

# EdTech Hub

Clear evidence, better decisions, more learning.

# Curriculum Reform & Building Back Better

FCDO South Sudan Helpdesk response  
September 2020

## About the Helpdesk

The Helpdesk is the Hub's rapid response service, available to Foreign and Commonwealth Development Office (FCDO) advisers and World Bank staff in 70 low- and lower-middle-income countries (LMICs). It delivers just-in-time services to support education technology planning and decision-making. We respond to most requests in 1-15 business days. Given the rapid nature of requests, we aim to produce comprehensive and evidence-based quality outputs, while acknowledging that our work is by no means exhaustive. For more information, please visit <https://edtechhub.org/helpdesk/>.

## Purpose of this document

This document was produced in response to a request from the FCDO South Sudan team that was submitted to the EdTech Hub Helpdesk. It presents an overview of curriculum reform implementation within the context of COVID-19 and strengthening education systems for when children return to school (“building back better”). The document emphasises interventions and evidence relevant to African countries.

# South Sudan context

# Learning outcomes

Despite an increase in exam pass rates from 2009, there continue to be gaps in literacy and numeracy skills in South Sudan. The [General Education Strategic Plan, 2017-2022](#) points to a need for teacher education on building foundational literacy and numeracy in the classroom.

## Primary exams

Average pass rate in 2014: 81%

- 83% for boys vs. 75% for girls
- Of all exam participants, 34% were girls

## Secondary exams

Average pass rate in 2018: 77%

## Literacy & numeracy

From GESS learning assessment

Average literacy scores

- 53% for S2 students
- 62% for P8 students

Average numeracy scores

- 30% for S2 students
- 40% for P5 & P8 students

Performance of girl students is weaker than for boy students, but the score gap decreases in upper grades

# National curriculum timeline

**2013:** Government embarks on major curriculum reform process. Previously, multiple curricula in use across the country.

**2015:** First post-independence National Curriculum launched. Curriculum Framework, Subject Overviews, Syllabi, Learning Outcomes, Literacy and Numeracy Assessments, Literacy and Numeracy Strategy, and Literacy and Numeracy kits developed and approved.

**2016:** Ministry starts developing textbooks, learning materials and teacher guides aligned to new curriculum - aiming to have all materials ready for use in 2018.

**2018:** Cambridge Education (2018) evaluation of GPE support finds “a gap between development and roll-out of the curriculum and textbooks” and that “designing feasible roll-out strategies including teacher training in the new curriculum will be a key priority.”

**2020:** First year of full implementation planned, including distribution of new textbooks.

# Examinations in South Sudan

The government aims to have a unified system in 2021, at which point the new South Sudan curriculum will be implemented across all states.

- At primary level, exams are run by states with no unified national system.
- At secondary level, while exams are administered and processed by the national Secretariat of Examinations, variation in curricula at state level means the exams also vary.
- There are additional logistical challenges involved in administering exams to internally displaced children and refugees.

# Post-COVID back to school strategy

- All schools closed from 20 March 2020. US\$10m requested from GPE to support COVID-19 response. 3 pillars:
  - 1)** Learning continuation: Includes (i) provision of physical “curriculum aligned learning packages” - e.g., textbook extracts, materials for self-directed learning adapted from similar regional contexts and aligned to new curriculum; (ii) radio programming; (iii) engagement and support from education officials.
  - 2)** School reopening: back-to-school campaign, improving WASH infrastructure, preparing teachers to provide increased support to pupils
  - 3)** Building contingency capacities: including Emergency Management Unit within Education Ministry
- Education Cluster Strategy includes plan to develop and implement remedial/ catch-up programme to make up for lost learning



# Curriculum reform

# Attaining curriculum reform

Significant misalignment often results between:

1. Intended curriculum  
(i.e., what the official guidance says)

2. Implemented curriculum  
(i.e., what teachers and learners actually do)

3. Attained curriculum  
(i.e., what students actually learn)

# Curriculum reform: not a stand-alone intervention

Multiple cross-country comparative studies have highlighted the importance of getting implementation of curriculum reform right, and the factors that affect implementation success.

- “Implementation has not been as successful as hoped... a wide gap exists between the expected goals of curriculum reforms and actual progress achieved” (Westbrook et al, 2013)
- “If the mathematics curriculum is not well matched to the capacities of the majority of learners then simply providing a textbook will not bridge the gap” (Bethell, 2016)
- “A new curriculum without the supportive elements of teacher training, textbooks, and revised examinations will not have the desired effect” (World Bank, 2019)

# Curriculum reform: not a stand-alone intervention

Implementation requires coordination across multiple areas, not just the curriculum itself.

For example, no significant difference in student achievement was found across mathematics curricula in Sub-Saharan Africa. Bethell (2016) highlights that other factors, in particular the quality of teaching, have a larger impact on student learning outcomes than the content of the intended curriculum.



