs reviewed in the document analysis support this claim. Rose et al (2019) document the notion of stigma and exclusion, highlighting the negative effect of these societal factors on students' education, which is often cut short when stigmatized students either drop out or leave school for long periods, effectively ending their education career.

With respect to disability, Mariga et al. (2014) as cited in Rose et al (2019) suggest that similar factors are at play, noting that “the stigma and shame associated with disability [...] still persists in many cultures [and] communities.” Pather and Nxumalo (2013) posit that the behavior of ostracization within a community is derived from colonization, when separate spaces were assigned for disabled children. Isolation and separation can also be perpetrated by the education institution itself, either deliberately or inadvertently. Most schools have limited or no early identification systems in place to diagnose the different learning needs of students from a young age, and where systems are in place, the resources to provide tailored learning for students of all ability levels is limited or is not inclusive in nature.

Another prevalent aspect of inclusion and equity involves language education policies. Students who speak indigenous language in the home, rather than the language of instruction at school, face disadvantages and often score lower on assessments than their peers. Where language policies do exist, a major challenge lies in the transition from indigenous language of instruction to English language instruction, which typically occurs at the end of lower primary. Additionally, the production of teaching and learning materials in indigenous languages can be challenging. These implementation gaps have led many language policies to stall throughout the implementation phase, as has been reported in Ghana, Mozambique, Somalia and Zambia. Conversely, countries like Liberia have seen success in piloting bilingual indigenous and English language education in early primary levels, and in mainland Tanzania, the language policy has expanded to include Kiswahili language instruction in secondary school. In The

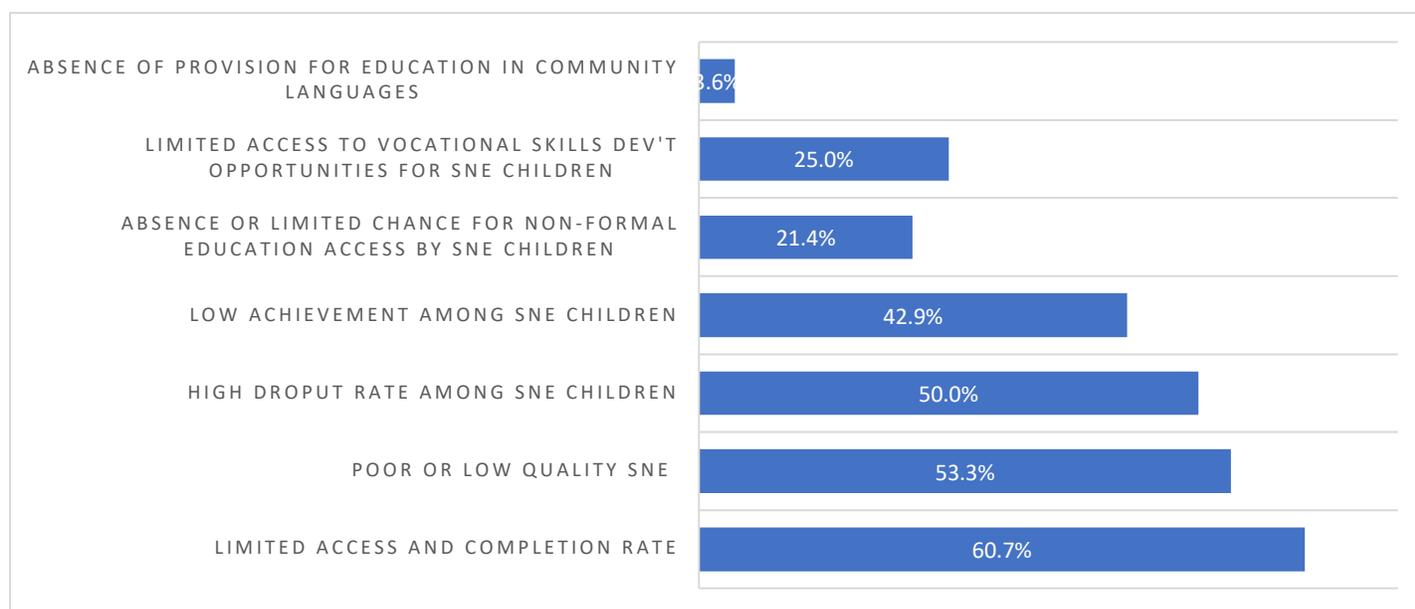
³ Rose, P., Downing, P., Asare, S. and Mitchell, R. (2019). *Mapping the landscape of education research by scholars based in sub-Saharan Africa: Insights from the African Education Research Database*. Synthesis report. REAL Centre, University of Cambridge. <https://doi.org/10.5281/zenodo.3242314>

Gambia, five indigenous languages have been piloted in specific regions as the language of instruction, including development of a teachers’ guide and teaching and learning materials.

Another critical element affecting equity and inclusion in education is conflict. Conflict and post-conflict communities face a unique set of barriers to the provision of quality and equitable education to children. Many of the consequences of conflict on education, particularly in reference to education opportunities for girls and women, have not been thoroughly researched (Chauraya and Masakure, 2016; Ortiz-Echevarria et al., 2017).

Members of LEGs identified the key challenges of equity and inclusivity in education as summarized in Figure 6 below.

Figure 6. Key challenges of equity and inclusion in education (n=28)



Source: In-depth country mapping, questionnaire: KIX Thematic area Local Education Groups (LEG) partner survey (July 2020)

They also recommended possible interventions to be designed in order to address these challenges. These include the following:

- Improved equity for marginalized groups, increased access for all learners, particularly for children in rural areas, girls, children living with disabilities, from low socio-economic backgrounds and with low literacy households (**all countries**)
- Ensure equitable, quality, relevant, appropriate, accessible and affordable education services for all children, youth and adults, at the ECD, primary, post-primary/secondary and technical, vocational education and training (TVET) levels, as well as functional adult literacy and intensive English courses (**South Sudan**)
- Prioritize inclusive education in policy documents and in implementation (**Lesotho, Nigeria**)

- Strengthen the capacities of teachers and institutions in modern technology. Update school infrastructure to accommodate ICT learning, inclusive schools and the growing population **(Ethiopia)**
- Implementation of the education sector policy for learners and trainees with disabilities and implementation of remote learning strategies for learners with special needs **(Kenya)**
- Increasing advocacy for planning, budgeting and capacity building to promote inclusive education **(Malawi)**
- Developing and distributing teaching and learning materials suitable to SNE **(Rwanda)**.

