

FINDING WORDS

A further analysis of Early Grade Reading Assessments in vulnerable communities

OVERVIEW

This paper documents learning from Concern's work in education across seven of the world's poorest and most vulnerable countries from 2013-2017. Based on data from Early Grade Reading Assessment (EGRA) surveys, progress in improving foundational literacy skills is measured. Analysis of the data provides education actors with rich information on the strategies that are effective in improving literacy levels, and the factors that inhibit children's progress in these contexts.

Concern programmes have contributed to substantial and statistically significant improvements in reading fluency scores in Afghanistan, Somalia, Sierra Leone, and Haiti. However, improvements in scores are not consistent across all programmes, and only limited improvements are visible in a number of countries, particularly Liberia and Niger. Conflict and crisis within a country often result in school closure and diverting of resources away from education programmes, which was the case in Liberia with the Ebola outbreak. In Niger, baseline levels were extremely low and it took two years of investment and government support to develop a holistic bilingual literacy intervention in this resource-poor country, with improvements not seen until the final year of implementation (2016). The key findings of this paper are:

1. The implementation of a **comprehensive foundational literacy intervention, including teacher training and mentoring programmes** has resulted in significant returns on students' reading fluency. The use of phonics-based instruction and improved literacy teaching methods were found to improve assessment scores regardless of country or language.

RC Primary School,
Makali Community.
Photo: Michael Duff/May
2014/Sierra Leone



2. **Students perform significantly better when taught through their mother tongue**, as seen in Afghanistan and Somalia.
3. **Access to reading materials and supportive home environments contribute to increases in students' literacy**, while parent's reactions to children's school performance has a strong influence on students' performance.
4. **There are significant gender differences in children's reading levels, but these can be successfully addressed with targeted gender-based interventions**. Programmes need to consider the gendered needs of *both* girls and boys, and intervene accordingly.
5. **Students who reported experiencing violence in the school or home tend to score significantly lower than their counterparts**.
6. **Poor school management practices can negatively impact students' education**.

INTRODUCTION

Concern Worldwide's mission is to help people living in extreme poverty achieve major improvements in their lives, which last and spread without ongoing support from Concern. The focus of Concern's Education Programme is to target those children who are most vulnerable, who are affected by conflict, natural and man-made disasters, extreme poverty, discrimination and disease. Our goal is to ensure that these children have access to safe, equitable learning environments where they can receive accredited, high quality education. Concern's Global Education Strategy for 2013-2017 is focused on improving the quality of education by addressing one of the root causes of poor academic progress: weak foundation literacy skills. Poor literacy is a root cause of school drop-out, examination failure and low transition rates to secondary school. To better inform Concern's education programme planning and assess the effectiveness of programme delivery, Concern measures children's literacy using the appropriate Early Grade Reading Assessment (EGRA) tool.

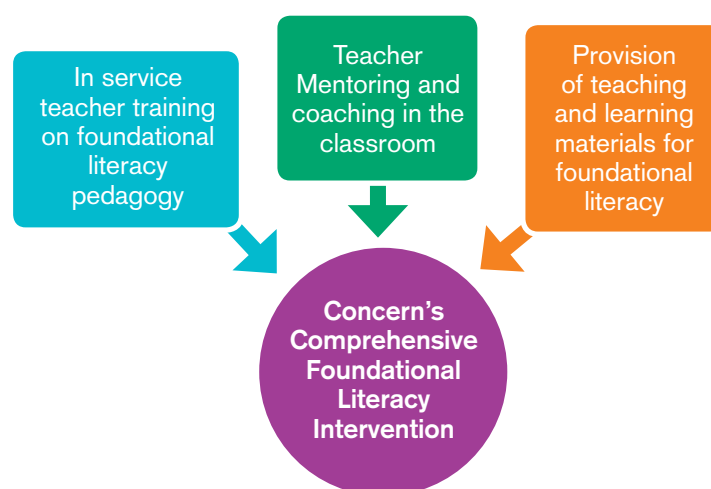
Low quality education, inequalities and conflict contribute to low retention of children in primary school. Of those who start primary school in Sub-Saharan Africa, only 58% make it to the final grade (UNESCO 2015). It is projected that one in six children in low and middle income countries will not have completed primary school by 2015. The Education for All Global Monitoring Report 2013/2014 (UNESCO 2014) focused on teaching and learning, identifying a global crisis as follows:



Of the world's 650 million primary aged children, at least 250 million are not learning the basics in reading and mathematics. Of these, 120 million have little or no experience of primary school, having not even reached Grade 4. The remaining 130 million are in primary school but have not achieved the minimum benchmarks for learning.

Sustainable Development Goal (SDG) 4 aims to ensure inclusive and equitable quality education and the promotion of life-long learning opportunities for all. The first target against which progress will be measured requires governments to consider the learning outcomes of children – a significant departure from Millennium Development Goal targets that focused on increased access to education. However, over half of the world's out-of-school children live in conflict-affected countries, and the protracted nature of many crises (recurrent food insecurity, displacement and conflict) will exclude those children from global goals unless there is deliberate inclusion of fragile states in SDG initiatives (UNESCO 2014).

