

UNICEF Eastern and Southern Africa
Working Paper 2020

Structured Pedagogy: For Real-Time Equitable Improvements in Learning Outcomes

Version 02

20 June 2020

Acknowledgements

This working paper has been developed with the input from colleagues across the United Nations Children's Fund (UNICEF) and external organizations and the authors would particularly like to thank: from UNICEF Karam Ali, Sandra Alvarez, Cecilia Baldeh, Camille Baudot, Helene Cron, Terry Durnnian, Ayoub Kafyulilo, Pantalee Kapichi, Leseke Mukokomani, Hiroshi Okamoto, Wycliffe Otieno, Cliodhna Ryan, Audax Tibuhinda; and from external organizations Noam Angrist (Young 1ove), Steven Cantrell (Bridge Academies), Ashleigh Morrell (Abdul Latif Jameel Poverty Action Lab [J-PAL]), Ben Piper (RTI International), and Ben Rudd (Bridge Academies).

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Recommended citation: Chakera, S., Haffner, D., Harrop, E., (2020) UNICEF Eastern and Southern Africa Region Working Paper – Structured Pedagogy: For Real-Time Equitable Improvements in Learning Outcomes. UNICEF: Nairobi.

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Acronyms

3R	reading, writing and arithmetic
ACR GCD	All Children Reading: A Grand Challenge for Development
ASET-KIE	Advancing Special Education Teachers' Knowledge on Inclusive Education
BRNEd	Big Results Now in Education
C4D	communication for development
CO	Country Office
COVID-19	coronavirus disease
CESA	African Union's Continental Education Strategy for Africa 2016–2025
DFiD	UK Department for International Development
EGRA	Early Grade Reading Assessment
EGRS	Early Grade Reading Study
EMIS	Education Management Information System
ESAR	Eastern and Southern Africa Region
ESARO	Eastern and Southern Africa Regional Office
GPE	Global Partnership for Education
ICTs	information communication technologies
J-PAL	Abdul Latif Jameel Poverty Action Lab
JICA	Japan International Cooperation Agency
MDG	Millennium Development Goal
MHPSS	mental health and psychosocial support
MICS	Multiple Indicator Cluster Surveys
MTR	Mid-Term Review
NRP	National Reading Programme
PRIMR	Primary Mathematics and Reading (Initiative)
PRP	Pakistan Reading Project
PSG	Parent Support Group
PTA	parent teacher association
RCT	randomized control trial
RISE	Research on Improving Systems of Education
SDG	Sustainable Development Goal
SEL	social and emotional learning
SIDA	Swedish International Aid Agency
STEP	Student-Teacher Enrichment Programme
TiCC	Teachers in Crisis Contexts
TLMs	teaching and learning materials
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
USAID	U.S. Agency for International Development

1. Introduction

1.1 About the structured pedagogy working paper

This Working Paper responds to demand from Country Offices (COs) in the Eastern and Southern Africa Region (ESAR) that emerged during the 2018 Regional Education Network Meeting. Draft versions of this paper have already been circulated and positively influenced programming in the region through 2019.

As a contribution to advancing structured pedagogy to help address the learning crisis, the UNICEF Eastern and Southern Africa Regional Office (ESARO) has reviewed the evidence, analysed experiences, and considered UNICEF's comparative advantage, in order to propose an evidence-based framework for structured pedagogy built around four pillars:

- Teacher professional development;
- Teaching and learning materials (TLMs);
- Formative assessment; and
- Primary caregiver engagement.

The proposed Structured Pedagogy Framework is a new and innovative model which is practical and implementable. The Framework can be included in CO programming and ultimately help COs support national and decentralized government and civil society partners to achieve tangible improvements in children's learning outcomes. Specifically, the framework seeks to:

- Catalyse debate about what it will take to realize quality education for all children in ESAR;
- Give COs and partners an insight into evidence-informed interventions that can be used to significantly improve learning;
- Guide COs at critical decision-making moments such as the development of country programme documents, Mid-Term Reviews (MTRs), strategic moments of reflection, and development of Education Section Plans;
- Inform conversations with ministers, donors and partners;
- Foster real-time improvements, which can be observed as making an immediate impact on learners and seeing impact at scale (at sub-national or national level) over a four to five-year programme or political cycle.

Whilst the Framework sets out some essential components of effective structured pedagogy interventions, it does not aim to be prescriptive; it invites adjustment through contextual analysis, partner engagement and consultation, and learning-by-doing, so that it can be enhanced as an active and dynamic framework for change. As a working paper, this document does not represent official UNICEF policy, but seeks to be used by UNICEF COs with government partners, donors and other external organizations as a foundation for inspiration and cooperation on approaches to generating equitable improvements in learning outcomes.

What is Structured Pedagogy?

The term structured pedagogy is neither universally defined nor consistently used to refer to the same set of interventions, and the literature that fed into this working paper is no exception. However, UNICEF here develops a definition of structured pedagogy that is a composite of evidence-informed concepts:

Structured pedagogy refers to a systemic change in educational content and methods, delivered through comprehensive, coordinated programmes that focus on teaching and learning, with the objective of changing classroom practices to ensure that every child learns.

The ultimate goal of structured pedagogy is that all children gain foundational (literacy and numeracy) and transferable (social and emotional) skills, as an essential grounding for ongoing learning and for life and work.

1.2 A crisis of learning in Africa

Schooling does not equate to learning, and for the first time in history there are more non-learners who are in school, than out of school¹. Sub-Saharan Africa is home to 32.2 million out-of-school children, representing over half of all out-of-school primary aged children globally, and 18.8 per cent of those in the region (21.4 per cent of girls and 16.3 per cent of boys). There are a further 28.3 million out-of-school adolescents of lower secondary school age in sub-Saharan Africa (36.7 per cent of that age group; 38.1 of girls vs 35.3 of boys).²

For children in school, 87 per cent of children in sub-Saharan Africa are in learning poverty as they do not have basic literacy by age 10³. Again, girls are most affected: more than 70 million school-aged girls in sub-Saharan Africa (90 per cent) will not meet minimum proficiency levels in reading, compared to 85 per cent of boys⁴.

The learning crisis undermines sustainable growth and poverty reduction and is a major contributor to human capital deficits⁵. Countries in ESAR have some of the lowest Human Capital Index rankings in the world⁶. For example, South Sudan has a score of just 0.30 which means that by the age of 18, a child born today will be only 30 per cent as productive as a child would be under the benchmark of a complete education and full health. Kenya has the highest score in ESAR at 0.52 (global average 0.56)⁷.

A focus on learning is essential as there is growing evidence that many of the benefits of education – cultural, economic, and social – accrue to individuals and society only when learning occurs, and when skills that can be applied in real life are gained⁸. While the focus of Millennium Development Goal (MDG) 2 was improving access to education (achieve universal primary education), Sustainable Development Goal (SDG) 4 seeks to ensure quality learning as well as access (inclusive and quality education for all and promoting lifelong learning).

However, progress in reducing learning poverty is far too slow to meet the SDG aspirations: at the current rate of improvement, in 2030 about 43 per cent of children will still be learning-poor⁹. In ESAR, high rates of primary school enrolment are overshadowed by inadequate infrastructure and learning environments; shortage of and poorly distributed qualified teachers; high levels of teacher absenteeism; lack of quality TLMs; ineffective bureaucracies; low quality system data; and limited fiscal space to achieve change.

Furthermore, there are many barriers to learning outside of the purview of the education system, or which require a multisectoral response. These include inadequate nutrition; opportunity costs of children's time, i.e., the value of children's time in alternative family support or income generating activities; cultural barriers such as child marriage; and the distance to school.

¹ UNICEF Education Strategy 2019–2030 www.unicef.org/reports/UNICEF-education-strategy-2019-2030 accessed 3 June 2020

² UNESCO Institute for Statistics, New Methodology Shows that 258 Million Children, Adolescents and Youth Are Out of School, Fact Sheet no. 56 September 2019 <http://uis.unesco.org/sites/default/files/documents/new-methodology-shows-258-million-children-adolescents-and-youth-are-out-school.pdf>

³ This indicator brings together schooling and learning indicators: it begins with the share of children who haven't achieved minimum reading proficiency (as measured in schools) and is adjusted by the proportion of children who are out of school (and are assumed not able to read proficiently). World Bank. 2019. Ending Learning Poverty: What Will It Take?. World Bank, Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/32553> License: CC BY 3.0 IGO

⁴ UNESCO Institute for Statistics, More than One-Half Children and Adolescents are not Learning Worldwide, Fact Sheet No. 46, September 2017 <http://uis.unesco.org/sites/default/files/documents/fs46-more-than-half-children-not-learning-en-2017.pdf>

⁵ World Bank, Learning Poverty, 15 October 2019 www.worldbank.org/en/topic/education/brief/learning-poverty accessed 3 June 2020

⁶ The World Bank Human Capital Index measures the human capital of the next generation across three components: survival; expected years of learning-adjusted school (quantity of education combined with a measure of quality); and health. World Bank, The Human Capital Project, 2018 <https://openknowledge.worldbank.org/bitstream/handle/10986/30498/33252.pdf>

⁷ Human Capital Index and Components, 2018 www.worldbank.org/en/data/interactive/2018/10/18/human-capital-index-and-components-2018 accessed 3 June 2020

⁸ OECD, The High Cost of Low Educational Performance, The Long-Run Economic Impact of Improving Pisa Outcomes, 2010 www.oecd.org/pisa/44417824.pdf and Hanushek, Eric A.; Woessmann, Ludger. 2007. The Role of Education Quality for Economic Growth. Policy Research Working Paper; No. 4122. World Bank, Washington, DC. © World Bank <https://openknowledge.worldbank.org/handle/10986/7154> License: CC BY 3.0 IGO

⁹ World Bank, Learning Poverty, 15 October 2019

The conventional mix of education inputs is not improving learning outcomes, with the result that countries in ESAR are unable to prepare children and adolescents for life, work and active citizenship. The impacts for children can last a lifetime, as the delayed or failed acquisition of basic skills such as reading leads to an accumulation of negative impacts for future learning, commonly known as the Matthew Effect¹⁰.

It is therefore vital that all stakeholders are awake to the urgency of solving the learning crisis, particularly in securing learning at the foundational pre-primary and primary levels, as a basis for all learning. The coronavirus disease (COVID-19) pandemic both reinforces the urgency of addressing education in Africa as well as presents a compelling opportunity to do so (Box 1).