3.2.4 Challenges confronting ECCE and recommended actions

The In-depth country mapping results confirmed that ECCE is another thematic area with critical gaps and pressing challenges that can be addressed through the KIX initiative. This is witnessed with the following key findings:

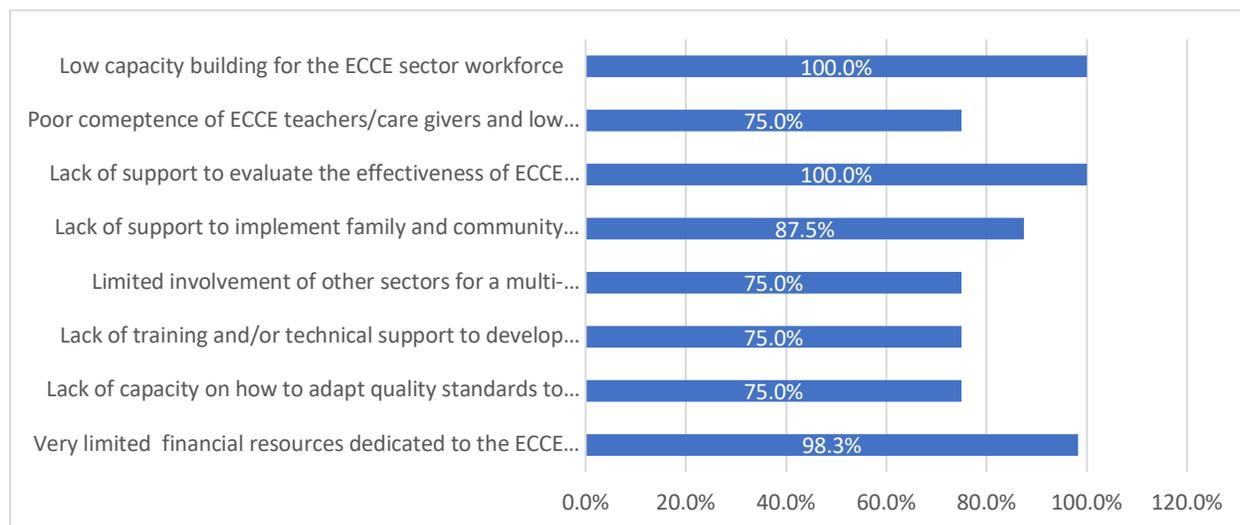
- In terms of coverage of pre-primary education, 50% of MoE participants confirmed that it is low, 32% described coverage as moderate and only 17.9% reported coverage as high.
- In terms of quality of pre-primary education, 54.3% of MoE respondents reported it as low, 32% reported quality as moderate and 3.6% as high. In relation to this, 64.3% of respondents to the LEG questionnaire (Tool 7) and respondents to the ECCE questionnaire (Tool 3) from Eritrea, Ethiopia, The Gambia, Kenya, Lesotho, Sierra Leone, Somalia, Uganda and Zambia reported that the quality of ECCE in the KIX Africa 19 Hub member states is low.

Despite progress made by governments to adhere to international commitments, such as SDG4 and the Africa 2063 Agenda, the pre-primary education sub-sector still requires substantial capacity development. The AU warns that pre-primary education across the continent is “severely underdeveloped,” plagued by “disparities, poor management, and a lack of coherent curriculum and linkages with primary education” (CESA 16-25, 2016). Where policies and strategies do exist, implementation barriers include inadequate infrastructure and resources, poor planning, under-trained teachers and care givers and inadequate materials. Based on these concerns, the AU nominated pre-primary education as a priority sub-sector for African development.

While enrolment in pre-primary education across the GPE member states is expanding, there is a long way to go to meet the goal of universal coverage. In most of the KIX Africa 19 Hub member states there has been an upward trend in enrollment, which can largely be attributed to policies which have annexed pre-primary schools to existing primary schools. However, in the case where this intervention has been implemented, it is important to ensure that quality is not diminished as coverage expands. In some cases, this policy option can lead to lower quality preschool offerings due to limited training opportunities for teachers and care givers on pre-primary curriculum, poor infrastructural facilities, lack of appropriate curriculum and absence of quality standards and guidelines for pre-primary education.

The critical challenges reported in the ECCE questionnaire are as follows:

Figure 7. Key challenges confronting ECCE in the member states (n=16)



Source: In-depth country mapping, questionnaire: Early childhood care and education (July 2020)

According to the survey results, the most critical challenges to address are: (1) poor quality of teaching and learning, including curriculum; (2) lack of capacity building for the ECCE sub-sector workforce; (3) limited facilities and infrastructure; (4) limited planning, implementation, monitoring and evaluation of the sub-sector; (5) limited financial resources dedicated to the ECCE sub-sector; (6) lack of access to appropriate school; and (7) lack of support for implementing family and community engagement programs. In addition, fragmented governance of the ECCE sub-sector is mentioned as one of the critical challenges contributing to budgetary constraints and poor quality.

Thus, the concerted efforts of policy makers, practitioners, researchers and development partners is required to address the above-mentioned challenges in order to improve the situation ECCE in member states.