Concern's first EGRA assessment was carried out in **Liberia** in 2010, and since then has been refined and undertaken in eight country programmes, usually on an annual basis. The first collated EGRA report, 'Lost for Words' (2014) detailed the baseline performance of five country programmes (**Sierra Leone, Haiti, Niger, Somalia** and **Liberia**) with low literacy levels recorded in each. This indicated the need for a broader approach to be adopted, incorporating the **three strands** of teacher training, mentoring, and the provision of education materials in schools. Programmes expanded literacy interventions to reach out to families and the local community more broadly.



METHODOLOGY

The most widely used literacy assessment tool in developing countries and in contexts of fragility is EGRA, designed in 2006 by Research Triangle Institute (RTI) to provide governments and education development partners with accessible tools that can be applied at scale to provide data on emergent literacy skills for young learners (Gove and Wetterberg, 2011). The instrument has been applied by governments and education actors in 69 countries to date (over 210 EGRAs in total).

The results discussed in this paper are taken from EGRA assessments in **Haiti, Liberia, Sierra Leone, Niger, Somalia**, and **Afghanistan**, plus an initial baseline assessment of the **Syria Region** with refugees in one host country. In three of these countries (Niger, Sierra Leone and Somalia) Concern had to take the lead in the development of contextually-appropriate EGRA tools.

The EGRA assessment is orally administered to individual students ensuring that incorrect responses are not due to a student's inability to read and understand a written test question. Children are asked to identify letters and letter sounds, discriminate beginning sounds in words, identify familiar words, decode non-real words, read a simple passage and answer questions about what they read. The findings in this paper focus on one sub-test of EGRA – reading fluency. **The reading scores are referred to as 'correct words per minute' (cwpm) throughout this paper.** In this assessment, students are presented with a short, grade-appropriate story to read which measures their connected-text oral reading fluency. Students are timed, and scores are based on the number of words read correctly per minute. In the following, we focus on statistically significant differences with the results of the appropriate inferential test included as a footnote.

Digitalising EGRA – Tangerine

As part of Concern's Information Communication Technology for Development (ICT4D) strategy, appropriate technology solutions were identified to improve the speed and accuracy of data collection and analysis of the EGRA assessments. RTI's Tangerine™ application specifically designed for EGRA, was used for the analysis of each of the datasets. This has improved the quality, efficiency, and reliability of data collection.

Assessments are not uniform across countries, meaning they are not comparable. Assessment tools are adjusted depending on access to site or language, and in two cases utilise an adapted testing model based on the standard EGRA format. Each unique language has differences in word length, sentence structure, and tonal relationships. Even comparisons between countries that teach through the same language, such as English, are inappropriate due to contextual language differences, varying education systems, and competency standards. While results across countries are not comparable, it is possible to compare the progress made towards minimum standards across countries, and to identify common patterns driving progress.

Many of the EGRAs discussed in this report were conducted in fragile contexts. The Ebola crisis in Liberia and Sierra Leone resulted in school closures and no EGRAs were conducted there during the crisis. Violence and insecurity in Somalia and Afghanistan limited access to some locations at different times during the programme. Food insecurity and extreme poverty have direct effects on school attendance in Niger, particularly during peaks, which limited ability to maintain constant sample sizes. While it is important to note these limitations, Concern will continue to work on EGRA and literacy interventions in these contexts *because of* the fragility and vulnerability of children there.

Country	Baseline	Midline	Endline	Language	Assessment tools	Conflict/crisis context
<i>Haiti</i>	2014	2015	2016	French and Creole	EGRA tool adapted by Concern from those developed by RTI for the USAID-funded ToTAL Programme.	
<i>Liberia: Bassa</i>	2015			Bassa	Bassa Early Grade Literacy Assessment (EGLA) developed by Concern in collaboration with LIBTRALO, SIL International and Cambridge Education.	Ebola outbreak
<i>Liberia: English</i>	2014		2015	English	EGLA developed by Concern based on RTI's EGRA for the Liberian Teacher Training Programme. Supplemented with sub-tasks for language comprehension.	Ebola outbreak
<i>Sierra Leone</i>	2013	2015	2016	English	EGRA tool adapted by Concern from a 2011 UNICEF EGRA assessment.	Ebola outbreak
<i>Niger</i>	2013	2015	2016	French and Hausa	Hausa EGRA tool developed by Concern. French EGRA adapted from regional tools available for Senegal and Mali.	Protracted food insecurity
<i>Syria Region</i>	2016			Arabic and host country language	EGRA adapted by Concern from RTI tools conducted in Arabic in Iraq, Egypt and Jordan. Assessment of host language developed by Concern.	Protracted conflict
<i>Afghanistan</i>	2014	2015	2016	Dari	BEACON EGRA adapted for the IRC from the EGRA original assessment conducted by the Partnership for Advancing Community Based Education in Afghanistan. Digitalised by Concern.	Protracted conflict
<i>Somalia</i>	2013	2014	2015	Somali	EGRA adapted by Concern from RTI's assessment developed for Somali speakers in Ethiopia.	Protracted conflict

Limitations

The findings detailed in this report need to be interpreted with some caveats. The results discussed relate only to the sample schools assessed, and are not representative of the entire population. As Concern's programmes focus on the extreme poor, results are lower than population based assessments would be in the same countries. **These findings provide data on the literacy levels of the poorest children in the countries in question** and can contribute to national-level data sets for improved pro-poor planning.