Box 1 COVID-19 and education

COVID-19 as an opportunity to rethink education in Africa

School closures offer an opportunity for pause, and a powerful moment for reorienting education from school attendance to learning.

As schools prepare for continued closure and reopening, education can harness three key opportunities:

1. Digital learning: As a result of the COVID-19 health crises, governments have widely expanded their use of technology to support distance and home learning, including online learning, and via radio, television, SMS and interactive voice response media. These expansions represent an opportunity for enhancing quality education provision for in- and out-of-school children through digital technologies, including those most hard to reach (Box 5).

2. System-wide focus on learning: “More of the same” will not add up to the changes in learning that are needed; developing countries will need to search for systemic actions that accelerate the overall pace of progress in learning¹¹. Work is underway in this area. For example, the Research on Improving Systems of Education (RISE) programme promotes evidence-based knowledge sharing on subjects such as incentivizing teachers in remote areas, and how to improve teaching practice¹². To facilitate these system-wide approaches, education systems need to be open to variety and experimentation¹³. In addition, practical tools are needed to facilitate systems change which are accessible and easily implementable by education personnel.

3. Lifewide learning: “Lifewide” learning is a term to capture the learning that takes place across a child’s life experiences, not just in school. Parents and primary caregivers play a leading role in how learning and intellectual stimulation in and around the home can be structured. The COVID-19 response has seen a massive scale-up of learning in the home and offers opportunities to further capacitate parents, caregivers and communities as facilitators and supporters of learning, and to reinforce lifewide learning as a critical component of a quality education.

1.3 Time for a learning revolution

Africa’s learning crisis needs to be met with a learning revolution. Indeed, a new, more radical approach that focuses on enhancing learning outcomes forms the basis for UNICEF’s Education Strategy (2019–2030). This includes an emphasis on social and emotional learning (SEL) to allow young people to become

¹⁰ Perc M. The Matthew effect in empirical data. *J R Soc Interface*. 2014 Sep 6;11(98):20140378. doi: 10.1098/rsif.2014.0378. PMID: 24990288; PMCID: PMC4233686. www.ncbi.nlm.nih.gov/pmc/articles/PMC4233686/ accessed 3 June 2020

¹¹ Research on Improving Systems of Education (RISE), Ambitious Learning Goals Need Audacious New Approaches, June 2015 www.riseprogramme.org/publications/vision-document-2-ambitious-learning-goals-need-audacious-new-approaches accessed 3 June 2020

¹² RISE Working Papers www.riseprogramme.org/working-papers accessed 3 June 2020

¹³ Lant Pritchett, The Rebirth of Education: Schooling Ain’t Learning, 24 September 2013 www.cgdev.org/publication/9781933286778-rebirth-education-schooling-aint-learning accessed 3 June 2020

agile, adaptive learners and citizens equipped to navigate personal, social, academic, economic and environmental challenges (Box 2).¹⁴

While it is difficult to improve learning outcomes for children at scale, there is a growing body of literature from developing country contexts assessing the impact of interventions on learning outcomes. This indicates that structured pedagogy programmes have the potential to address some of these challenges at scale.

UNICEF’s “mission” approach to address the learning crisis is based on a five-pronged approach which includes structured pedagogy¹⁵. The Structured Pedagogy Framework outlined below can include all five elements:

- Fixed time for children to catch up (e.g. hour/day);
- Quickly assess learning levels;
- Set short term (3 month) goals;
- Enable structured pedagogy;
- Focus on implementation, assess progress and take corrective action.

Structured pedagogy is key for realizing equity and inclusion in education. This means focusing – and focusing at an early age – on the twin goals of equity and learning for children excluded on the basis of gender, children with disabilities, the poorest, ethnic and linguistic minorities, migrant and displaced children, and children affected by emergencies¹⁶. As enrolment is highest in the early grades of primary and the strongest evidence on the effectiveness of structured pedagogy is in primary schooling, structured pedagogy interventions at this stage can reach the highest number of children, including the most marginalized that are more likely to drop out early.

To this end, UNICEF will actively promote – with governments and partners – the principle of progressive universalism so that initial priority in the allocation of public funding is given to lower levels of education, gradually increasing allocations to higher levels when coverage is close to universal at lower levels, with a focus on the poorest and most vulnerable children.¹⁷

Box 2 Social and emotional learning

The importance of social and emotional learning

Social and emotional learning (SEL) is as equally important as numeracy and literacy, and enhances students’ capacity to integrate skills, attitudes, and behaviours to deal effectively and ethically with daily tasks and challenges.

In addition, research in neuroscience demonstrates that learning is not purely cognitive, but instead emotions influence cognitive processes such as attention and memory, and thus, facilitate or hinder learning. Therefore, supporting students’ social and emotional well-being, is needed to fulfil the fundamental “promise” of structured pedagogy - that it facilitates the efficient acquisition of essential core competencies and skills¹⁸.

SEL is an essential component for ‘leapfrogging’ (leaping forward in learning), developing the full breadth of competencies and skills children need to thrive in a fast-changing world¹⁹. Students who received training on social and emotional regulation improved their social and emotional skills and behavioural

¹⁴ UNICEF Education Strategy 2019–2030

¹⁵ UNICEF, A “Mission” Approach to Address the Learning Crisis, PPT, undated, internal document (unpublished)

¹⁶ UNICEF Education Strategy 2019–2030

¹⁷ UNICEF Education Strategy 2019–2030

¹⁸ USAID, Promoting Successful Literacy Acquisition through Structured Pedagogy, March 2019

www.globalreadingnetwork.net/sites/default/files/media/file/Structured%20Pedagogy_REACH%20Nov%202019.pdf

¹⁹ Brookings, How playful learning can help leapfrog progress in education, 2 April 2019 www.brookings.edu/research/how-playful-learning-can-help-leapfrog-progress-in-education/ accessed 3 June 2020

outcomes (e.g., positive attitudes and behaviours, greater motivation to learn, decreased disruptive class behaviour), and achieved higher academic performance²⁰.

SEL include the ability to²¹:

- Recognize and manage emotions;
- Set and achieve positive goals;
- Appreciate the perspectives of others;
- Establish and maintain positive relationships;
- Make responsible decisions;
- Handle interpersonal situations constructively.

Also critical are core competencies known as “21st century skills” for employability which often overlap with SEL or are more advanced skills that build on foundational social and emotional skills. These include²²:

- Critical thinking and problem solving;
- Collaboration and influence;
- Mental agility;
- Entrepreneurship;
- Effective communication;
- The ability to access and analyse information;
- Curiosity.

UNICEF ESARO suggests that structured pedagogy interventions are in foundational literacy, numeracy *and* social and emotional skills.

However, many structured pedagogy programmes are designed without life skills and run the risk of over-concentrating on a narrow range of skills at expense of the broader curriculum. SEL – including student-centred, playful learning experiences which incorporate experimentation and iteration – is often marginalized by schools, due to its low status and invisibility in summative assessments, and also in the instance of underdeveloped curricula, and the low skills of teachers in these areas²³.

Social and emotional skills development needs to be embedded in education systems through advocacy and technical assistance to ensure policies and plans for holistic skill development are developed with equitable allocation of resources, targets, and accountability mechanisms for different learning pathways and throughout the life course²⁴.

²⁰ USAID, Promoting Successful Literacy Acquisition through Structured Pedagogy, March 2019

²¹ USAID, Promoting Successful Literacy Acquisition through Structured Pedagogy, March 2019

²² Brookings, To close the skills gap, start with the learning gap, 3 August 2017 www.brookings.edu/opinions/to-close-the-skills-gap-start-with-the-learning-gap/ accessed 3 June 2020

²³ Aga Khan Education Services and the Aga Khan Foundation (2018) Raising Learning Outcomes: the opportunities and challenges of ICT for learning. UNICEF Eastern and Southern Africa Regional Office and West and Central Regional Office, Nairobi.

²⁴ UNICEF, Global Framework on Transferable Skills, November 2019 www.unicef.org/media/64751/file/Global-framework-on-transferable-skills-2019.pdf

2. The Structured Pedagogy Framework

The foundations for the Structured Pedagogy Framework are UNICEF's mandate for children and the global education frameworks, namely: the child's right to quality education; the concepts of equity and ending learning poverty; SDG 4; and the African Union's Continental Education Strategy for Africa (CESA) 2016–2025. Structured Pedagogy moreover aligns with UNICEF's long-standing commitment to child-centred learning; rights-based, child-friendly schools; the UNICEF Education Strategy 2019–2030 and UNICEF's dedication to achieving results for children.

The four interlinked components of the Structured Pedagogy Framework are well represented among the literature on what works to improve learning outcomes for children. Several reviews and metareviews have systemically assessed the evidence of programmes aimed at improving learning. They research the effectiveness of multiple interventions – at the level of the child, household, school, teacher, and at systems-level – and include elements of structured pedagogy (Box 3).

Box 3 The evidence

Structured Pedagogy: The Evidence

The findings around effective interventions for improved learning outcomes of four of the most recent and comprehensive studies²⁵ were synthesized to reveal the largest and most consistent effects for learning. While the research does not evaluate a common Structured Pedagogy Framework, a number of commonalities across the research inform the ideas in this paper.

The interventions that were found to have the largest and most consistent effects for learning were:

- Altered teacher pedagogy;
- (Adaptive) instructional techniques;
- Newly created content and material for teachers and learners;
- (Repeated) teacher training and professional development;
- Teacher coaching;
- Community mobilization for learning;
- Improved accountability
- System-level capacity building.

Interventions were found to be most effective when they were tailored to the respective groups of students and teachers. For instance, providing teacher training and guidance was not in itself effective, but led to improved learning only when it contained detailed input such as scripted lesson plans.²⁶

Key findings of the four studies are:

Conn (2017) Meta-Analysis of impact evaluations in sub-Saharan Africa: A key findings is that programmes that alter teacher pedagogy or classroom instructional techniques had an effect size approximately 0.30 standard deviations greater than all other types of programmes combined. Limited evidence further suggests that pedagogical programmes that employed adaptive instruction or teacher coaching were particularly effective.