3.2.5. Education data challenges and recommended actions

Confronting the challenges facing education data management has come out as the fifth priority in the In-depth country mapping, although it stood in fourth place during the Rapid country assessment (see fig. 1 & 2). When LEG members were asked about their observation regarding the extent of the adequacy of the data collected and collated by their respective ministries, 35.7% characterized EMIS data as adequate while 44% judged it be *somewhat adequate* and 14% confirmed it as *inadequate* (Tool 7). All MoE respondents to survey tool 6 on EMIS data characterized the quality and adequacy of education data as having existing gaps, which aligns with the responses from LEGs.

When LEG members were further asked about the level at which the EMIS data are used for planning and monitoring purposes, the results are revealed as follows:

- At one level (central government) = 50%
- At two levels (central government & provincial government) = 21.4%
- At three levels (central government, provincial state government, school) = 25%
- Uncertain = 3.6%.

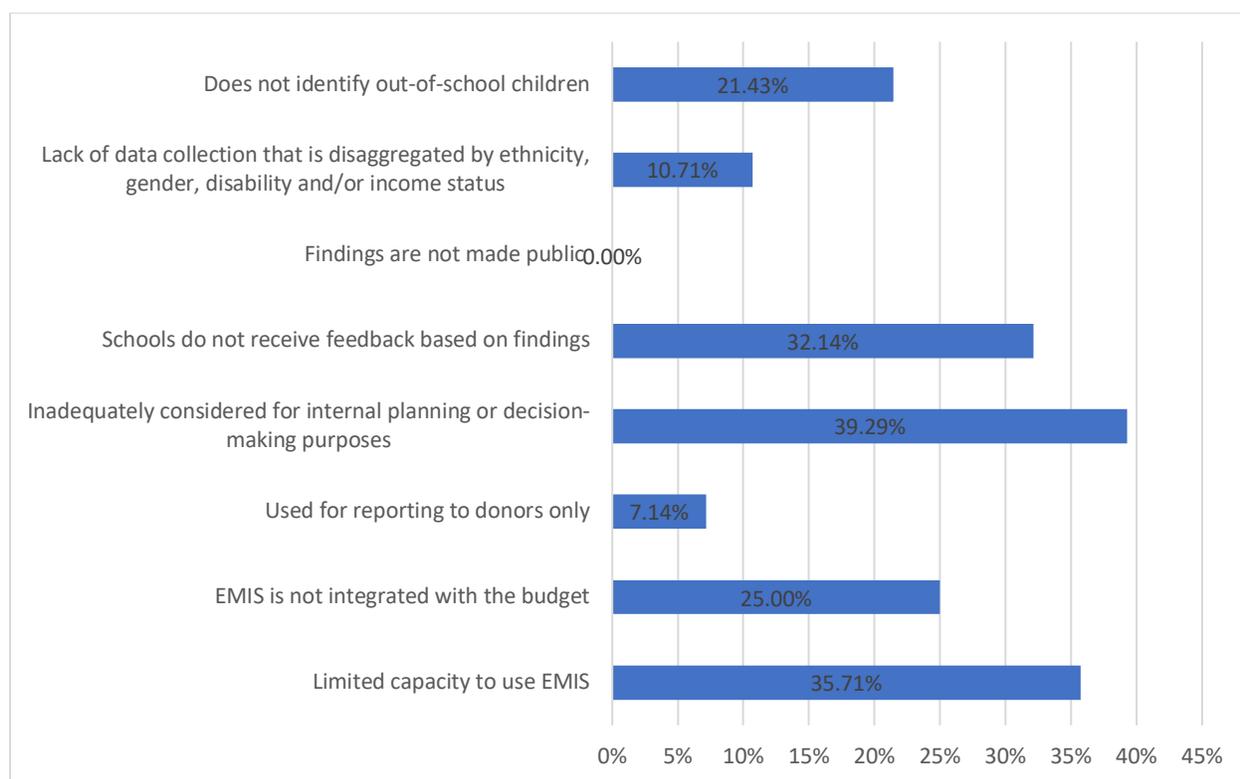
The data indicate that most of the member states are using the EMIS data at the central level only, though many member states have delineated decentralization policies that detail the use of the EMIS system at local and school levels.

The level of satisfaction experienced by LEG members with the exiting EMIS data is summarized as:

- Very satisfied = 7.1%
- Somewhat satisfied = 46.4%
- Somewhat dissatisfied = 25%
- Not satisfied at all = 17.9%
- Uncertain = 3.6%.

To clarify specific areas for improvement, LEG members identified the most significant limitations of EMIS systems as follows:

Figure 8. Limitations of EMIS (N= 28)



Source: In-depth country mapping, questionnaire: KIX Thematic area Local Education Groups (LEG) partner survey (July 2020)

Considering the limitations reported above, the KIX Africa 19 Hub can support EMIS improvements in the following ways:

- Provide further capacity building opportunities for professionals using the EMIS system at all levels. More specifically, develop capacity of professionals to gather authentic data, enhance coordination and use of EMIS data and share lessons on best practices (**Eritrea, Rwanda, Sierra Leone, The Gambia**)

- Engage in system strengthening to improve data collection and analysis processes using ICT and on-line mechanisms **(Ethiopia, Lesotho, Somalia)**
- Improve the use of data in practice and decision making **(Ethiopia, Lesotho)**
- Improve the dissemination of information to the public. For example, provide access to exam results on mobile phones and create an online query system in examination matters **(Kenya)**
- Develop processes and systems to provide feedback from EMIS data to schools and students **(Nigeria, The Gambia)**
- Link EMIS with human resource data systems **(The Gambia)**
- Update the EMIS system and specifically develop a dashboard to allow for real-time data collection **(Zambia, Zimbabwe)**
- Establish a system-wide monitoring and supervision system, system-wide use of EMIS data and identify risks and mitigation measures **(Ethiopia, Nigeria, Somalia)**
- Provide feedback to the lower levels of education, especially schools **(Ethiopia)**
- While EMIS is currently used, an integrated data management system is needed that would link to the Accountability Framework, delineate available and needed data sources, define the frequency of data collection and include a dashboard feature. EMIS data systems should capture out of school children. An accountability framework is needed across the sector at the school level, especially to increase teacher management and support **(Ghana)**

3.3.6 Confronting challenges facing gender equality and recommended actions

Gender equality in education has been ranked in sixth position among the KIX thematic areas, though the theme of gender equality is cross-sectoral, spanning across all aspects of education. It is therefore crucial to address gender in and along each of the KIX thematic areas.