While efforts were made to have strong sample designs for each EGRA, the populations were not always consistent across baseline and endline assessments. Variations in the schools and regions assessed were occasionally necessary due to access and security issues, for instance Badakhshan Province in **Afghanistan**, had to be excluded from the 2015 midline assessment due to escalating violence in the region. Similarly, the persistence of protracted conflict in **Somalia** has consistently restricted assessments to schools located in Mogadishu with access to rural schools in Lower Shebelle highly restricted. **It is also important to note that the assessments are only representative of the children in attendance in school on the days the assessments took place** and follow-up assessments at household level were not conducted for absent children.

Practical and financial constraints led to programmes opting for the minimum acceptable sample size limiting the opportunities for further analysis of disaggregated sub-groups. While randomised samples of students were used in each assessment to establish a normal distribution of student's abilities within schools, sample sizes differ due to school size, programme size, and the number of students absent from classes on the days of assessment.

Additionally, contextual questions about class lesson structure, home environment, and social conditions should be considered with the **possibility of self-reporting or information bias** in mind. For example, students may not fully appreciate their parent's literacy levels, and report to assessors what they believe to be true versus what may actually be the case. Students may over or under report their school attendance or the frequency with which teachers practice reading. Where possible responses were verified through programme monitoring data (such as headcount attendance rates collected by programme staff). Children may also under report incidents of bullying or violence due to the normalisation of practices or shame attachment.

PROGRESS TOWARDS READING FLUENCY

The selection of the oral reading fluency sub-task for analysis is based on both speed and comprehension. Children must read fluently to comprehend what they are reading (Gove and Cyelich, 2010). By weaving together the strands of reading, including background knowledge, vocabulary, language structures (syntax, semantics), and literary knowledge (print concepts and genres) with knowledge of print-sound relationships and decoding, they get closer to skilled reading and comprehension (Scarborough, 2002). Oral reading fluency is a critical strand in this, as measured by the number of words read correctly per minute (Fuchs et al. 2001). The minimum speed a person needs to read to comprehend text is roughly one word per 1-1.15 seconds or 45-60 cwpm (Abadzi, 2006). Notwithstanding, linguistic structures do vary considerably, with African languages, for example, having simpler orthographies than the more complex structure of English.

For the reporting period of 2013-2016 Concern's standard indicator for EGRA was the "mean score of students in the reading fluency subtask, disaggregated by sex". This served as a strong indicator against which to measure progress from baseline to endline. However, high numbers of students were found to score zero in all countries at all stages. **Indicators that focus on mean EGRA scores can show positive progress, while large numbers of children scoring zero remain 'invisible' within the results.**

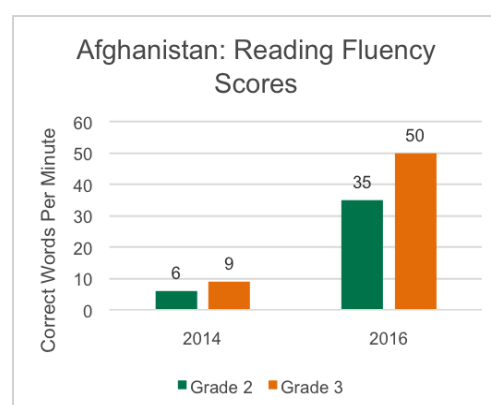
To address this Concern changed the standard indicators in late 2016 to reflect the percentage of children scoring minimum standards in literacy levels, with the overall aim that 100% should be able to read with fluency by the end of grade three. The new targets are 45cwpm and 60cwpm as interim and final targets for reading fluency for students, when given a grade suitable text. Where alternative targets have been established and approved for a particular language, these are used instead, for example a target of 40cwpm for Dari in Afghanistan (IRC, 2014), and 46cwpm for Arabic in the Syria Region (RTI, 2014). This report provides a combination of mean scores, zero scores and percentage of students reaching minimum standards, to reflect the reporting period in question and the new standard indicators looking forward.

% of students in Grade 3						
	% Score Zero		% scoring over 45*cwpm		% Scoring over 60cwpm	
<i>Country</i>	<i>Baseline</i>	<i>Endline</i>	<i>Baseline</i>	<i>Endline</i>	<i>Baseline</i>	<i>Endline</i>
<i>Syria Region</i>	14%		4%		1%	
<i>Afghanistan</i>	68%	<1%	10%	57%	29%	38%
<i>Somalia</i>	29%	<1%	12%	70%	4%	32%
<i>Niger: Hausa</i>	98%	14%	0%	7%	0%	2%
<i>Niger: French</i>	97%	14%	0%	2%	0%	0%
<i>Haiti: French</i>	47%	28%	16%	19%	7%	10%
<i>Haiti: Creole</i>	25%	30%	33%	35%	23%	27%
<i>Liberia: English</i>	12%	2%	9%	24%	3%	3%
<i>Liberia: Bassa</i>	98%		0%		0	
<i>Sierra Leone</i>	43%	55%	2%	8%	0%	0%
*40cwpm for Afghanistan, 46cwpm for Syria Region						

The following provides an overview of these results on a country by country basis.