Evans and Popova (2016) Metareview of six systematic reviews: Across the reviews, the three classes of programmes that are recommended with some consistency (albeit under different names) are: a) pedagogical interventions (including computer-assisted learning) that tailor teaching to student skills; b)

²⁵ Conn, 2017; Evans and Popova, 2016; Friedman et al., 2016; Snilstveit et al., 2015. The key limitations to those studies include the difficulty of isolating impact in holistic projects; the partial international comparability of learning outcomes; and the absence of cost considerations in many studies on effectiveness. Additional to the meta-analyses reviewed, each of the components were informed by further evidence (see Bibliography for extensive further reading).

²⁶ Evans and Popova, 2016: 17

repeated teacher training interventions, often linked to another pedagogical intervention; c) improving accountability through contracts or performance incentives.

Friedman et al. (2016) Review and analysis of relevant programmes in ESAR: The literature review identified the following suite of strategies in successful programmes: Use of learning assessments; teacher continuous professional development; equal provision of high-quality TLMs; community mobilization and support for children's learning; and system-level capacity-building.

Snilstveit et al. (2015) Systematic review of 420 papers on 238 studies: The review found that structured pedagogy programmes have the largest and most consistent positive average effects on learning outcomes. Typically, structured pedagogy interventions include development of new content focused on a particular topic, materials for students and teachers, and short-term training courses for teachers in delivering the new content.

2.1 The four inter-linked components of the Structured Pedagogy Framework

Obstacles to learning are multiple and interlinked, and evidence has shown that programmes that address one barrier to quality education alone tend to have more limited success and impact than comprehensive approaches that tackle multiple barriers²⁷. Hence, the Structured Pedagogy Framework suggests a package of practices with four inter-connected components which are implemented concurrently: teacher professional development, TLMs, formative assessment, and primary caregiver engagement (Figure 1).

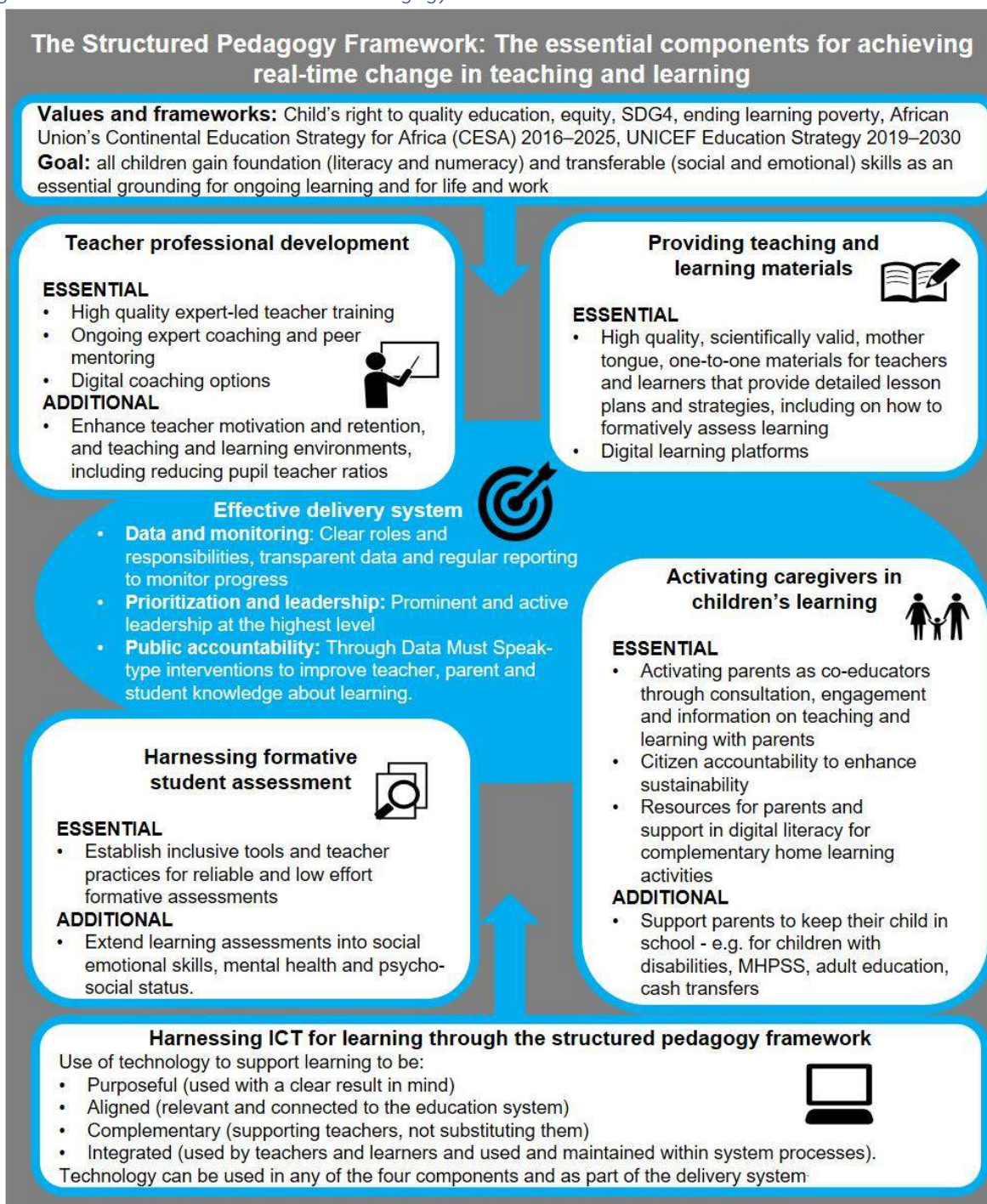
The Framework builds on evidence and experience that shows that delivering system reform is hugely challenging, and an effective delivery system needs to be at the heart of the change and implementation strategy. The Structured Pedagogy Framework also creates vital opportunities to harness information communication technologies (ICTs) for the delivery of systems change and learning outcomes.

All components of the Structured Pedagogy Framework promote inclusive education, meaning real learning opportunities for children who have traditionally been excluded in terms of disability, language, gender, socioeconomic status, ethnicity or other attribute. Educating children with disabilities can first be done by improving teaching and learning for all children, as, in most cases, effective teaching for children with disabilities is effective teaching for all²⁸.

²⁷ Snilstveit et al., 2015

²⁸ Emma Sarton and Mark Smith, The challenge of inclusion for children with disabilities – experiences of implementation in Eastern and Southern Africa, Education Think Piece Series, 2018, UNICEF Eastern and Southern Africa Regional Office www.unicef.org/esa/sites/unicef.org/esa/files/2019-04/EducationThinkPieces_7_DisabilityInclusion.pdf

Figure 1: UNICEF ESARO's Structured Pedagogy Framework



Source: UNICEF ESARO Education 2020



Component 1: Teacher professional development

What it entails: High quality expert-led teacher training; ongoing expert-coaching and peer mentoring; digital coaching options.

Key messages: Teacher professional development is a central delivery mechanism and key to catalysing other components of the Structured Pedagogy Framework. Research on effective teacher professional development shows that that expert-coaching and peer mentoring is critical in helping teachers change and improve their teaching, and that expert-delivered training is more effective than cascade training. The more school-based and practical training is, the greater the positive impact on children's learning.

Teacher effectiveness and performance are the most important school-based predictors for student learning. Teacher professional development is therefore key to delivering learning in the classroom and to supporting inclusive education. The role of the classroom teacher is to deliver high quality teaching: doing this will benefit all learners including children with disabilities and children with special needs²⁹.

Teacher professional development as part of the Structured Pedagogy Framework needs to be evidence-based and build on lessons learnt in effective training, defined as positively impacting classroom teaching and learning. The key components are expert-led training, professional coaching, in-school support and peer mentoring.

Online provision is important both in the context of COVID-19 and for flexibility, especially for teachers in rural areas. For example, in Tanzania, Advancing Special Education Teachers' Knowledge on Inclusive Education (ASET-KIE) by the Jumuisha Tanzania Initiative, provides online teacher professional development programmes on special educational needs and inclusive education. An online library and innovative learning network include four categories of disability: hearing impairment, visual impairment, physical impairment and intellectual impairment³⁰.

Expert-led training

The external training that removes a teacher from the school to gain new knowledge and skills on the new structured pedagogic and assessment practices and curriculum materials needs to be led by the expert rather than using a training of trainers cascade approach. This external training should be short and intense e.g. 3–5 days. The training should be skills-oriented, practical and school-relevant, including specific strategies for teaching in challenging environments such as multilingual, multi-grade and overcrowded classrooms. Furthermore, it should be grounded in established gender-sensitive and inclusive of children with disabilities pedagogies.

In-school support

For the teacher to improve their pedagogy and use the new structured pedagogy materials and approaches, the head teacher or supervisor needs to value and support the efforts. The head teacher can create the conditions whereby teachers are provided with the permissions, time and resources to try out their new approaches and head teachers are essential for

Professional coaching

In order to effectively implement the knowledge and skills gained from the expert-led training, teachers need ongoing support from professionals who are effective coaches and have in-depth understanding and experience of the four pillars of structured pedagogy.

²⁹ Emma Sarton and Mark Smith, The challenge of inclusion for children with disabilities – experiences of implementation in Eastern and Southern Africa, Education Think Piece Series, 2018, UNICEF Eastern and Southern Africa Regional Office

³⁰ AUC, Africa Education Innovations Handbook 2019, https://au.int/sites/default/files/documents/38243-doc-education_innovations_handbook_2019_en.pdf

This role is about improving the effectiveness (fidelity to the model, responsiveness to the context, impact on learning) of the teaching over time. Coaching support is frequently the largest recurrent cost of a structured pedagogy intervention, but evidence (Box 4) indicates this is a critical part of success. As structured pedagogy is particularly designed as a pro-equity intervention, the coach needs to have a high level of gender awareness and sensitivity to the needs and identification of children with disabilities when observing classrooms and providing feedback.

Peer mentoring

Peer mentoring can be organized through individual schools or school cluster teacher groups and networks. It sustains motivation for implementing the structured pedagogy intervention and creates safe spaces for teachers to ask questions, exchange ideas and incorporate new practices as they shift their classroom teaching.

Other elements to strengthen the impact of teacher training include recognition of the training, such as accreditation, or recognizing status within the school; and providing follow-up trainings to enable teacher trainers to target particular skills that teachers may need additional support in developing.