In a considerable number of the KIX Africa 19 Hub member states, gender inequalities in education still exist at large. These are often reinforced by curriculum, textbooks and teaching materials that are based on patriarchal perspectives and which serve to reinforce negative stereotypes, which are especially impactful in the formative years.

In sub-Saharan Africa, access to primary education has improved for girls in recent decades, though one of the largest challenges is to maintain female enrollment, particularly during the transition from primary to secondary level (Abbott et al., 2015). Some promising practices, including in The Gambia, center on scholarship programs for girls from disadvantaged backgrounds to prevent female dropout at the secondary level (Gajigo, 2016). Similarly, Zambia's government has implemented scholarship programs to ensure retention of girls from marginalized families in rural areas entering into secondary education. In Malawi, a National Girls Education Strategy was developed in partnership with Save the Children to increase girls' enrolment in school and to provide girls with opportunities to complete their education if they leave or drop out for any reason, including due to early pregnancy. Cash-transfer programs have been piloted in different regions in Nigeria to increase girls' retention and to provide opportunities for girls from nomad families.

The In-depth country mapping has pinpointed some of the major challenges in providing and ensuring education opportunities are equal for both boys and girls, including:

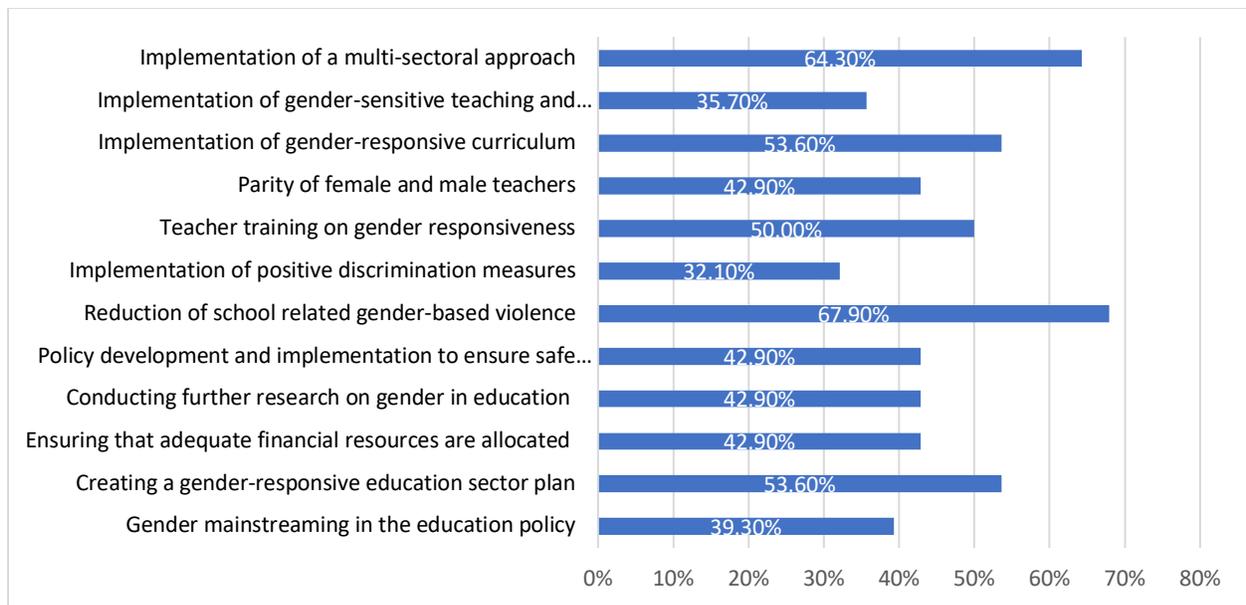
- High female drop-out rate, including low retention levels at the secondary level **(Eritrea, Zimbabwe, Zambia)**
- Socio-economic constraints of families which are unable to send all children to school, **(Eritrea, Ethiopia, Nigeria, Rwanda, The Gambia)**, disproportionate burden of domestic work for girls

(Rwanda) and migration of parents (The Gambia)

- Low perceived value to education of the girl child **(Eritrea, Rwanda, Somalia)**
- Early marriage **(Eritrea, Ethiopia, Kenya, Lesotho, Nigeria, Somalia, The Gambia)**
- Inadequate school facilities and lack of appropriate WASH materials, such as sanitary towels and separate toilets **(Ethiopia, Kenya, Lesotho, Nigeria, Sierra Leone, Somalia)**
- Safety and SRGBV concerns **(Ethiopia, Lesotho, Rwanda, Sierra Leone, Uganda, Zambia)** and limited health reproductive education sessions in schools **(Rwanda)**
- Early pregnancies preventing girls from continuing in school during or after birth of their child **(Kenya, Lesotho, Rwanda, Sierra Leone, The Gambia)**
- Harmful gender norms and stereotypes perpetuated in schools, lack of gender-responsive pedagogy **(Kenya, Rwanda, Zambia)** and in some areas lack of strong female role models **(Kenya)**
- Gender-stereotypes still exist in STEM education despite curriculum review to eliminate negative gendering **(Ghana)**.

Considering the prevalence of gender inequalities in education, the participants of the study have recommended the following priorities:

Figure 9. Key priorities related to gender equality in education (n=28)



Source: In-depth country mapping, questionnaire: KIX Thematic area Local Education Groups (LEG) partner survey (July 2020)

KIX Africa 19 Hub members reported the top five most important areas for immediate intervention as:

1. Reduction of SRGBV
2. Implementation of a multi-sectoral approach to ensure gender equality in education
3. Implementation of gender-responsive curriculum
4. Development of a gender-responsive education plan
5. Teacher training in gender-responsive pedagogy.