Afghanistan

Concern Afghanistan's education programme is located in the northeast of the country, in highly insecure and isolated areas vulnerable to weather extremes and violent attacks by Taliban-associated fighters. Although the government has established primary schools in rural areas there are not enough, and parents are often reluctant to send young children to schools some distance away. To address this the programme supports the government's Community Based Education (CBE) initiative, setting up small classes for grades 1 to 3 in rural villages, providing teacher training, coaching and mentoring and learning materials. The schools are linked to nearby primary schools meaning that when children reach grade four they are welcomed into the formal system and can travel together in accompanied groups. The interventions have resulted in substantial increases in mean reading fluency scores, and an overall decline in the percentage of students scoring zero on literacy assessments. The average score in Grade 2 for reading fluency in 2016 is 35cwpm, up from 6cwpm in 2014¹. Less than 1% of Grade 2 students scored zero in the 2016 reading assessment, down from 80% in 2014². Students in Grade 3 now have a mean test score of 50cwpm, with 54% of students scoring over the 40cwpm target.



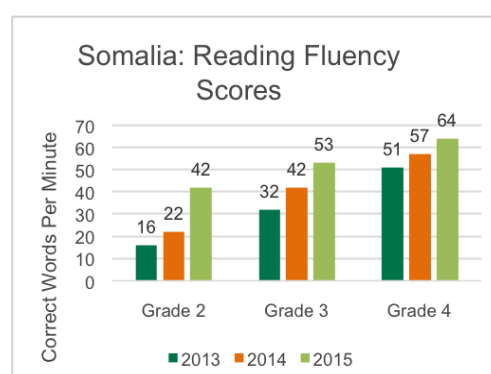
¹. T(246)=11.296; p=0.000

². T(228)=-19.35; p=0.000

Somalia

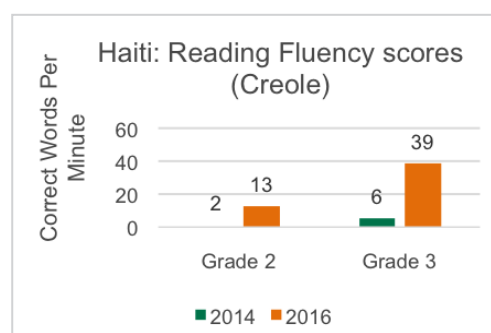
Despite decades of violent conflict, recurrent droughts and mass displacement, Concern's education response in Mogadishu demonstrated positive results in the reading levels of boys and girls. Community Education Committees are established to run schools, with activities focused on building their capacity to manage their budgets, teacher recruitment and daily school management. This has enabled schools to remain open despite insecurity. Assessments in Mogadishu show significant improvements in scores:

students in Grade 2 had a mean score of 42cwpm by 2015, more than double the 2013 score of 16cwpm³. Scores grow significantly between grades as students' progress through the education system. Grade 4 students' scores reached a mean of 64cwpm by 2015, up from 51cwpm in 2013⁴. This success is attributed to the implementation of new foundational literacy teaching methods and materials, rolled out through teacher training and in-classroom mentoring.



Haiti

Concern's programme in Saut d'Eau targets extremely poor communities, many of them located on Montagne Terrible and reachable only on foot or by donkey. To support unqualified and inexperienced teachers to effectively teach Creole literacy, the programme trained teams of teacher trainers to travel between schools, providing in-service coaching and mentoring. The scores of students in Haiti have seen similar success in both Creole and French reading fluency since 2013. Grade 2 scores have increased in Creole from just 2cwpm in 2013 to 13cwpm in 2016⁵. Grade 3 scores have similarly increased from 6cwpm to 39cwpm, just short of reaching Concern's interim targets for reading fluency.



Sierra Leone

The education programme in Tonkolili, Sierra Leone was designed to provide a three-year literacy intervention to children and teachers in rural schools. The Ebola crisis and closure of schools had a considerable impact on this: attention was diverted to life-saving health education, engaging with teachers and school management in messaging on how to protect children and families from infection. To prepare for schools re-opening, the team worked through a nationally-led programme to train teachers on an accelerated curriculum for basic literacy and numeracy, to account for the shorter school year children would have.

Improvements are visible in the post-Ebola assessments carried out in 2016. Reading fluency scores increased from a base of 3cwpm in class 2 and 10cwpm in class 4 in 2013, to 17cwpm and 29cwpm respectively in 2015, even though this is slightly below the 2016 values of 9 and 18cwpm⁶. The increase (and subsequent decline) in test scores in 2015 is reflective of the success of the accelerated learning programme adopted after Ebola. Schools were provided with structured, condensed curricula to facilitate an accelerated learning programme. In 2016, schools returned to normal and these materials were no longer available, which may have contributed to the slide in scores. While the 2016 figures are significantly higher than those from 2013, the scores are still well below fluency targets, requiring further sustained support.

³. $T(300)=-9.43$, $p=0.000$

⁴. $T(320)=-7.26$; $p=0.000$

⁵. $T(271)=-5.59$ $p=0.00$

⁶. $F(2, 874) = 31.714$, $p=0.005$

Liberia

The education programme in Liberia was also halted by the Ebola crisis, with the education team restructured so that staff could join the health team. Teacher trainers used their links to teachers and Parent Teacher Association members to deliver health education messages to protect communities from the disease spreading. As the crisis became less severe, the education programme worked with schools to prepare for re-opening, mainly through repairs and disinfecting of schools.