Additionally, efforts to mitigate against low teacher motivation and poor teaching and learning environments need to be factored into reform efforts. This includes increased efforts to reduce pupil teacher ratio and increase retention in challenging teaching environments. These might include a focus on teacher recruitment, retention and deployment by enhancing motivation, well-being and incentives such as teacher housing and salaries.

Box 4 Coaching and mentoring of teachers

The importance of coaching and mentoring of teachers

Global evidence points to a range of positive impacts of professional mentoring and coaching³¹. In ESAR, evidence from countries such as Kenya and South Africa points to the critical value of coaching and mentoring to support teachers to implement new, effective teaching and learning practices in the classroom.

Mentoring is defined as being concerned with 'growing an individual', both professionally and personally and is linked with professional and career development. Coaching is defined with a narrower remit than mentoring, and relates to specific areas of performance and job outcomes³².

The new knowledge and skills gained by a teacher needs to be supplemented with ongoing support that involves:

- Regular coaching by an expert in this field;
- In-school support and mentoring, including school head teacher buy-in and support;
- Peer support mechanisms where teachers can support and learn from each other (eg act as a critical friend, good at asking questions and providing direct feedback sensitively, good listener and observer, ambitious for teachers).

Coaches need to be trained on how to observe lessons and provide feedback to teachers. Depending on the context, coaches could be government officers in charge of instructional support.

³¹ See for example, National Foundation for Educational Research, Mentoring and Coaching for Professionals: A Study of the Research Evidence, 2008 www.nfer.ac.uk/media/2003/mcm01.pdf

³² National Foundation for Educational Research, Mentoring and Coaching for Professionals: A Study of the Research Evidence, 2008 www.nfer.ac.uk/media/2003/mcm01.pdf

As regular constructive feedback to students is important to improve learning (see component three), feedback to teachers through supportive supervision and coaching in schools is critical to improve teacher behaviour and enable classroom practices that are conducive to student learning.

In strong examples of teacher support, teachers were given very concrete assistance to plan their lessons, systematically considering gender and other diversities in the classroom. In order to embed and 'normalize' the new techniques, they were coached by more experienced teachers and trainers, for example, on using sample lesson plans with teaching and learning objectives, suggestions for different types of learning activity and different ways in which to present new information, along with formative assessment techniques. This coaching model included lesson observations followed by constructive feedback to teachers on their performance against different aspects of their teaching practice. Teacher observation was important, as was feedback to teachers on these observations, as it helped to consolidate positive changes and highlighted and discourage less useful practices.³³

Digital solutions include the Teachers in Crisis Contexts (TiCC) Training Pack that can be used with refugee teachers. The TiCC Training Pack is a free, open-source tool that offers a multi-pronged form of professional development, incorporating in-person training, ongoing peer coaching and teacher learning circles, and mobile mentoring, using WhatsApp³⁴.

Component 2: Teaching and learning materials

What it entails: High quality, scientifically valid, mother tongue, one-to-one materials for teachers and learners that provide detailed lesson plans and strategies, including on how to formatively assess learning; digital learning platforms.

Key messages: Structured, easy to use classroom materials that explains content as unambiguously as possible improve learning outcomes. Lesson plans and strategies enhance teaching quality and help the teacher focus on teaching all their children rather than planning. TLMs have the highest impact when distributed "one resource per child and teacher".

The Structured Pedagogy Framework requires scientifically-based, gender sensitive, inclusive TLMs in languages that teachers and children are familiar with, and that align with the core curriculum areas of numeracy, literacy and SEL (although note that SEL may be integrated through the numeracy and literacy content). TLMs may also include improved use of learning aids made out of local resources and the provision of assistive devices for children with disabilities³⁵.

The evidence shows that well designed, detailed teaching materials (topic guides, lesson plans, assessment tools) lead to an increase in teacher agency, creativity and the ability to respond to their students and children. Detailed teaching materials can still allow the teacher to elaborate on the presentation of lessons and materials through learning from their training and coaching. Highly structured approaches to pedagogy and especially structured lesson plans are often criticized for de-professionalizing teachers through reducing their autonomy and agency. However, this does not have to be the case: Zambia has observed increased teacher and student creativity as a result of the Catch Up programme for example (see Section 3).

³³ UK Department for International Development, Steps to success Learning from the Girls' Education Challenge 2012-2017, July 2018 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/733765/Steps-to-Success.pdf

³⁴ IIEP-UNESCO and Education Development Trust, Teachers of refugees: a review of the literature, 2018

www.educationdevelopmenttrust.com/EducationDevelopmentTrust/files/8e/8ebcf77f-4fff-4bba-9635-f40123598f22.pdf

³⁵ Emma Sarton and Mark Smith, The challenge of inclusion for children with disabilities – experiences of implementation in Eastern and Southern Africa, Education Think Piece Series, 2018, UNICEF Eastern and Southern Africa Regional Office

TLMs for teachers:

- Should be appropriate for teachers' challenging lived realities by including strategies for teaching in multilingual, multi-grade and overcrowded classrooms.
- Should embed formative assessment practices (component 3 of the framework).
- It is essential for every teacher to have a full set of the materials.

TLMs for children:

- Should be attractive, easy to use and understand, age and skill appropriate, comprehensive and universal, in local languages, and gender and disability sensitive, so that all children have access.
- Need to be aligned with the teacher materials.
- Should be available for each child as a one-to-one learner resource.

TLMs could be developed by teachers working collaboratively, by centralized curriculum teams, or be drawn from open education resources. The presentation of materials – be they glossy publications, basic printed materials or supported through ICTs – is not prescribed. However, important innovations such as Accessible Digital Textbooks for All are making textbooks available, affordable and accessible for children with disabilities in all contexts. By adding specific features to digital formats and following Universal Design for Learning principles, textbooks can be made accessible to students who are blind or have low vision, to those who are deaf or hard of hearing, and to those who have intellectual, developmental or learning disabilities, among others. These features can also enrich the learning experience for all children³⁶.

Where materials are printed, consideration needs to be given to cost (sustainability of printing) and environmental impacts of unnecessarily elaborate TLMs.

Component 3: Formative assessment

What it entails: Establish tools and teacher practices for reliable and low effort formative assessments.

Key messages: Regular formative assessments that assess individual children's levels and challenges inform teaching and ensure that it is appropriate to each child. Formative classroom assessment and real-time feedback for learners are low cost and high impact investments to improve student learning outcomes, with the largest gains being realized by low achievers.

Formative tests are low stakes and diagnostic, enabling teachers to determine whether learning is taking place and make any necessary adaptations to their teaching and learning programme³⁷.

Assessing what students know, understand, and can do plays a vital role in making informed decisions at the individual, classroom, school, and system-wide levels³⁸. However, learning assessment in ESAR is mainly high-stakes and summative, seeking to evaluate student learning at the end of a teaching chapter. This can have the effect of "teaching towards the test" which narrows the curriculum and leaves more disadvantaged children behind.

Conversely, formative classroom assessment builds a continuous picture of children's learning and provides real-time information to inform teaching and remedial strategies. Strengthening continuous and comprehensive evaluation of a child's learning can be a good approach for giving regular feedback to children and working with them for improving their understanding and skills. The evidence is clear on a

³⁶ UNICEF, UNICEF Global Portal on Accessible Digital Textbooks for All www.accessibletextbooksforall.org accessed 11 June 2020

³⁷ UNESCO International Institute for Educational Planning, Brief 2 Learning Assessments, 22 May 19 <https://learningportal.iiep.unesco.org/en/issue-briefs/monitor-learning/learning-assessments> accessed 11 June 2020

³⁸ World Bank, Learning Assessment Platform (LeAP), 12 July 2019 www.worldbank.org/en/topic/education/brief/learning-assessment-platform-leap accessed 4 June 2020

strong link between high-quality, formative classroom assessment activities and better student learning outcomes, with the largest gains being realized by low achievers³⁹.

The Structured Pedagogy Framework embeds this regular formative assessment that shapes lessons, guides student groupings and inform where remediation or revisiting curriculum for the whole class is needed. Formative assessment can be integrated into teaching and learning at any level, and generate critical information for teachers to inform their teaching. Furthermore, learning assessments can be extended to provide a picture of a child's social emotional skills, mental health and psycho-social status.

Inclusive learning assessments

During assessments, teachers should be supported to learn to recognize and eliminate gender bias, and to support children with disabilities and other children at risk of exclusion, because it can limit students' ambitions and accomplishments. This can include⁴⁰:

- Assessment conditions that cater for individual needs such as different assessment styles to appeal to different learners' needs, e.g., group work, individual assignments, projects, written, oral presentations, etc.
- Creating assessment instruments that have equal representation of gender roles or gender-role content.
- Teachers' judgements of children's achievement should not be based on gender expectations, but rather result from equal treatment and evaluation, using the same benchmarks.
- Time should be created to provide adequate feedback to both girls and boys, and to children with disabilities, and vice versa to ensure learners have understood the lesson.

Accessible formative assessment tools

Formative assessment practices need to be embedded into teacher training and TLMs to ensure consistency and ease of use. If integrated into teacher performance planning and review, formative assessment is likely to be more consistently used, evaluated and appreciated by teachers and other education actors alike.

Frequently formative assessment is designed in a way that is only really suitable for advanced teachers, which is not the reality amongst many teaching workforces in ESAR. Whilst many standardized tools have been developed⁴¹, significantly more investment in developing cheap, simple and effective tools for teachers to use in classrooms are essential to support responsive teaching. Approaches such as Teaching at the Right Level (TaRL) (see country examples below) demonstrate that intuitive, quick to deploy and use learning assessment tools can be created that all teachers can use.

Component 4: Primary caregiver engagement.

What it entails: Activating parents as co-educators through: consultation, engagement and information on teaching and learning with parents; citizen accountability to enhance sustainability; resources for parents and support in digital literacy for complementary home learning activities. All three inputs can be used to support regular in-school learning, as well as out-of-school education such as during the COVID-19 pandemic.