3.3.7 Strengthening governance and management of the education system

Many of the KIX Africa 19 Hub member states have set out “strengthening governance and management of the education system” as a strategic priority in their ESPs. Governance and management in fact serves as a cross-functional theme that serves as a key factor of success or failure for a given country’s education system as a whole. It refers to the structure that is in place to coordinate and integrate the policies, strategies and different educational establishments across a given country. Governance and management involve developing a comprehensive policy framework that guides the education system to create a well-functioning structure at various levels of the education sector, including at decentralized levels. Choosing the correct policy framework, assigning the right people to run the system, defining hierarchical but well-functioning relationships among the various levels and responsibility centers, developing strategic and operational plans based on well-defined goals and measurable indicators, monitoring and evaluating the progress of the system based on well-defined indicators for each performing unit/department and executing appropriate change or reform based on the evaluation results are all essential components.

An examination of strategic documents from the KIX Africa 19 Hub’s member states uncovered critical challenges to be addressed:

- Lack of competency in leadership and management among education officials at federal/central and state/provincial levels
- Poor efficiency and effectiveness in the education system
- Lack of transparency and accountability in the education system at all levels
- Misalignment of the ESP with the problems that need to be addressed in the education system, this as a result of completing planning without having completed a thorough sectoral analysis
- Absence of a well-established system-wide M&E protocol at all levels
- Lack of an effective school quality control mechanism and a system to benchmark improvement of the education system for greater efficiency and effectiveness
- The mismatch between planned activities and required budget and resources
- Poor or low quality of data collected
- Lack of appropriate data analysis
- Delay in release of information to the general public
- Limited infrastructure, including ICT, to facilitate coordination and integration of activities at various levels.

A review of national ESPs resulted in the identification of several recommended actions:

- Strengthen human resource and financial management systems and procedures and improve coordination between the MoE and state education apparatus (**South Sudan**)
- Improve governance and management of the education system at all levels by increasing capacity among education leaders, managers and administrators at school, district, provincial and national levels (**Eritrea, Ethiopia, Rwanda, Malawi, Mozambique, Nigeria**)
- Establish sustainable and efficient management, financing, transparency and accountability, as well as an effective school quality improvement system in education for greater efficiency outcomes (**Kenya, Ghana**)
- Establish a framework for participatory planning to address plan misalignment **Ethiopia**)
- Strengthen education systems for improved educational data, planning and ICT use in education (**Ethiopia, Liberia, Zambia**)
- Establish a system-wide monitoring and supervision system, establish system-wide use of EMIS data, support decentralization of education service delivery, and Higher Education, and Financial

Plan and Domestic Financing; the Monitoring Plan, and the Risks and Mitigation Measures (**Sierra Leone, Somalia**)

- Increase capacity of heads of schools on financial management to properly administer school grants and other resources (**Ghana**)
- Improving the quality of and process used to develop the ESP (**Uganda**).

3.3.8 Strengthening emergency preparedness and response mechanisms

Lack of peace and stability has affected several KIX Africa 19 Hub member states' capacity to provide quality, inclusive education (e.g. Ethiopia, Libya, Somalia, South Sudan). Currently, the COVID-19 pandemic is further complicating education provision across the globe, including the KIX Africa 19 Hub member states. Many schools have been forced to close, or have attempted to provide distance education opportunities; in both cases, education in the time of COVID-19 has presented enormous challenges to education systems and is therefore an imminent priority for member states

Governments, and the education authorities at various levels, have used various distance education methods, often through alternative modalities, such as radio, television, e-learning and so forth. However, the assessment of realities on the ground in most of the KIX Africa 19 Hub member states shows that there are critical challenges, which obstruct the smooth operation of distance education. Some reported challenges include:

- Poor or low level of teachers' competence in ICT application for teaching and learning
- Inadequate infrastructure (including computers and internet access)
- Irregular supply of power
- Lack of experience in design curriculum materials to suit to e-learning
- Limited coverage of internet, telephone, radio and television services, especially in rural areas.

To address some of the challenges associated with implementation of distance education or e-learning, it is recommended that issues relating to teacher capacity, quality of content, system strengthening, support services and bridging the technological gaps need to receive immediate attention. More specifically, further attention should focus on training teachers in blended learning modalities including distance education delivery methods and pedagogical use of ICT technologies to work with students; fulfilling infrastructural facilities including internet access, computers, mobile phones or tablets, satellite dishes, radio, television, etc., as necessary; revision of school curricula and learning materials to suit the new modalities of learning (i.e. blended learning); revision of education policies and school guidelines to respond to the current reality; creation of strategies to bridge gaps created due to the technological divide between students from high and low-income families, urban and rural residents, boys and girls, students of all abilities, majority and minority groups (especially in terms of language differences) and others.

4. Conclusion and recommendations

4.1 Conclusion

Through a thorough analysis of available country data, the In-depth country mapping has identified the top education system challenges and priorities along the six KIX thematic areas and across the 18 KIX Africa 19 Hub member states. Two additional thematic areas, system strengthening and the emergency COVID-19 response, have also emerged. The key findings of the In-depth country mapping are as follows:

1. For **improving teaching and learning effectiveness**, the key priorities include:
 - Provision of greater instructional leadership and teacher support
 - Better provision and quality of educational materials
 - Encouragement of students' interest towards learning
 - Teacher capacity building
 - Breaking down language of instruction barriers
 - Improvement to the quality of curriculum
 - Addressing teacher absenteeism

2. In relation to **strengthening learning assessment systems**, the key priorities include:
 - Utilization of assessment results for monitoring and evaluation purposes
 - Provision of evaluation feedback to learners
 - Improvement of national assessment systems
 - Use of learning assessments to inform school reforms
 - Adequate student preparation to participate in large-scale assessments
 - Use of mixed and balanced (theoretical and practical) testing systems for admission decisions to secondary and tertiary education.