**Building back better (BBB)**

# Projecting learning loss

Based on data from 157 countries, [World Bank](#) estimates that COVID-19 could lead to:



0.3 - 0.9 years of  
schooling lost



USD \$10 trillion  
reduction in lifecycle  
earning



7 million children  
dropping out of  
school in 2020\*

\*Girls may be disproportionately affected by COVID-19. For example, girls were 83% more likely than boys to drop out of primary school during economic crises in Cameroon (1980s - 1990s).

# Projecting educational responses

As schools around the world plan for reopening, building back better through continued adaptation to student learning levels is key to mitigating learning loss and enabling more inclusive and resilient education systems.



## **Emergency remediation (i.e., 0.5 - 1 year of remedial classes when school reopen)**

Projection: Learning loss is reduced by half, but students will stay more than half a year behind, compared to where they would have been with no disruption to schooling.



## **Combination of emergency remediation with continued adaptation in instruction to student learning levels**

Projection: No learning loss, and students receive an additional year's worth of learning.

# Building back better in the COVID context

Emergency remediation and returning to “business as usual” will have minimal impact on learning targets. Other initiatives are needed to meet the learning needs of students.

[World Bank \(2020\)](#) projects that global learning poverty will be halved by 2055, if “business as usual” in education is continued once schools reopen. Alternatively, **accelerating learning process** will enable global learning poverty to be halved by 2032.



# Eight key factors

# Factors affecting curriculum reform

As schools in South Sudan prepare to reopen, curriculum reform must take place in parallel with the overarching goals to build back better and reduce learning loss for students post-COVID. Factors that relate to both initiatives include:

1. Curriculum focus

2. Assessments

3. Teacher professional development

4. Learning and teaching materials

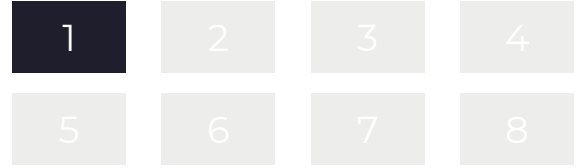
5. System capacity

6. Financial resources

7. Language of instruction

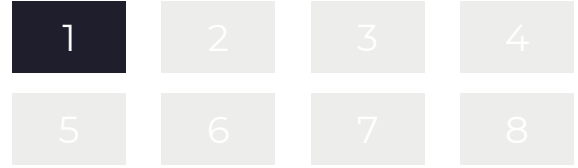
8. School leadership

# Focus on curriculum foundations



- **Focus on early grades.** Students who don't learn the fundamentals in early years of schooling are unlikely to be able to access the rest of the curriculum, and are more likely to drop out
- **Focus on literacy and numeracy.** Prioritise these fundamentals over other curriculum areas. Country governments can refer to the [Global Proficiency Framework](#), which defines the minimum reading and mathematics proficiency levels for grades 2 - 6 (jointly developed by UNESCO, USAID, DFID, ACER, and Gates Foundation)
- **Avoid overcrowding the curriculum** with too much content and too many subjects, at the expense of depth in core areas

# Focus on curriculum foundations in ALPs



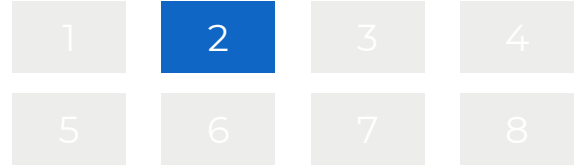
As schools reopen, many countries have set up accelerated learning programs (ALPs). A [2013 assessment](#) of 12 ALPs found two themes relevant to curriculum reform:

- **Relevant curriculum:** ALPs in Ghana, Malawi and Uganda used “real world” scenarios in lessons. Life skills were integrated across literacy lessons and other subject areas.
- **Foundational skills:** 60% of Malawi’s Complementary Basic Education (CBE) curriculum is focused on literacy and numeracy. In addition, an [ALP program in Nigeria](#) for out-of-school children focused on and reported significant improvements in literacy and numeracy.

## Country Example: Nigeria

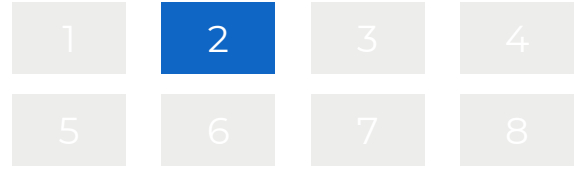
Across 43,000 schools, accelerated learning programmes “with individualised feedback loops” will be developed and implemented to support students post-COVID.