³⁹ Black and Wiliam, 1998

⁴⁰ Ministry of Education Rwanda and United Nations Children's Fund Rwanda, National Gender-Responsive Teacher Training Package, 2018 www.unicef.org/rwanda/media/1336/file/2017-National-Gender-Responsive-Teacher-Training-Package.pdf

⁴¹ Such as the early grade reading assessment (EGRA) toolkit 2016 <https://learningportal.iiep.unesco.org/en/library/early-grade-reading-assessment-egra-toolkit> www.globalreadingnetwork.net/resources/early-grade-reading-assessment-egra-toolkit-second-edition; Uwezo, a five-year initiative that aims to improve competencies in literacy and numeracy among children aged 6-16 years old in Kenya, Tanzania and Uganda www.uwezo.net/assessment/; and Multiple Indicator Cluster Surveys (MICS) which has a new module to capture the literacy and numeracy skills of children age 7-14 https://mics.unicef.org/methodological_work/2/ASSESSMENT-OF-LEARNING-OUTCOMES all accessed 3 June 2020

Key messages: Students' attitudes towards learning, their beliefs in their own abilities, and their parents' encouragement can all influence how they perform at school⁴². The best learning occurs when students are socially and emotionally engaged in learning in the context of supportive relationships⁴³ and parents and primary caregivers play a leading role in how learning or intellectual stimulation in and around the home can be structured. Engaging the caregiver is also about supporting them to engage with learning for excluded children such as children with disabilities, and building school accountability that increases ownership and support for structured pedagogy interventions and, thus, build sustainability beyond initial investment periods.

Schools are not the only place where learning occurs, and school-based learning alone is insufficient for a child's educational development. Primary school students spend more awake hours outside school (76 per cent) than inside (24 per cent), with only 11 per cent of time spent in school with a teacher who is on task⁴⁴. To fully support children's learning, parents and caregivers need to be activated as co-educators during the approximately three-quarters of time (or 100 per cent of the time during a crisis) a child is awake and not in school.

This illustrates the considerable need for and the potential of "lifewide learning". Reading in homes is known for its positive effects on children's learning, while parental talk and other simple activities have been associated with children's greater vocabularies, increased school readiness and improved learning outcomes⁴⁵. Importantly this requires parent-level-of-literacy appropriate and learner age-appropriate resources (reading books, workbooks, toys) in the home, as well as access to ICTs and support with digital literacy.

Bridging the gap between learning in school and in the home has many benefits:

- The engagement of caregivers in extracurricular activities;
- Improved joint parent-school school improvement planning and greater engagement in parent teacher associations (PTAs)
- Communication for development (C4D) activities for awareness raising on the value of education reducing out of school children and dropouts;
- Addressing social norms that create obstacles to schooling and learning, especially for marginalized groups such as girls and children with disabilities, including convening dialogue and providing information to address issues such as girls' education and gender equality in education, early marriage, child labour and violence against children;
- Identifying and addressing other non-education system barriers to learning such as poor nutrition and cost through multisectoral approaches;
- Building community ownership for school quality;
- Ensuring, community cultural norms and voices strengthen the whole programme, especially for the most marginalized of communities, for example pastoralists.

Resources for parents

Resources for parents to use to promote complementary home learning activities can have a significant impact on learning. A range of resources can be built into the structured pedagogy programme – toys,

⁴² OECD, The ABC of Gender Equality in Education: Aptitude, Behaviour, Confidence; How Family, School and Society Affect Boys' and Girls' Performance at School, 2015 www.oecd-ilibrary.org/education/the-abc-of-gender-equality-in-education/how-family-school-and-society-affect-boys-and-girls-performance-at-school_9789264229945-8-en accessed 4 June 2020

⁴³ USAID, Promoting Successful Literacy Acquisition through Structured Pedagogy, March 2019.

⁴⁴ Figures from Save The Children illustrating annual hours of opportunity for a primary school child to learn in Malawi. Dowd, A, Pisani, L, Dusabe, C, Howell, H (2018). UNICEF Think Piece Series: Parents and Caregivers. UNICEF Eastern and Southern Africa Regional Office, Nairobi https://www.unicef.org/esa/sites/unicef.org/esa/files/2018-09/EducationThinkPieces_3_Parents-and-caregivers.pdf

⁴⁵ Dowd et al., 2018

workbooks, audio guides, online materials age-appropriate fiction and non-fiction books, weekly SMS nudges and updates⁴⁶ and parent support sessions – to complement the core focus of early grade numeracy, literacy and social emotion learning and equip particularly the most marginalized with the home resources to learn.

Information sharing and additional parental support

Additionally, programmes should consider how to mitigate against factors that lead to parents removing their child from school, such as through the provision of mental health and psychosocial support (MHPSS) services; adult education; and social protection (eg cash transfers) support to help effective parenting.

Research in Eswatini, Kenya and Namibia shows that widely held practices of actively hiding children with disabilities and their exclusion from education are related to three broad social norms: overprotection, a mind-your-own-business attitude, and avoidance of decisions by fathers while mothers are more action oriented. This can be addressed through encouraging parents and teachers to communicate openly about disability, and C4D strategies including publicising positive deviants' successful stories across the region⁴⁷. An active Parent Support Group (PSG) can see increasing numbers of children with disabilities in school. Examples of good practice included PSGs that conduct community visits in order to encourage other parents to enrol their children into school or follow up on drop out⁴⁸.

The Structured Pedagogy Framework promotes engagement between teachers and parents as critical through information sharing about learning progress, tips on home learning opportunities, and opportunities to engage in school life.

Citizen feedback and accountability to promote the quality and sustainability of the structured pedagogy programme

One critical way of engaging parents and caregivers to challenge and support the quality of service provision, is through providing accessible and vivid accounts of school activity and learning progress to parents.

In a number of countries, UNICEF is doing this through the Data Must Speak programme www.unicef.org/education/data-must-speak which aims to identify existing data on education and learning and make that accessible to caregivers and the community.

In collaboration with national stakeholders, Data Must Speak develops context-specific tools and resources for understanding education data. These materials can be shared with and adapted for other country settings, arming communities around the world with information on how their schools are resourced and how they perform relative to others. Whilst Data Must Speak mainly relies on national and regional Education Management Information System (EMIS) data, which may not illustrate specifically the work being undertaken as part of a structured pedagogy programme, the principle of sharing critical information about the nature and results of education initiatives via accessible dashboards and posters is important.

Parents and caregivers have a right to know about the interventions impacting their children and with their understanding comes engagement, buy-in and the greater likelihood for long-term sustainability.

⁴⁶ A programme in the United States sent three texts to parents per week for eight months. The texts provided literacy-specific activities that could be built into existing family routines as well as other encouragement and information about the importance of literacy. The programme increased parental engagement at home and increased literacy outcomes for children. Abdul Latif Jameel Poverty Action Lab (J-PAL), Initial Ideas to Encourage Learning During and After the COVID-19 Outbreak, undated, unpublished

⁴⁷ Dr Syden Brouwers, The Role of Social Norms in Decisions to Provide Schooling to Children with Disabilities in East and Southern Africa, UNICEF Eastern and Southern Africa Regional Office (ESARO), 2019

⁴⁸ Emma Sarton and Mark Smith, The challenge of inclusion for children with disabilities – experiences of implementation in Eastern and Southern Africa, Education Think Piece Series, 2018, UNICEF Eastern and Southern Africa Regional Office

2.2 An effective education delivery approach

What it entails: Governments harness practices, tools and techniques to bring about rapid improvements in specific areas of the education system⁴⁹. This includes: clear roles and responsibilities, transparent data and regular reporting to monitor progress; prominent and active leadership at the highest level; public accountability through Data Must Speak-type interventions to improve teacher, parent and student knowledge about learning.

Key messages: The Structured Pedagogy Framework aims at impact on learning at scale in real-time (ie over an election or CO programme cycle) and this requires, in most cases in ESAR, the development of management systems to deliver pedagogy that result in learning for children. At the heart of any effective approach, a virtuous circle can be created by providing education actors' motivation through evidence of change.

Structured pedagogy interventions that make real-time impact at scale will not only have the four inter-related components identified above, but are delivered consistently and sustainably by drawing on principles of effective management and strong monitoring, evaluation and learning practices. This is notoriously challenging as it requires working through Ministries of Education and District Education Offices that have multiple priorities, complex accountabilities and are frequently lacking essential capacity.

The Delivery Approach illustrated by Robin Todd in his UNICEF ESARO Education Think Piece offers one promising methodology on how to undertake concerted action and achieve results in public service delivery. It is based on four key pillars, and the delivery of all four elements needs to be managed through a coherent delivery structure (Figure 2).