3. For **ensuring equity and inclusivity in education**, the key priorities include:
 - Improving access to education based on sex, economic status, ethnicity and physical disability across all member states
 - Better access and completion rates for children enrolled in SNE
 - Improvement in the quality of SNE
 - Improving the learning environment and providing the necessary educational support for SNE children
 - Addressing the major causes of dropout for SNE children based on appropriate research
 - Development of vocational skills development opportunities within SNE
 - Greater access to non-formal educational opportunities within SNE
 - Greater provision of education in community language for SNE.

4. For **strengthening the governance and management of education systems**, the key priorities include:
 - Leadership and management capacity building among education officials at federal/central and state/provincial levels
 - Promoting efficiency and effectiveness by establishing a well-functioning result-based management system in the education sector
 - Creating greater transparency and accountability in the education system at all levels
 - Development of the education sector plan based on a thorough sector analysis
 - Institutionalization of efficient and effective school quality control systems, including setting standards for schools
 - Improvement of system-wide M&E systems
 - Ensuring that planned activities have the required budget and resources
 - Improvement in education data quality and analysis and timely dissemination of data to the general public
 - Improvement of education infrastructure, including ICT equipment.

5. For **ensuring coverage and quality of ECCE**, the key priorities include:
 - Improvement in the quality of teaching and learning, including ECCE curriculum
 - Improvement and better provision of facilities and infrastructure
 - Further capacity building and adequate qualifications system for ECCE staff
 - Increasing access to appropriate ECCE schooling
 - Expansion of planning, implementation and M&E of the sub-sector.

6. For **ensuring gender equality in education**, the key priorities include:
 - Ending SRGBV
 - Adoption of a multi-sectoral approach to ensure gender equality in education
 - Implementation of gender-responsive curriculum
 - Ensuring gender-responsive education plans are developed and implemented
 - Adopting gender-responsive pedagogy in teacher training programs.

7. For **enhancing EMIS**, the key priorities include:
 - Upgrading manual-based data collection to avoid delays and statistical errors
 - Developing a strong ICT infrastructure (e.g. computers, tablets, internet) to ensure timely data collection
 - Further capacity building among personnel using EMIS at central and local levels
 - Developing appropriate data banks for all education related activities in a given country
 - Creating a robust system to produce reliable, evidence based, comprehensive and timely data for decision-making and M&E support
 - Developing EMIS policies and data collection guidelines
 - Ensuring appropriate feedback mechanisms for schools following data analysis and reporting requirements.

8. For **coping with COVID-19, conflict and other emergency situations**, the key priorities include:
 - Enhancing teachers' competence in ICT application for teaching and learning at all levels
 - Improving the capacity of educational experts in designing competency-based curriculum and curriculum materials for e-learning
 - Providing the necessary infrastructure (including computers and internet access) to schools
 - Supporting, to the extent possible, a reliable supply of power and wide coverage of internet, telephone, radio and television services in rural areas.

4.2 Recommendations

The KIX Africa 19 Hub recommends four standalone thematic areas to be used as the basis for applied research, knowledge generation and investigation. The areas of data management and gender equality should be considered as cross-sectional themes. The priority themes include:

- **1st priority:** Improving teaching and learning effectiveness, as well as creating a robust learning assessment system across all sub-sectors. In both cases, the application of ICT and staff capacity strengthening in effective pedagogy and instruction received greatest attention among the study participants
- **2nd priority:** Ensure equity and inclusivity in education coverage by opening access to rural children (particularly girls), poor children, children with disabilities (special needs education) and children from minority groups
- **3rd priority:** Strengthening governance and management of the education system

- **4th priority:** Expanding pre-primary education coverage by providing quality ECCE.

10. References

- Abbott, P., Sapsford, R., Rwirahira, J. (2015). Rwanda's potential to achieve the millennium development goals for education. *International Journal of Educational Development* 40, 117–125. <https://doi.org/10.1016/j.ijedudev.2014.12.007>
- Abuya, B.A., Ngware, W.M., Mutisya, M., Nyariro, M. (2017). Girls' primary education and transition to secondary school in Nairobi: perceptions of community members at the onset of an education intervention. *International Journal of Adolescence and Youth* 22, 349–363. <https://doi.org/10.1080/02673843.2016.1185446>
- Abuya, B.A., Onsomu, E.O., Moore, D.K. (2014). Determinants of educational exclusion: Poor urban girls' experiences in- and out-of-school in Kenya. *Prospects* 44, 381–394. <https://doi.org/10.1007/s11125-014-9306-1>
- Adeniyi, Y.C., Omigbodun, O. (2016). Effect of a classroom-based intervention on the social skills of pupils with intellectual disability in Southwest Nigeria. *Child and Adolescent Psychiatry and Mental Health* 10, 1–29
- African Union (2016). Continental Education Strategy for Africa (CESA 2016-2025): Indicators Manual, accessed from http://www.education2030-africa.org/images/systeme_edu/docs/Final_Indicators_Manual.compressed.pdf
- Ahmed, B. (2012). Achieving education of high quality in Islamiyya schools of Nigeria, in: *International Perspectives on the Goals of Universal Basic and Secondary Education*. pp. 88–93. <https://doi.org/10.4324/9780203882146>
- Bannink, F., Idro, R., van, H. (2016). "I like to play with my friends": Children with spina bifida and belonging in Uganda. *Social Inclusion* 4, 127–141. <https://doi.org/10.17645/si.v4i1.630>
- Chauraya, E., Masakure, O. (2016). How civil conflict and gender-based violence affect women's education in Africa, in: *Security, Education and Development in Contemporary Africa*. pp. 156–170. <https://doi.org/10.4324/9781315608143>
- Dev, P., Mberu, B.U., Pongou, R. (2016). Ethnic Inequality: Theory and Evidence from Formal Education in Nigeria. *Economic Development and Cultural Change* 64, 603–660. <https://doi.org/10.1086/686739>
- Gajigo, O. (2016). Closing the education gender gap: estimating the impact of girls' scholarship program in The Gambia. *Education Economics* 24, 167–188. <https://doi.org/10.1080/09645292.2014.985287>
- Global Partnership for Education (GPE, 2019). Improving the teaching and learning: A Knowledge and Innovation Exchange (KIX) Discussion Paper, accessed from <http://www.globalpartnership.org/content/improving-teaching-and-learning-knowledge-and-innovation-exchange-kix-discussion-paper.com>
- Kamanda, M., Madise, N., Schnepf, S. (2016). Does living in a community with more educated mothers enhance children's school attendance? Evidence from Sierra Leone. *International Journal of Educational Development* 46, 114–124. <https://doi.org/10.1016/j.ijedudev.2015.09.008>
- Ketsitlile, L. (2012). An integrative review on the San of Botswana's indigenous literacy and formal schooling education. *Australian Journal of Indigenous Education* 41, 218–228. <https://doi.org/10.1017/jie.2012.21>
- Mariga, L., Mcconkey, R., Myezwa, H. (2014). Inclusive education in low-income countries: a resource book for teacher educators, parent trainers, and community development workers. Disability Innovations Africa, Rondebosch, South Africa.
- Mokibelo, E.B. (2014). The national language as a language of instruction in Botswana primary