# Encourage use of formative assessment



- Teachers should be supported to use formative assessment to inform, improve and focus their classroom practice. However, effective implementation of formative assessment in Sub-Saharan Africa is rare, and in large classes, formative assessment is difficult even for skilled and experienced teachers
- **Effective use of formative assessment requires development of teacher skills** – and should be embedded into initial teacher education and ongoing teacher supervision and support
- Use of formative assessment can be encouraged through **provision of exemplar assessment resources in teacher guides**

## When students return to school, assess learning levels (formative)

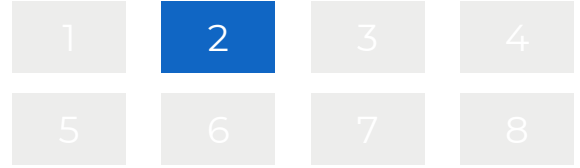


Continued adaptation of instruction and teaching activities to student learning levels post-COVID requires assessments on a periodic basis. Once schools reopen, Ministries of Education should conduct assessments on student needs (including education, cost barriers, nutrition, etc.) and the capacity of available teachers to support remedial education.

### Country Example: Malawi

Starting in September or October 2020, all schools in Malawi plan to evaluate learning levels using end-of-term assessments. The assessment will “inform the teachers on the learning gaps and assist in planning for remedial lessons including teaching at the right level of the child.” Clear communication with students, teachers, and parents about how the results of the assessment will be used is important. The Ministry of Education should set expectations that the exams will be solely used for diagnostic purposes, and not for high-stakes testing to determine progression to the next grade.

# Align summative assessments with new curriculum

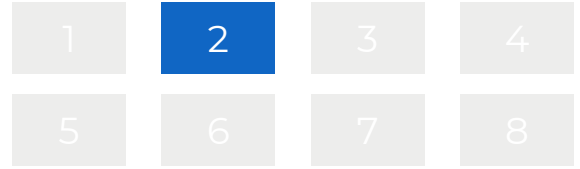


- **Any examinations used to summatively assess students should be based on the curriculum they have been taught with.** The pace of exam reform cannot exceed the pace of curriculum roll-out to ensure alignment between the new curriculum and examination content

## Country Example: Namibia

Post-independence, Namibia made large-scale changes to decolonise its curriculum. Some major changes were made immediately (including adopting English as the language of instruction), but a more transitional approach was taken to the introduction of new examinations. The Namibia Junior Secondary Certification Examination was introduced in 1991 (with the first exam taking place in 1994); the Senior Secondary Certificate was introduced in 1994; and further reforms were made throughout the 2000s. Quality assurance and support from local communities enabled the success of the reform.

# Align summative assessments with new curriculum

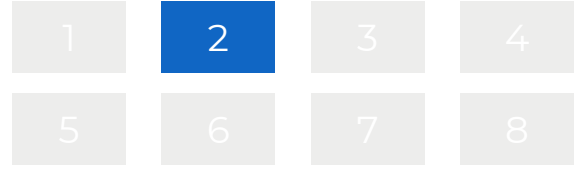


## Country Examples: Cameroon, Gabon, Mali, Senegal and Tunisia

There was no significant improvement in student learning outcomes from a study on competency-based curriculum reform in the five countries. Analysis revealed common gaps in the design and implementation of the new curriculum, including misalignment between assessments and the curriculum. Existing certification tests (e.g., examinations for secondary school entry, study certificates) were not clearly linked to student learning. This created the mindset within communities that the new curriculum held little importance and discouraged families from sending their children to schools implementing the competency-based curriculum.



## When students return to school, assess learning levels (summative)

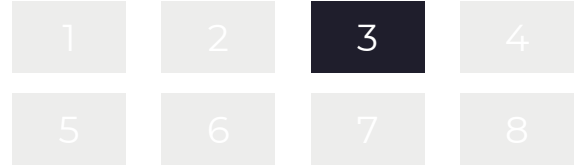


Out of [84 surveyed countries](#) in April 2020, 58 rescheduled exams, 23 introduced alternative methods for testing, 22 kept exams as-is, and 11 cancelled. In several COVID-19 response plans, country governments are preparing further support for learners taking national examinations. Following COVID, there may be key opportunities to reform existing high-stakes exam systems to best support and measure student learning (e.g., through [open-ended and school-based assessments](#)).

### Country Example: Liberia

Supplemental lessons for 6th, 9th, and 12th grade students in Liberia will be provided when schools re-open. The West African Examinations Council (WAEC) and the West African Senior Secondary School Certificate Exam (WASSCE) 2020 exams have been rescheduled to take place in August.