English reading fluency scores in Liberia have not seen significant improvements. Grade 2 scores slid to 9cwpm from 10 in 2015, while Grade 3 scores increased from 20cwpm to 27cwpm. However, zero scores did decline to 2% in 2015, an improvement from 12% in the 2013 baseline⁷. The persistence of low scores may be due to the limited schooling students received in the period between baseline and end line assessments and a lack of an adequate intervention to compensate for the missed grade. The difference in outcomes between Liberia and neighboring Sierra Leone shows how crisis management can lead to gains or long-term losses to an education system, and the need for sustained implementation.

Niger

In Niger, despite starting from the lowest base of any country programme, reading fluency scores have shown encouraging progress. Over 94% of students across both Grades 2 (CP) and 3 (CE1) failed to read a single word in either Hausa or French during the 2013 baseline, with the highest recorded Hausa score being 5cwpm. In response to these results, Concern and the Nigerien Ministry of Education designed and implemented a Hausa based phonics intervention to improve the quality of education.

The 2016 assessment shows marked improvements in reading fluency. Zero scores have dramatically decreased in both languages: only 24% of Grade 2 students scored zero in the French assessment in 2016, with 31% in the Hausa, while the percentage of zero scores in Grade 3 has decreased to 14% in both French and Hausa⁸. Students' mean scores also improved from a base of barely 1cwpm in both grades and languages in 2013. Students in Grade 2 increased to a mean reading fluency score of 4cwpm in French, and 6cwpm in Hausa, while students in Grade 3 increased to 11cwpm in French and 20cwpm in Hausa.

Syria Region

The 2016 Concern **Syria Region** EGRA provided baseline insights into the literacy standards of Syrian children in Concern-supported educational facilities run for refugees in host countries. The programme is intended to reintegrate children back into formal education, many of whom have experienced unprecedented interruption to their schooling and adverse trauma. Students are expected to be able to read at approximately 46cwpm in Arabic to have reading fluency, and the means to progress through the education systems, but average scores in schools were found to be just 14cwpm; almost 14% of students scored zero in oral reading fluency.

Prior to the outbreak of conflict in Syria, the national literacy rate was approximately 80% for adults over the age of 15, and the country was considered a regional leader in educational attainment, though the education sector was dominated by private providers (Save the Children 2015). EGRA findings stress the need for a consistent approach to education policy in the region in order to provide continued education attainment and psychosocial support to students

⁷. $T(1296)=16.93$; $p=0.000$

⁸. A logistic regression was performed to assess the effects of grade and gender and year of assessment. For both French and Hausa, the likelihood was significant for year (French, $p<0.001$; Hausa, $p<0.001$) and grade (French, $p=0.004$; Hausa, $p<0.001$), but only significant for gender in Hausa. (French, $p=0.139$; Hausa $p=0.004$)

QUALITY OF EDUCATION

Quality education is at the heart of Concern's Education Policy. The policy defines 'good quality education' to be of a standard that supports individuals to succeed in reaching learning goals in literacy, numeracy and life skills, while promoting children's healthy social and emotional development. EGRA results allow us to assess if our programmes are supporting education systems to reach these standards and identify the best practices for improving reading scores. Our analysis shows there are four key influences on reading fluency. First, students have the greatest score improvements when instructed through mother tongue. Second, students taught solely through a second language they do not speak or understand do not see the same improvements in assessment scores, while students with limited exposure to the language of instruction outside school score on the lower end of assessments. Third, the use of phonics-based instruction and improved literacy teaching methods improves a student's assessment score regardless of country or language. Students who reported that their teachers practice letter sounds or encouraged them to read individually in class outscored their counterparts by statistically significant margins. Fourth, having access to books in either the school or home has a positive influence on reading fluency scores.

▶ Children in a Community Based Education Centre, Kohistan. Credit: Vijay Raghavan, Concern Worldwide, Afghanistan 2014



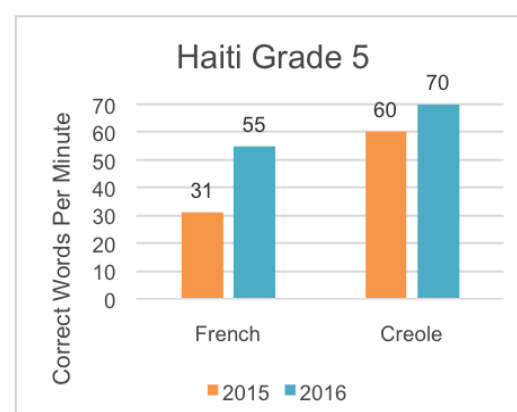
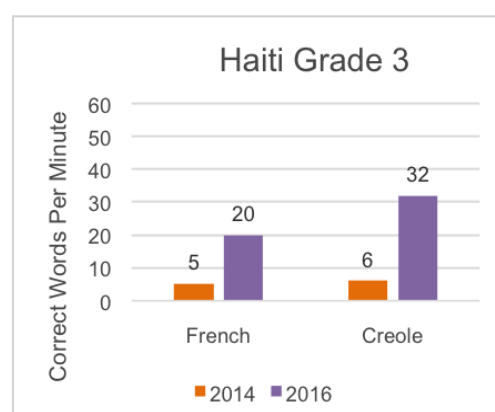
Language

There is a strong evidence base to show that teaching a child in a language they understand leads to better learning outcomes. Education interventions that use children's mother tongue from the start help students to gain early reading skills more quickly, and to transfer skills to a second language (UNESCO, 2008; Bialystock, 2006; Geva 2006). However an estimated 221 million school-aged children speak languages at home that are not recognized in schools or official settings (Dutcher, 2004). Many developing countries apply the "submersion approach" to language instruction, where children who do not speak the dominant language either "sink or swim".