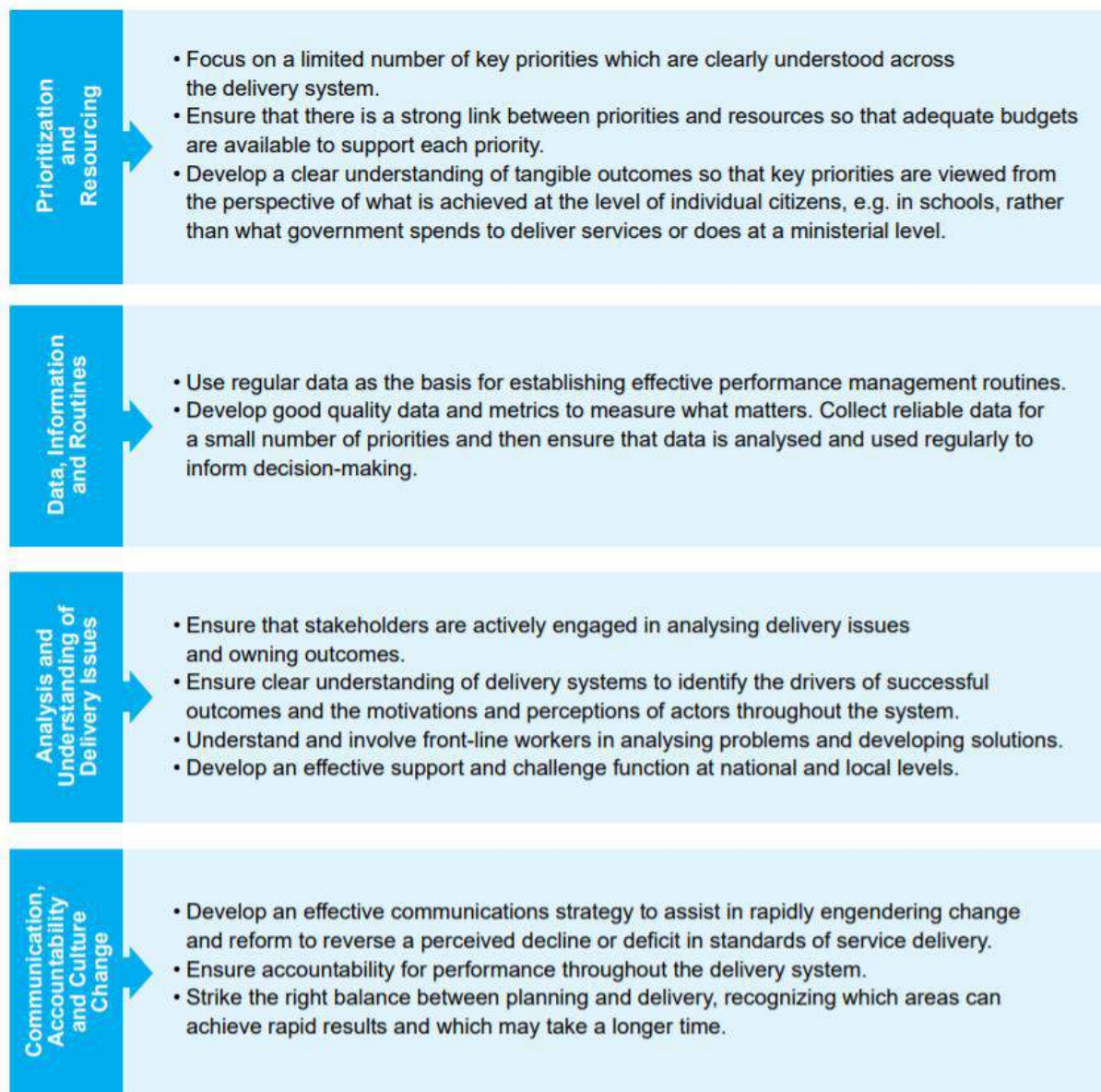
When the four principles of the Delivery Approach come together, they can provide policymakers with the tools needed to deliver services and achieve results around specific, well-defined programme areas, such as delivering a structured pedagogy intervention to improve learning. When the Delivery Approach works, it can create a virtuous circle of systems strengthening and improvements by providing education actors motivation through evidence of change.

The Delivery Approach discussed here provides one approach to scaling up, sustaining and institutionalizing the Structured Pedagogy Framework. The UNICEF Paper on scaling innovation for every child offers additional critical guidance to inform this aspect of the Structured Pedagogy Framework⁵⁰. Indeed, there are substantial resources on effectively implementing complex, high-stakes changes. These can be accelerated and enhanced through ICTs (Box 5). The key message that having a considered approach for implementing a structured pedagogy intervention is a prerequisite to achieving real-time impact.

⁴⁹ Todd, Robin (2018). UNICEF Think Piece Series: Accountability. UNICEF Eastern and Southern Africa regional Office. Nairobi. https://www.unicef.org/esa/sites/unicef.org/esa/files/2018-12/EducationThinkPieces_6_Accountability.pdf

⁵⁰ For example, UPSHIFT is being scaled by Ministries of Education through formal or non-formal education systems. UPSHIFT supports young people to develop transferable skills through both the training elements and the opportunity to work collaboratively, in a supportive environment, to identify and solve social problems. UNICEF, Scaling innovation for every child, March 2019 <https://www.unicef.org/innovation/media/4551/file/Scaling%20Innovation%20for%20Every%20Child%20v2.pdf> and <https://www.unicef.org/innovation/upshift>

Figure 2: Principles of the Delivery Approach



Source: Todd, Robin (2018). UNICEF Think Piece Series: Accountability. UNICEF Eastern and Southern Africa regional Office. Nairobi. www.unicef.org/esa/sites/unicef.org/esa/files/2018-12/EducationThinkPieces_6_Accountability.pdf

Harnessing ICT for learning through the Structured Pedagogy Framework

The growth of technology, and the increasingly broad range of partners providing learning opportunities, bring the potential to deliver learning opportunities anywhere, to anyone, at any time⁵¹. UNICEF's new "Learning Unlimited" concept aims to achieve digital learning for every child, everywhere⁵².

This involves⁵³:

- Strengthening the quality and reach of national digital platforms such as Learning Passport (see below);
- Scaling up other ICT-enabled solutions including through strategic partnerships with world class providers (e.g Khan Academy, Google Classrooms);
- Curating content for the most marginalized (such as girls and children with disabilities) and across foundational, transferable, digital, entrepreneurial and job specific skills;
- Supporting work to meet local demand for devices and connectivity.

However, technology can be introduced into schooling and learning to the detriment of learning outcomes, and access to technology can expose children and young people to new risks. Research into ICTs and learning in sub-Saharan Africa indicates that technology is by no means a panacea to the learning crisis⁵⁴. The report shows that to improve teaching and learning, technology needs to be:

- **Purposeful:** used with a clear result in mind; technology is the means not the end;
- **Aligned:** relevant and connected to the national curriculum, to lesson structures and other elements of the education system;
- **Complementary:** to support and not substitute teacher and instruction time;
- **Integrated:** users (both students and teachers) need to be trained and equipped with the knowledge and skills to actively use and maintain the technology.

The Structured Pedagogy Framework provides a purposeful platform for the effective use of technology. It can be used across all four components, for example

- **Component 1 teacher professional development:** Smartphone video providing feedback loops for teacher training; teacher training combined with WhatsApp group peer support systems. In the context of school reopening around COVID-19, there are opportunities for blended (part in-person and part distance) teacher training programmes building on the new content that is available. A priority could be to equip teachers with the skills to use the newly available digital learning resources to support their teaching and learning.
- **Component 2 TLMs:** Tablets carrying up-to-date digital TLMs that are responsive, adaptive, and motivating for learners.
- **Component 3 formative assessment:** Digital recording of assessments that can be used for learning; tablet-based assessment systems that can combine multiple data sources to improve teacher efficacy.
- **Component 4 caregiver engagement:** SMS communication with parents and community to encourage co-teaching and home-support mechanisms.

Technology can also support the delivery approach through real-time updated dashboards for programme and public accountability to improve delivery, and through digital community feedback mechanisms.

⁵¹ UNICEF Education Strategy 2019–2030

⁵² UNICEF, Learning Unlimited PPT, undated, internal document (unpublished)

⁵³ UNICEF, Learning Unlimited PPT, undated, internal document (unpublished)

⁵⁴ Innovation Unit, Aga Khan Education Services and the Aga Khan Foundation (2018) Raising Learning Outcomes: the opportunities and challenges of ICT for learning. UNICEF Eastern and Southern Africa Regional Office and West and Central Regional Office, Nairobi.

Key initiatives in digital education include:

- **The African Union DOTSS framework** (Digital connectivity, Online and offline learning, Teachers as facilitators and motivators of learning, Safety online and offline, and Skills focused learning) offers an integrated approach to transforming Africa's education systems allowing Member States to reach every child to learn – whether in a crisis situation such as COVID-19, or in reaching the most marginalized children with quality and relevant education⁵⁵.
- **The GIGA initiative** by the International Telecommunication Union and UNICEF aims to connect every school to the Internet by 2030. GIGA is working with the governments of Kenya, Rwanda and Uganda in mapping school connectivity real-time, and developing business models to make connectivity affordable and sustainable.⁵⁶
- **The Learning Passport** partnership between UNICEF, Microsoft and the University of Cambridge offers a country-specific online platform with a digitized curriculum with textbooks and a selection of supplemental content, in national languages, that is jointly curated at country-level to best serve learners' and educators' specific needs. The platform has undergone rapid expansion since COVID-19 to support home learning.⁵⁷

For details of other initiatives, see the United Nations Educational, Scientific and Cultural Organization (UNESCO) summary of national learning platforms and tools as part of its COVID-19 education response: <https://en.unesco.org/covid19/educationresponse/nationalresponses>

⁵⁵ African Union, Joint AUC/UNICEF Statement to Member States on Response of the Education Sector to COVID-19 to Ensure Continuity of Learning www.edu-au.org/news/announcements-and-opportunities/237-au-statement-on-response-of-the-education-sector-to-covid-19 accessed 3 June 2020

⁵⁶ GIGA <https://gigaconnect.org/> accessed 3 June 2020

⁵⁷ UNICEF, UNICEF and Microsoft launch global learning platform to help address COVID-19 education crisis, 20 April 2020 www.unicef.org/press-releases/unicef-and-microsoft-launch-global-learning-platform-help-address-covid-19-education accessed 3 June 2020

3. Country Examples

Countries in ESAR and elsewhere are already showcasing important and inspirational examples of implementing one or more elements of the Structured Pedagogy Framework⁵⁸. While effective ways of improving teaching and classroom practices to enhance learning depend on the context, rigorous analysis of the theory behind a programme, the descriptive evidence and evaluation results together with an analysis of the context can offer some generalizable lessons.⁵⁹ These nine country examples are shared in this spirit.

1. All Children Reading: A Grand Challenge for Development – Malawi and Zambia

Advancing Edtech innovation and research to improve reading outcomes for marginalized children in low-resource contexts.

Launched in 2011, All Children Reading: A Grand Challenge for Development (ACR GCD) is a partnership between the Australian Government, U.S. Agency for International Development (USAID) and World Vision. Through the programme, USAID invests in strengthening national education systems to improve early grade reading, including supporting the development and implementation of policies to ensure children learn in a language they understand, working with Ministries of Education to take early grade reading interventions to scale, and innovating to improve reading instruction, including tablet or mobile systems for student assessment and classroom monitoring⁶⁰. The programme includes education initiatives such as Lecture Pour Tous in Senegal (see below).

In Malawi, an Early Grade Reading Assessment (EGRA) conducted in 2010 revealed 76 per cent of Standard 2 learners (year two of primary) could not recognize a single letter, 97 per cent of Standard 2 students and 69 per cent of Standard 4 students (year four of primary) were unable to answer a single comprehension question correctly, and the average reading speed in Standard 2 was just one word per minute and only 11 words per minute in Standard 4. In response, USAID partnered with the Government of Malawi to improve the reading skills of students in the first four years of primary school through the Malawi National Reading Programme (NRP). The NRP is revising the curriculum and instructional approach to be founded upon evidence-based practices for teaching reading in Chichewa as well as English. The programme also includes revising student textbooks and teacher guides, distributing textbooks to students, training teachers, assessing students, updating national policy, and engaging communities and families to support reading⁶¹.