- schools. *Language and Education* 28, 421–435.
<https://doi.org/10.1080/09500782.2014.892126>
- Munene, I.I., Ruto, S. (2015). Pastoralist education in Kenya: Continuity in exclusion in arid and semi-arid lands (ASAL). *Journal of Third World Studies* 32, 133–158.
- Novelli, M., Daoust, G., Selby, J., Valiente, O., Scandura, R., Deng Kuol, L.B., Salter, E. (2016). Exploring the linkages between education sector governance, inequity, conflict, and peace building in South Sudan.
- Ortiz-Echevarria, L., Greeley, M., Bawoke, T., Zimmerman, L., Robinson, C., Schlecht, J. (2017). Understanding the unique experiences, perspectives and sexual and reproductive health needs of very young adolescents: Somali refugees in Ethiopia. *Conflict and Health* 11.
<https://doi.org/10.1186/s13031-017-0129-6>
- Pather, S., Nxumalo, C.P. (2013). Challenging understandings of inclusive education policy development in Southern Africa through comparative reflection. *International Journal of Inclusive Education* 17, 420–434. <https://doi.org/10.1080/13603116.2011.651821>.
- Quarshie, J.D., Oyedele, V. (2011). University, Education District, and schools collaboration in the preparation of local level educational leaders: The Zimbabwean experience. Presented at the Procedia - Social and Behavioral Sciences, pp. 1236–1243.
<https://doi.org/10.1016/j.sbspro.2011.11.358>
- Rose, P., Downing, P., Asare, S. and Mitchell, R. (2019). *Mapping the landscape of education research by scholars based in sub-Saharan Africa: Insights from the African Education Research Database*. Synthesis report. REAL Centre, University of Cambridge.
<https://doi.org/10.5281/zenodo.3242314>
- Rwantabagu, H. (2010). Moral education in a post-conflict context: the case of Burundi. *Journal of Moral Education* 39, 345–352. <https://doi.org/10.1080/03057240.2010.497614>.
- Sekere, B., 2011. Secondary education for san students in Botswana: A new Xade case study. *Diaspora, Indigenous, and Minority Education* 5, 76–87.
<https://doi.org/10.1080/15595692.2011.559772>.
- Setume, S.D. (2016). Myths and beliefs about disabilities: Implications for educators and counselors. *Journal of Disability and Religion* 20, 62–76.
<https://doi.org/10.1080/23312521.2016.1152938>
- Teaching and Learning Educators’ Network for Transformation (TALENT) (2020). Learning assessment in sub-Saharan Africa: snapshot of the situation: Challenges, needs and opportunities to improve learning outcomes, presentation in the KIX Knowledge Sharing Virtual Meeting, June 11, 2020.
- Teaching and Learning Educators’ Network for Transformation (TALENT) (forthcoming 2020). *L’Evaluation des apprentissages en Afrique Sub-Saharienne, version provisoire*.
- Tesfay, N., Malmberg, L.-E. (2014). Horizontal inequalities in children’s educational outcomes in Ethiopia. *International Journal of Educational Development* 39, 110–120.
<https://doi.org/10.1016/j.ijedudev.2014.08.009>.
- Woldab, Z.E., Mekonnen, M. (2013). Geo-economic quandaries and educational exclusion in the context of pastoralists the case of Dasanech children in Southern Omo, Ethiopia. *Mediterranean Journal of Social Sciences* 4, 305–316.
<https://doi.org/10.5901/mjss.2013.v4n13p305>.

Country desk reviews

1. Eritrea:

- a. Eritrea Education Sector Analysis (2017)