Concern's education programmes prioritise mother-tongue literacy instruction, but work within government systems so are often restricted by curricular policies. Evidence of the positive effects of mother-tongue literacy is visible in the EGRA scores in this report. The two countries achieving reading fluency targets are **Somalia** and **Afghanistan**, two of the most difficult countries to operate in, but both countries where children learn through their mother tongue (Somali and Dari). Countries that made the least progress, **Liberia** and **Sierra Leone**, did not have mother-tongue programmes due to government language policies that would have allowed the children to learn in Bassa or Themne, rather than English. Countries that made good progress and rapidly increased from very low baselines have started bilingual programmes, prioritising mother-tongue literacy instruction in early grades and transitioning into the second language in upper primary school. This is the case for **Niger** (Hausa and French) and **Haiti** (Creole and French).

In **Liberia**, the programme tried to introduce a mother-tongue literacy intervention in Bassa, the language used by 87% of children in the programme area. An EGRA was conducted in Bassa, but as the language is not used formally, children (and teachers) had never seen it in written form and 98% of students assessed were unable to read a single word. Literacy materials were developed for Bassa literacy instruction and a comprehensive curriculum and teacher training package was prepared. However, a change in government policy meant the programme was not permitted to pilot the materials and children continued to learn through English.

In **Haiti**, Concern has been promoting literacy through Creole (children's mother tongue) rather than French (the official language of instruction) since 2013 to help improve reading levels in primary school. Schools teach in both languages but emphasise Creole in earlier grades. The average score for Grade 3 Creole has increased to 32cwpm in 2016 from 6cwpm in the 2013 baseline, and the score for Grade 5 reached 70cwpm⁹. While the programme focused on Creole literacy, it contributed to a significant improvement in reading fluency in French. This is aligned with international research, which shows that **children who learn to read and write in their mother tongue first will be more proficient at learning to read and write in a second language subsequently** (Bialystock, 2006). In French, Grade 3 students improved from a base of 5cwpm in 2013, to 20cwpm in 2016¹⁰, while Grade 5 students improved from 31cwpm to 55cwpm in 2016¹¹.



Similarly, not all children seeking refuge from the **Syria** crisis come from Arabic speaking homes. Other languages may include Kurdish, Armenian or Azeri Turkish. When entering host countries students may have opportunities to learn in Arabic (the mother-tongue of the majority of Syrian refugees) or the host-community language. Students assessed in the 2016 EGRA were studying through Arabic in school. Students who spoke Arabic at home had a mean reading fluency score of 16cwpm, significantly higher than those who spoke another language with a score of 8cwpm¹².

⁹. T(844)=6.488; p=0.000

¹⁰. T(272)=-5.59; p=0.000

¹¹. T(92)=-4.48; p=0.000

¹². T(129,996)=5.223, p=<.001, d=0.6837

Language barriers also present a specific challenge for children who are refugees needing to integrate into local schools and communities. An initial assessment of the host community's official language of instruction focused on listening comprehension skills. Grade 1 children living in the host community, even if there for up to three years, struggled to understand a basic story in the language, with over 50% of students scoring zero. Syrian children who reported that they play with children from the host community had higher comprehension scores than those who did not, demonstrating the importance of play and social interactions for young children's language development.

The importance of good pedagogy

The use of improved literacy teaching practices in classrooms is seen to have a positive influence on the reading fluency scores of students in all programmes. This success highlights the importance of phonics based teaching methods and teacher training in early grade literacy. Training teachers in how to teach reading (foundational literacy pedagogy) can generate immediate reading gains (Gove and Cyelich 2010). Teaching practices that address the whole class and invite recall with limited independent student contribution are related to lower academic scores. On the other hand, teaching practices that allow individual children to practice, respond to questions, provide feedback and engage in discussion are evidenced to be very effective in contributing to learning. (Abadzi, 2006). In extremely poor contexts class sizes may prohibit a teacher's ability to engage in one-to-one instruction, but simple strategies can be introduced to encourage more individual practice of reading skills. Asking a child to read individually (silently or aloud) and providing opportunities for children to learn de-coding skills through phonics are two examples of strategies introduced by Concern in literacy interventions.

Improved literacy focused instruction

In **Liberia**, students who reported that their teachers practiced letter sounds (89%) and read aloud in class (97%) scored higher than those who did not. Students who reported that their teachers did not read aloud in class scored just 2cwpm, compared to 13cwpm whose teachers do¹³. At baseline only 50% of students said they practiced letter sounds with their teacher; following in-service teacher training and in-classroom coaching, this practice increased to 89% over a the three year period¹⁴.