In recognition of the critical role that families and communities can play in their children's learning (Component 4 of the Structured Pedagogy Framework), and acknowledging that families and communities are often underutilized, four of the 12 ACR GCD Round 2 projects implemented focused on family and community engagement, including Makhalidwe Athu (Our Way of Staying), implemented in Zambia. Students in rural Zambia received text message stories and comprehension questions on their parents' or caretakers' phone in their mother tongue language, ciNyanja. Parents and caretakers attended monthly meetings about the programme, and many received home visits from community mobilizers⁶².

More information: <https://allchildrenreading.org/>

⁵⁸ Stern, J. et al, Is It Possible to Improve Learning at Scale? Reflections on the Process of Identifying Large-Scale Successful Education Interventions, Center For Global Development, 2 March 2020 <https://www.cgdev.org/blog/it-possible-improve-learning-scale-reflections-process-identifying-large-scale-successful>

⁵⁹ Bates and Glennester 2017

⁶⁰ USAID, Education Strategy Progress Report 2011-2017, www.usaid.gov/sites/default/files/documents/1865/USAID_2018_Progress_Report_Web_180703.pdf

⁶¹ USAID, Malawi Education, www.usaid.gov/malawi/education accessed 10 June 2020

⁶² School-to-School International, Engaging Families and Communities to Support Student Reading Skills Development, Lessons from Four All Children Reading: A Grand Challenge for Development Projects, May 2018 www.edu-links.org/sites/default/files/media/file/STS_Thematic-Report_FCE_Lo-Res_5.31.2018.pdf

2. Big Results Now in Education (BRNEd) Programme – Tanzania

Engendering a marked shift away from mere input provision and towards clear alignment with global evidence on what works to improve education outcomes⁶³.

BRNEd was introduced in early 2013 by the Government of Tanzania, the UK Department for International Development (DFID), the Swedish International Aid Agency (SIDA) and World Bank to deliver transformational change in the education sector through a set of nine activities aimed at increasing resource flows to schools, and at improving pass rates and attainment levels in the early grades in reading, writing and arithmetic:

1. Official school ranking
2. National 3R (reading, writing and arithmetic) assessment
3. School incentive scheme
4. Teacher motivation (non-financial performance incentives for teachers and clear backlog of claims)
5. School improvement toolkit
6. 3R teacher training
7. Student-Teacher Enrichment Programme (STEP)
8. Capitation grants
9. Basic facilities construction.

An EGRA showed that the proportion of Standard 3 students classed as 'non-readers' declined from 28 per cent to 16 per cent, whilst the proportion of students classed as 'progressing readers' increased from 22 per cent to 31 per cent between 2013 and 2016. From late 2015, there were significant improvements in the regularity and size of financial flows to schools⁶⁴.

More information: <http://documents.worldbank.org/curated/en/147121468312011600/Tanzania-Big-Results-Now-in-Education-Program-Project>

3. Early Grade Reading Study (EGRS) – South Africa

Large scale evaluations build evidence about what works to improve the learning and teaching of early grade reading in South African schools.

Although there are various initiatives underway in South Africa to support early grade reading, there is little or no sense of what is working or why. The core of the EGRS project is a comparison of the cost-effectiveness of three promising intervention models (each implemented in a different set of 50 schools) to improve reading outcomes in learners' home language (Setswana):

- Teacher training – Teachers provided with lesson plans aligned to the National Curriculum as well as additional quality reading materials and training at centralized workshops twice a year;
- Teacher coaching – Teachers provided with the same set of lesson plans and reading materials but provides ongoing support through on-site coaching and small cluster training sessions;
- Parental involvement – Weekly meetings held with parents to discuss the importance of learning to read in the early grades and to empower them with the knowledge and tools to become more involved in their child's literacy development.

EGRS measures reading achievements across four groups in primary schools, with three interventions (teacher training, teacher coaching, parental involvement) and a control group over two years. It found that the full structured pedagogy set of interventions (specifically with coaching) did make a difference, if aligned to the official curriculum and supported with high quality reading materials.

⁶³ World Bank, International Development Association Programme Appraisal Document Big Results Now In Education (BRNEd) Programme June 16, 2014

<http://documents.worldbank.org/curated/en/147121468312011600/pdf/845450PJPR0P14010Box385244B00OUO090.pdf>

⁶⁴ Todd and Atfield, 2017

All three groups improved children’s reading competency compared to the control group: teacher coaching by about 40 per cent, teacher training by about 19 per cent and parental involvement by 13 per cent. Coaching of teachers worked better than direct centralized training. Cascade training had less impact than direct centralized training, which confirms broader research on teacher training effectiveness. While the effects of parental involvement were not entirely conclusive, the measure is cost-effective and thus worthy of further research.

More information: www.education.gov.za/Programmes/EarlyGradeReadingStudy.aspx

4. Lecture Pour Tous Project – Senegal

A sustainable and scalable national reading programme under USAID/All Children Reading.

The Government of Senegal and its Ministère de l’Education nationale launched a national reading programme, Lecture Pour Tous, to significantly increase reading outcomes for students in the early grades. The programme began at the end of October 2016 and runs through to July 2021, aiming to greatly improve reading levels for students in Grades 1-3 through an effective, sustainable and scalable national programme.

This technical assistance programme targets three outcomes to achieve this goal: improved early grade reading instruction in public primary schools and daaras (Quranic schools), delivery systems for early grade reading instruction, and parent and community engagement in early grade reading.

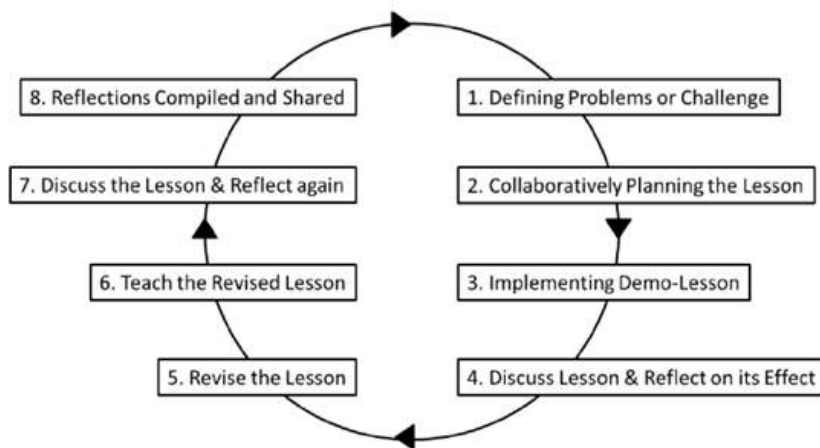
More information: www.sil-lead.org/senegal-acr

5. Lesson Study – Zambia

Scaling up peer-to-peer learning for teachers supported by JICA

Lesson Study (2005–2015), implemented by the Zambian Ministry of General Education in partnership with the Japan International Cooperation Agency (JICA), is a peer-to-peer collaborative learning practice where primary or secondary level teachers share knowledge and skills to continuously improve teaching through a monthly cycle of Plan-Do-See activities (Figure 3).

Figure 3: The cycle of lesson study in Zambia



Source: Zambian Ministry of Education, 2010 www.brookings.edu/blog/education-plus-development/2015/03/25/getting-millions-to-learn-how-did-japans-lesson-study-program-help-improve-education-in-zambia/

Every month, depending on the calendars of individual schools and the number of teachers available, teachers conduct Lesson Study activities where fellow teachers plan and observe a lesson followed by a

discussion about ways to constructively improve these lessons. Through these conversations, teachers learn techniques to improve learner-centered teaching methods and develop problem solving and critical thinking skills. The method aims to strengthen school systems by encouraging teamwork among teachers and improving supervision among school managers.

Teaching approaches started changing from traditional chalk and talk instructional methods to an inquiry-based, learner-centered approach that integrates hands-on activities to help students develop critical and creative thinking. Three years of improved teaching skills in the target province were correlated with improved student pass rates on the Grade 12 national exam. Ministry of Education officials developed a Master Plan in 2010 to spread the programme across all of Zambia.⁶⁵

More information: www.brookings.edu/wp-content/uploads/2016/07/FINAL-Lesson-Study-Case-Study.pdf

6. Literacy Boost – Burundi, Ethiopia, Kenya, Malawi, Mozambique, Rwanda, South Africa, Uganda, Zambia

Creating a culture of reading both inside and outside the classroom that dramatically improves children's literacy development.

World Vision and Save the Children are working together to improve children's learning outcomes by providing early grade learners with quality literacy programmes – in school and out of school – that significantly improve reading skills acquisition and reading comprehension. The Literacy Boost programme consists of three components:

- Reading assessments – Baseline and endline reading assessments evaluate children's literacy learning needs, and help schools and ministries of education track student progress;
- Teacher training – Training teachers to incorporate the five core reading skills into their regularly scheduled curricula;
- Community action – Mobilizing parents and communities to support children through fun out-of-school literacy activities and the creation of locally relevant reading materials.

Literacy Boost consistently finds treatment schools to have improved literacy outcomes compared to control groups, specifically for the most disadvantaged learners. An evaluation of Literacy Boost in Malawi showed 27 per cent gains in single word reading for the poorest quintile of learners, which represented 13 per cent more than in schools that did not benefit from the programme.

More information: www.savethechildren.org/us/what-we-do/global-programs/education/literacy-boost and www.wvi.org/education-and-life-skills/literacy-boost

7. Pakistan Reading Project (PRP)

Supporting the provincial and regional departments of education throughout Pakistan to improve the reading skills of children in grades one and two.

The USAID-funded PRP, implemented by the International Rescue Committee and its partners, is a seven-year project with three components that work in synergy to affect the quality of early grade education: improved classroom learning environment for reading, improved policies and systems for reading, and improved community-based support for reading.

The project is improving the quality of teaching and assessment of reading by supporting improvements to teachers' pre-service education, providing a model for continuous professional development for in-service teachers, and making supplemental instructional materials more widely available to primary school

⁶⁵ Haeyeon Jung, Christina Kwauk, Ainan Nuran, Jenny Perlman Robinson, Marijke Schouten, and Sheikh Islam Tanjeb, Lesson Study: Scaling Up Peer-To-Peer Learning For Teachers In Zambia, 2016, The Brookings Institution www.brookings.edu/wp-content/uploads/2016/07/FINAL-Lesson-Study-Case-Study.pdf

teachers. The project's strategy entails supporting efforts of the Government of Pakistan in each province and region to achieve these goals.