- b. Eritrea Education Sector Plan (2018)
 - c. Eritrean Education System: A critical Analysis and Future Research Directions (Macrothink Institute, 2019), <http://ije.macrothink.org>
- 2. Ethiopia:**
 - a. Advancing Analysis in the Education Sector of Ethiopia-Joint Report
 - b. Education Statistics Annual Abstract 2011 E.C. (2018/19)
 - c. Education Sector Development Programme V (ESDP V) 2015/16 - 2019/20)
 - d. Education Sector Development Program V - Mid Term Review
- 3. Ghana**
 - a. Ministry of Education, Ghana. Education Strategic Plan 2018-2030.
 - b. Joint Sector Review Aide Memoire: 2019
 - c. Global Education Monitoring Report Profiles Enhancing Education Reviews (PEER): <https://education-profiles.org/sub-saharan-africa/ghana/~inclusion#Laws,%20Plans,%20Policies%20and%20Programmes>
- 4. Kenya:**
 - a. National Education Sector Strategic Plan for the Period 2018 – 2022
 - b. GPE 2020 Country-level Prospective Evaluations for Kenya (2019).
- 5. Lesotho:**
 - a. Kingdom of Lesotho Ministry of Education and Training. Education Sector Plan.
 - b. Global Education Monitoring Report Profiles Enhancing Education Reviews (PEER): <https://education-profiles.org/sub-saharan-africa/lesotho/~inclusion>
- 6. Liberia:**
 - a. Ministry of Education, Republic of Liberia. Getting to Best Education Sector Plan. 2017-2021.
 - b. Ministry of Education. Aide-Mémoire for Joint Education Sector Review (JESR) Roundtable. 2019.
 - c. Global Education Monitoring Report Profiles Enhancing Education Reviews (PEER): <https://education-profiles.org/sub-saharan-africa/liberia/~inclusion>
- 7. Malawi:**
 - a. Government of Malawi Ministry of Education, Science and Technology. 2018/19 Education Sector Performance Report
 - b. Global Education Monitoring Report Profiles Enhancing Education Reviews (PEER): <https://education-profiles.org/sub-saharan-africa/malawi/~inclusion>
 - c. Malawi Ministry of Education, Science and Technology. National Education Sector Plan 2008-17. <https://www.globalpartnership.org/sites/default/files/2008-Malawi-Education-Sector-Plans-2008-2017.pdf>
- 8. Mozambique:**
 - a. Republic of Mozambique Ministry of Education and Human Development. Education Sector Strategic Plan 2020-29.
 - b. Republic of Mozambique. 2019. Joint Education Sector Review
 - c. Global Education Monitoring Report Profiles Enhancing Education Reviews (PEER): <https://education-profiles.org/sub-saharan-africa/mozambique/~mozambique>
- 9. Nigeria:**
 - a. Federal Ministry of Education. Education for Change: A Ministerial Strategic Plan. 2019.
 - b. Global Education Monitoring Report Profiles Enhancing Education Reviews (PEER): <https://education-profiles.org/sub-saharan-africa/nigeria/~nigeria>

- c. The World Bank. 2013. SABER early childhood development country report : Nigeria
<https://documents.worldbank.org/en/publication/documents-reports/documentdetail/278661468288989040/saber-early-childhood-development-country-report-nigeria-2013>
 - d. Nigerian Educational Research and Development Council (NERC). Special Program Centre Major Achievements
https://www.nerdc.gov.ng/content_manager/spc_achievements.html
- 10. Rwanda:**
- a. Education Sector Strategic Plan 2018/19- 2023/24
 - b. Summative GPE country evaluation (2019)
- 11. Sierra Leone:**
- a. Ministry of Education, Science and Technology. Education Sector Plan. 2018-2020.
 - b. Ministry of Education, Science and Technology (MEST) and Education Development Partners (EDP). Education Sector Review. 2015.
 - c. Global Education Monitoring Report Profiles Enhancing Education Reviews (PEER):
<https://education-profiles.org/sub-saharan-africa/ghana/~inclusion#Laws,%20Plans,%20Policies%20and%20Programmes>
- 12. Somalia:**
- a. Federal Government of Somalia Ministry of Education, Culture and Higher Education. Education Sector Strategic Plan 2018-2020
 - b. Federal Government of Somalia Ministry of Education. Education Sector Analysis
 - c. Global Education Monitoring Report Profiles Enhancing Education Reviews (PEER):
<https://education-profiles.org/sub-saharan-africa/somalia/~somalia>
- 13. South Sudan:**
- a. The General Education Strategic Plan, 2017-2022 (Ministry of Education and Instruction, 2017)
 - b. Education sector analysis 2016: planning for resilience (UNESCO)
 - c. Summative GPE country program evaluation (2019), www.universalia.com
- 14. Tanzania:**
- a. The Revolutionary Government of Zanzibar and Ministry of Education and Vocational Training and President’s Office – Regional Administration and Local Government and Special Departments. Annual Joint Education Sector Review Report 2019.
 - b. Joint Education Sector Review 2019.
 - c. Global Education Monitoring Report Profiles Enhancing Education Reviews (PEER):
<https://education-profiles.org/sub-saharan-africa/united-republic-of-tanzania/~united-republic-of-tanzania>
- 15. The Gambia:**
- a. Education Sector Strategic Plan 2016-2030. Ministries of Basic and Secondary Education and Higher Education Research Science and Technology
 - b. Global Education Monitoring Report Profiles Enhancing Education Reviews (PEER):
<https://education-profiles.org/sub-saharan-africa/gambia/~inclusion>
 - c. The Gambia Early Childhood Development Country Report. 2013. World Bank SABER:
<http://documents1.worldbank.org/curated/en/784541467991911674/pdf/100063-WP-PUBLIC-ADD-SERIES-Box393216B-SABER-ECD-The-Gambia.pdf>
 - d. Republic of the Gambia Ministry of Basic and Secondary Education Directorate of Planning, Policy Analysis, Research and Budgeting. Education Statistics 2019/2020.
- 16. Uganda:**

- a. Education and Sports Sector Strategic Plan 2017-2020 (Ministry of Education and Sports, 2017)
- b. Education and Sports Sector Semi-Annual Monitoring Report (2019)

17. Zambia:

- a. Republic of Zambia Ministry of General Education and Ministry of Higher Education. Education and Skills Plan 2017-21
- b. Republic of Zambia Ministry of General Education. 2018. Education Sector Analysis
- c.) Global Education Monitoring Report Profiles Enhancing Education Reviews (PEER):
<https://education-profiles.org/sub-saharan-africa/zambia/~inclusion>

18. Zimbabwe:

- a. Republic of Zimbabwe Ministry of Primary and Secondary Education. Education Sector Strategic Plan 2016-20
- b. Republic of Zimbabwe Ministry of Primary and Secondary Education. 2019. Joint Sector Review Report.
- c. Global Education Monitoring Report Profiles Enhancing Education Reviews (PEER):
<https://education-profiles.org/sub-saharan-africa/zimbabwe/~inclusion>