These findings are supported by strong correlations found between the letter sounds per minute subtask, and oral reading fluency scores seen in other programmes. In **Haiti**, each correct letter sound identified was strongly correlated with increased reading fluency¹⁵, as was the ability to correctly identify nonsense words¹⁶. Similar results were identified in **Liberia**, where correctly identifying a letter sound was correlated with increased reading fluency scores¹⁷.

Teaching practices encouraging students to read in class, both silently and aloud and assigning reading for children to do at home were also noted to have positive impacts on reading fluency. Students who reported that their teachers utilised all five of the improved teaching methods (58%) scored significantly better than those students who reported less than five exercises (17 to 9cwpm)¹⁸.

¹³. T(30)= 8.86, p=0.000

¹⁴. T(1257)=20.4; p=0.000

¹⁵. Correlations test of Correct Letter Sound Per Min against Correct Word Per Minute, Pearson R= 0.777 p=0.000

¹⁶. Correlations test of Correct Invented word Per Min against Correct Word Per Minute, Pearson R= 0.87 p=0.000

¹⁷. Correlations test of Correct Letter Sound Per Min against Correct Word Per Minute, Pearson R= 0.57 p=0.000

¹⁸. T(320)=5.48, p=0.000

Reading tasks

The importance of teachers assigning reading tasks is also seen in **the Syria Region** and **Haiti**. Students in **the Syria Region** who reported that their teachers asked them to read aloud in class (88%) scored significantly better than those who did not. Students who read aloud also had a mean score of 15cwpm when compared to 8cwpm for those who did not¹⁹. In **Haiti**, students who stated that they read Creole aloud in class (83%) scored 25cwpm, compared to 7cwpm for those who did not²⁰. Students who reported that they were given reading to do as homework (66%) also score significantly better than their counterparts do, at 26cwpm compared to 16cwpm²¹.

Reading materials

Lindsay (2010) in a meta-analysis of 108 studies found that having access to print material improves children's performance and encourages young people to read more and for longer. A longitudinal study by Evans *et al.* (2010) found that having books in the home has a strong and significant impact on a child's attainment level. A key objective of Concern's programme's is to increase children's access to text and encourage individual reading practice.

In **Liberia**, students scored an average of 16cwpm when they reported having access to books at home, compared to 7cwpm for students with no access to books²², while students with four or more books at home scored an average of 24cwpm compared to those students who only had one book, who scored 12cwpm²³. Students from **Haiti** who reported bringing books home from the school library to read also scored significantly better in reading fluency, at 34cwpm compared to 21cwpm for those who did not²⁴. In **Afghanistan**, 97% of students reported that they used a language textbook in class (Dari), compared to 88% in 2014. An additional 88% reported having reading books at home, up from 40% in 2014²⁵.

^{19.} T(16)=2.358 p=0.032

^{20.} T(363)=-3.33; p=0.001

^{21.} T(369)=-2.68; p=0.008

^{22.} T(288)=5.30; p=0.000

^{23.} T(24)=-3.4; p=0.003

^{24.} T(199)=-2.4; p=0.016

^{25.} T(786)=-12.1; p=0.000

GENDER

The presence of damaging **gender perceptions and gender inequalities that affect children's access to school** can influence educational attainment, through increased exposure to exploitation, imbalanced responsibilities in the home or child labour, and reduced expectations. Violence experienced by both girls and boys has a negative impact on attendance, retention, academic performance, and learning achievement (Dunne *et al.*, 2003), while a child's sex remains a strong determinant of reading fluency in many programmes. The impact of gender upon test scores remains context dependent, though positive movement toward gender parity is visible – results from Somalia show that gender parity can be attained even in contexts of protracted conflict and conservative cultural norms. Interventions to target girls and to address the barriers to success girls may face, such as teacher training and coaching on gender equality and ways for teachers to communicate equal learning expectations to girls, training for parents and communities on ways to promote education for girls and direct support to girls themselves can be successful.

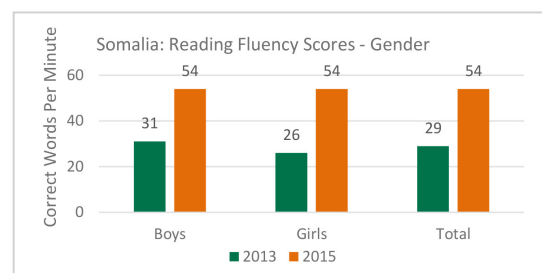
► Students study in a classroom in Obosibo Halane, a slum area in Mogadishu. The girls are a part of an accelerated education program supported by Concern Worldwide and its local partner, YouthLink, that focuses on helping children who have not been to school learn basic reading, writing, and maths skills. Credit: Crystal Wells, 2014