More information: www.pakreading.org.pk/en

8. Teaching at the Right Level (TaRL) and Catch-Up – Botswana, Madagascar, Uganda and Zambia

An evidence-backed educational approach that helps children develop basic reading and mathematics skills.

TaRL is an initiative championed by the Abdul Latif Jameel Poverty Action Lab (J-PAL) and Pratham, which seeks to improve learning outcomes in basic literacy and numeracy for children in grades 3 to 5, by tailoring instruction to the learning level of the child. J-PAL has conducted six randomized control trials (RCTs) on the TaRL model, all showing a significant impact on learning. TaRL seeks to move away from input-oriented education systems to change classroom practices for learning.

Core aspects of TaRL are:

- Grouping of children according to their assessed levels rather than according to age or grade;
- Targeted instruction and lessons;
- Providing teachers with appropriate and engaging pedagogical materials;
- Strong implementation and monitoring systems.

The Catch Up programme scales up the TaRL approach, for example in Zambia to approximately 1,800 schools from 2017 to 2020⁶⁶.

The implementation success of TaRL varies across countries. Botswana recorded an increase in levels of numeracy, and Zambia in literacy and numeracy. Contrary to fears associated with structured pedagogy being top-down and limiting teacher agency and creativity, teachers in Zambia were observed to be more creative due to the structured input through TaRL. Zambia noted that implementation was hindered by the competing priorities of the Ministry of Education, illustrating the importance of delivery approaches that establish clear priorities.

More information: www.teachingattherightlevel.org

9. Tusome Programme – Kenya

Employing research-driven learning materials, proven teaching methodologies, and a cutting-edge tablet-based feedback and monitoring system.

Since 2015, the Kenyan Ministry of Education has partnered with USAID and DFID to improve early grade literacy outcomes through the “Tusome” (“Let’s read” in Kiswahili) project. It targets 7 million children across Kenya in 22,600 public schools, 5,027 private schools and 1,500 alternative basic education institutions.

The programme builds on the lessons learnt during the 2011–2014 Primary Mathematics and Reading (PRIMR) initiative, especially in terms of instructional design, the use of ICTs and the focus on language of instruction. PRIMR was rigorously evaluated through RCTs and found to significantly improve learning outcomes. Key success factors that were taken up by Tusome include improved lesson plans, student books, and teacher training and support and classroom assessment.

In a 2015–2016 evaluation, Tusome was shown to have led to a decrease in non-readers from 38 to 12 per cent in English Grade 2, while the percentage of fluent readers rose from 12 to 47 per cent.

More information: www.usaid.gov/documents/1860/tusome-early-grade-reading-activity

⁶⁶ VVOB - education for development, Zambia - Catch Up: remedial teaching with Teaching at the Right Level methodologies <https://www.vvob.org/en/programmes/zambia-catch> accessed 3 June 2020

4. Guidance on Using the Structured Pedagogy Framework

The Structured Pedagogy Framework offers an evidence-based plan for implementing education reforms and interventions in ESAR that are likely to lead to real-time improvements in learning, especially for the most disadvantaged children. The framework can realistically be applied and results seen, within a regular four to five-year political or country programme cycle.

The Structured Pedagogy Framework can guide COs at critical decision-making moments – new country programme documents, MTRs, strategic moments of reflection, development of Education Section Plans, and in critical conversation with ministers, donors and partners – with inputs that can realistically be included in CO programming and ultimately help COs support the government to achieve real-time improvements in children's learning outcomes.

COs first need to consider whether structured pedagogy is appropriate for the current state of educational development and the education system's capacity. There needs to be genuine political will and partner support, coupled with significant funding, time and effort to be dedicated to rolling out structured pedagogy.

When applying the Structured Pedagogy Framework or assessing if it is desirable and realistic for the country context, COs can consider the following (steps do not have to be in the order given and can be concurrent):

Step 1: Contextual analysis

Consider whether structured pedagogy is appropriate for the current state of educational development and the education system's capacity.

- Is there political will and partner support coupled with funding, time and effort to be dedicated to developing and rolling out structured pedagogy interventions?
- Are effective delivery mechanisms in place to ensure implementation and effective uptake by schools, teachers, teacher training colleges etc.? When considering systems in place to support the framework, as well as national systems, consider also systems at district level or that supporting education within a refugee setting.
- What evaluations or studies have been conducted in-country which may help inform the application of the framework?

Step 2: Audit of quality education interventions

The framework can be used as a powerful tool to audit quality education interventions.

- Do current CO programmes consider all the four components? If not, what component can be added?
- How thorough, scalable and sustainable are interventions under each component?
- What are the opportunities and risks?
- How effective is the education delivery system and what are the priorities?

Step 3: Stakeholder mapping

In every country context, COs are advised to carefully assess which partners are already involved in programmes similar to structured pedagogy, in order to avoid overlap and establish synergies that can bring quality structured pedagogy.

In many contexts, advocating for the implementation of the Structured Pedagogy Framework will be pushing on an open door. There are many governments, development partners, donors and other organizations that

are implementing components of the Structured Pedagogy Framework or interventions approximating to it. Many stakeholders are keen to invest in result-oriented education programmes that make an observable difference on primary learning outcomes.

- Who are the key actors and stakeholders currently conducting activities which fit into the framework?
- Which actors and stakeholders have the skills or capacity to be brought on board to conduct those activities?
- Are teachers, communities, parents and children adequately represented among those stakeholders? Structured Pedagogy risks being perceived as a highly top-down measure, that has minimal space for consultations with and participation of teachers, teacher trainers, communities etc. This can and should be mitigated against.

Step 4: Financing

Structured Pedagogy needs substantial upfront investment. Cost-effectiveness is not accounted for in most of the impact studies, hindering a realistic assessment of feasibility and prioritization in overall education sector planning.

The Structured Pedagogy Framework needs to be designed as a system-wide effort to enhance learning for all children, which means having adequate and sustainable financing. Whilst the Structured Pedagogy Framework in this paper is well-defined, it is not an off-the-shelf model. All the training materials, TLMs, assessment tools and parental engagement strategies need to be built from the bottom-up for the respective country. Of course, there are substantial resources globally to draw from, but it should be clear that the upfront investment is critical.

The Global Partnership for Education (GPE)⁶⁷ contains far ranging interventions, but cover all the elements related to the four dimensions of the framework⁶⁸, however this is rarely coordinated. As such, drawing on the Framework could provide a stronger case for impacting on learning through GPE programmes.

- What financing is available in national budgets which can support structured pedagogy?
- If that financing is available, is there evidence that education budgets are being equitably and transparently disbursed?
- What financing is available from other sources such as GPE which can support application of the Structured Pedagogy Framework?

Step 5: Preconditions for success

While it has achieved impressive results in some contexts, the delivery method is no silver bullet. Whether it is likely to achieve results depends on contextual factors such as public service values, reform programme and institutional patterns⁶⁹.

Key preconditions for success which COs can consider include:

- Genuine political will;
- Adequate and significant finances, time and effort of government, partners and stakeholders;

⁶⁷ For partner countries please see www.globalpartnership.org/where-we-work/partner-countries accessed 3 June 2020

⁶⁸ See for example teacher training www.globalpartnership.org/what-we-do/teaching-quality; Learning assessments www.globalpartnership.org/what-we-do/learning-assessments; and the GPE Strategic Plan 2016–2020 www.globalpartnership.org/sites/default/files/2018-05-gpe-2020-strategic-plan.pdf

⁶⁹ see Shostak et al. 2018

- Selecting priorities that are appropriate for the current state of educational development.

Risks which COs can consider include:

- The temptation to try achieving too much at once which risks overall failure and subsequent cynicism. Prioritization must be realistic and ambition gradual.
- Using the delivery approach (section 2.2) carries with it risks including: concentrating on structure over purpose and substance; undermining other structures if the delivery unit is a mere example of isomorphic mimicry.⁷⁰
- Focusing on the easily measurable not the genuinely important changes.

An approach for adding value

UNICEF ESARO and CO roles in adding value to government education systems through structured pedagogy could consist of the following:⁷¹

- Identify countries with a genuine political will and commitment to achieving educational results in quality, i.e. raised learning outcomes;
- Encourage countries to consider how to prioritize and apply the delivery approach to this specific education challenge;
- Provide capacity building and expert advice to countries wishing to implement structured pedagogy, potentially through the delivery approach.

⁷⁰ There should be two parallel efforts – first, to get rid of international development efforts that incentivize ventriloquism instead of adaptation, and second, to allow governments the space to experiment, including turning something that worked well elsewhere into genuinely local innovation. ODI, Of institutions and butterflies: is isomorphism in developing countries necessarily a bad thing? April 2013 <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8353.pdf>

⁷¹ adapted from Todd, 2018

5. Conclusion

Structured pedagogy refers to a systemic change both in educational content and methods, with the objective to change classroom practices to ensure that every child learns. This working paper has made the case for comprehensive interventions that train teachers, provide structured TLMs, strengthen feedback and informal assessment in classrooms and engage primary caregivers in stimulating and enhancing children's learning.

The proposed framework is grounded in evidence on what works in improving learning outcomes for children globally, but especially in ESAR, where the need to improve quality education is acute. The Structured Pedagogy Framework is timely and relevant in light of UNICEF's new mission approach to education, and the opportunities for scaling quality education on a flexible but purposeful basis, offered by the COVID-19 response.

While structured pedagogy requires substantial investment and relies on the capacity of education systems to deliver, this working paper has further introduced the delivery approach to help COs navigate the advantages and disadvantages of prioritizing the Structured Pedagogy Framework in their respective contexts.

While this paper is an internal working paper for UNICEF and does not represent UNICEF policy, it can be shared with partners and external organizations in the spirit intended: to surface ideas and suggestions in developing an approach to make sustainable, real-time equitable improvements in learning outcomes.

Request for feedback

Designed to be a useful and practical resource for UNICEF COs, this working paper is a solid starting point for collaborative development within and outside of UNICEF and will benefit from feedback and continuous inputs.

UNICEF ESARO remains available and open to reviewing and revising this document. Please submit feedback to Shiraz Chakera schakera@unicef.org.

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June 2020

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