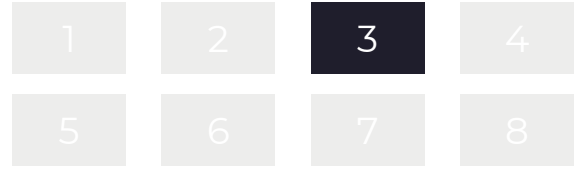
# Provide teacher professional development (TPD)



“A new curriculum will go nowhere unless serving, as well as future, teachers are oriented, trained and supported to be able to teach it.” (Cunningham, 2019)

- **Align teacher education (both initial teacher education and continuous professional development) to the new curriculum** and to the realities of classroom practice
- **Facilitate peer support** and ongoing follow-up classroom support for teachers
- Teacher education should include instruction on the **skills required to undertake continuous assessment**

## Enable TPD through multiple channels, including EdTech



Though EdTech is not the sole solution to effective teacher education, it can be integrated within a comprehensive framework of practices to support professional development. This may be especially relevant during COVID when in-person teacher support is less feasible. Examples include:

- Engage teachers at school and home (e.g., accessing offline content)
- Video record lessons for self-reflection and discussion with colleagues
- Network with other teachers (e.g., on special issues, such as disability)
- Carry out virtual, regular coaching (e.g., for school-based facilitators)
- Send tips and encouragement to teachers through SMS texts
- Use [Open Educational Resources \(OER\)](#) (in print or digital) for lesson planning.

# Invest in learning and teaching resources



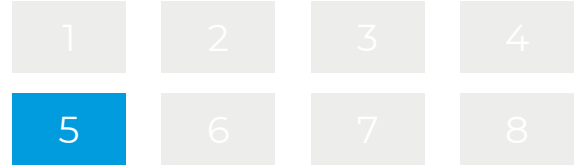
## For teachers:

- Provision of resources alone is not enough; resources need to be accompanied with guidance on how to use effectively. **Teacher guides containing structured lesson plans** can be effective, particularly during the transition to a new curriculum
  - Analysis of the Kenya Primary Math and Reading Initiative found that including teacher guides in programme design was “by far the most cost-effective intervention”
  - Comparative analysis of teacher guide use across 13 countries in SSA and Asia found that simple, structured teacher guides were more effective than scripted lesson guides

## For students:

- Ensure resources are accessible, in terms of language and content. Resources (and curriculum) should be pitched to learners of all abilities, not just the strongest students

# Develop system capacity for curriculum reform



- **Develop the capacity of the education system to deliver reform**, including the capacity of the Ministry to coordinate and oversee implementation, and the capacity of delivery partners such as teacher training institutions, exam boards, etc.
- **Consider reducing scope of curriculum change to align with the system’s capacity to deliver.** “Focus on what can be realistically delivered” (Cunningham, 2019), and adopt an “incremental timeline for implementing reforms and expecting results” (OECD, 2019)

## Develop system capacity for BBB

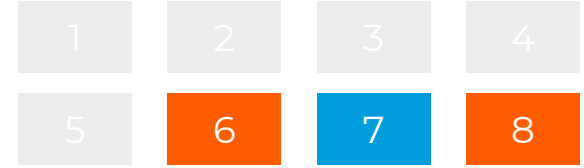


Building back better will require more robust processes and systems for data collection and analysis. Post COVID, tracking learning outcomes and equity measures will become all the more crucial.

### Country Example: Sierra Leone

The Education Data Hub was launched in 2019 by Sierra Leone's Director of Science, Technology, and Innovation (DSTI) and the Ministry of Basic and Senior Secondary Education (MBSSE). The tool aggregates census data and results from the national examinations. Decision-makers, parents, students, and teachers can use the Data Hub to support informed planning and accountability for education quality. The EdTech Hub is currently partnering with the Sierra Leone Minister of Education to support rapid research to build out the Data Hub.

## Other implementation factors



- **Financial resources:** Ensure sufficient funds are in place to meet the costs of implementing reforms in full. In late 2016, Uganda paused implementation of its curriculum reforms due to a shortfall in funds
- **Language of instruction:** Learners in early grades should be taught in their mother tongue wherever possible
- **School leadership:** Ensure principals and other school leaders are engaged in reform design and in building back better, and that they provide support, supervision and leadership to implement reforms at school level

# Key considerations for South Sudan

## Considerations



- Emergency remediation and returning to “business as usual” will have minimal impact on learning targets. Other initiatives are needed to meet the learning needs of students.
- When schools reopen, assess and analyse learning levels to focus curriculum on gaps in student knowledge. For exam classes returning to school in 2020, end-of-year assessments should be reflective of the curriculum studied
- [Promoting and focusing on student learning outcomes](#) in teacher education, and developing teachers’ formative assessment skills, will support both building back better and curriculum implementation

## Potential uses of EdTech



- Use interactive radio instruction to supplement in-person lessons and/or support teacher development
- Create a community of practice for teachers through in-person activities and digital tools (e.g., peer sharing, lesson planning, mentorship, WhatsApp groups)
- Leverage and align with existing interventions in South Sudan, such as the GDL Radio Collection (funded by USAID)



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