Gender focused interventions

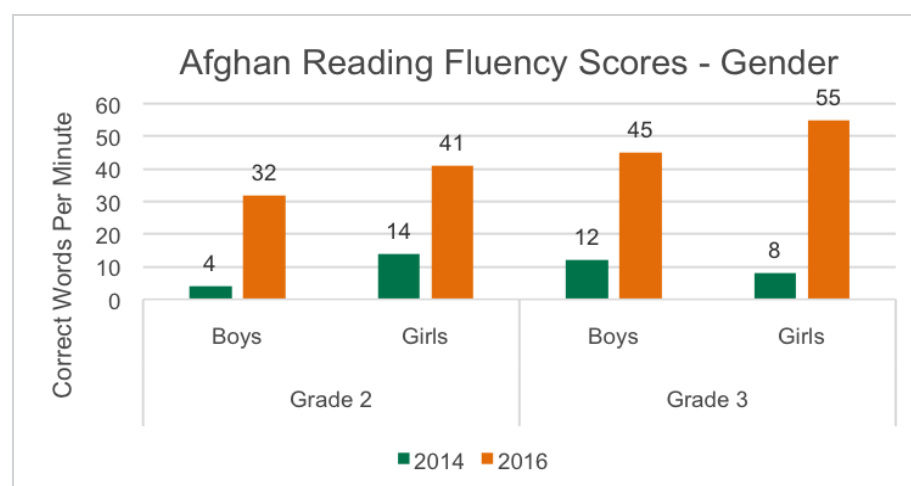
Against a backdrop of protracted conflict and a context where the national literacy rate for women is just 26%, compared to 50% for men (UNESCO statistics, 2016a), the early grade gender disparities visible in **Somalia's** 2013 assessment had disappeared by the time of the endline assessment. There was no difference in scores between boys and girls in the 2015 assessments, with mean scores of 54cwpm for both, compared to a score of 26cwpm for girls and 31cwpm for boys in the 2013 baseline.

To achieve this, the programme focused efforts on enrolment and retention campaigns for girls. Training was provided for teachers and Community Education Committees on gender equality and the importance of targeted support for girls. To counteract the risks of violence children face in Somalia, the programme invested resources and time on the safety and well-being of children, addressing corporal punishment and bullying, and providing safe spaces for recreation and life skills for girls and boys.



Despite direct threats to the right to education for girls and women, improvements in scores for girls have also been achieved in **Afghanistan**. Threats and actual attacks on schools, students and staff have been frequent over the past three years, and school closures during times of increased hostility has disrupted school calendars. There are large differences between the literacy rates of females aged 15 or over in Afghanistan (17%) compared to males (52%) (UNESCO 2016b) and only 21% of girls are enrolled in secondary education compared to 43% of boys (World Bank Data Bank, 2016). Unsurprisingly, the baseline found significantly lower scores for girls than boys, however since 2014, the programme has successfully raised the average score of girls in Grade 2 from 14cwpm in 2014, to 41cwpm, and in Grade 3 from just 8cwpm to 54cwpm, surpassing the target of 40cwpm for Dari²⁶.

In addition to teacher training and community outreach campaigns, the programme directly addressed the fears of parents. Insecurity and threats against girls in education meant that parents were reluctant to send young girls to school, particularly if they were away from their villages. The freedom of young girls is also restricted by strict social norms, often confining them to the family compound. In response, the programme supported Community-Based Education Centres (CBEs), in partnership with the Ministry of Education, to provide classes within small villages for young girls and boys to attend for grades 1-3. These CBEs are managed by a nearby primary school, and the head-teacher of the primary school has oversight so that children attending CBE classes can then move into the primary school when they are a little older and allowed to walk there.



Scores for **boys in Afghanistan** have increased significantly, but not to the same extent as their female classmates. Though boys in Grade 3 started at a higher baseline score than girls, they did not experience the same increase in scores over the same period. Since 2014, the mean scores for boys in Grade 2 rose from 4cwpm in 2014 to 32cwpm in 2016²⁷, while boys in Grade 3 achieved mean scores of 45cwpm, up from 12cwpm in 2014²⁸. Despite these improvements, the difference in average test scores remains statistically significant when disaggregated by gender, with boys averaging 35cwpm to girls 42cwpm²⁹. The reasons for boys in programme schools lagging behind girls needs further investigation so that targeted efforts to support both boys and girls can be introduced in 2017.

In **Niger**, the improvements seen in literacy assessments show significant differences in both languages when disaggregated by gender. Girls mean scores in 2016 are significantly lower than boys in both Hausa and French. Girls score 10cwpm in Hausa, compared to 16cwpm for boys³⁰, and score 5cwpm in French, relative to 9cwpm for boys³¹. The likelihood of scoring zero in Hausa assessments also significantly increases if a student is a girl, with 30% of girls scoring zero compared to 18% of boys.

²⁶. $T(389)=-14.6$; $p=0.000$

²⁷. $T(283)=-5.5$; $p=0.000$

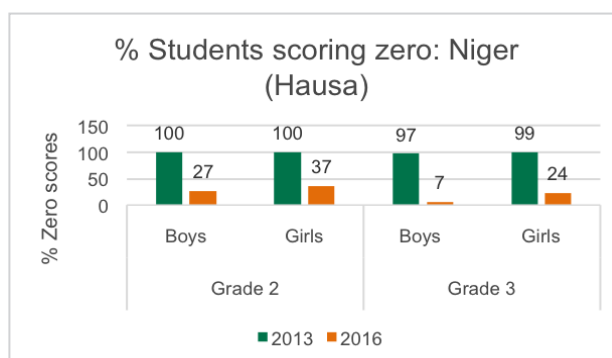
²⁸. $T(426)=17.86$; $p=0.000$

²⁹. $T(499)=-2.88$ $p=0.005$

³⁰. $T(3269)=3.99$; $p=0.000$

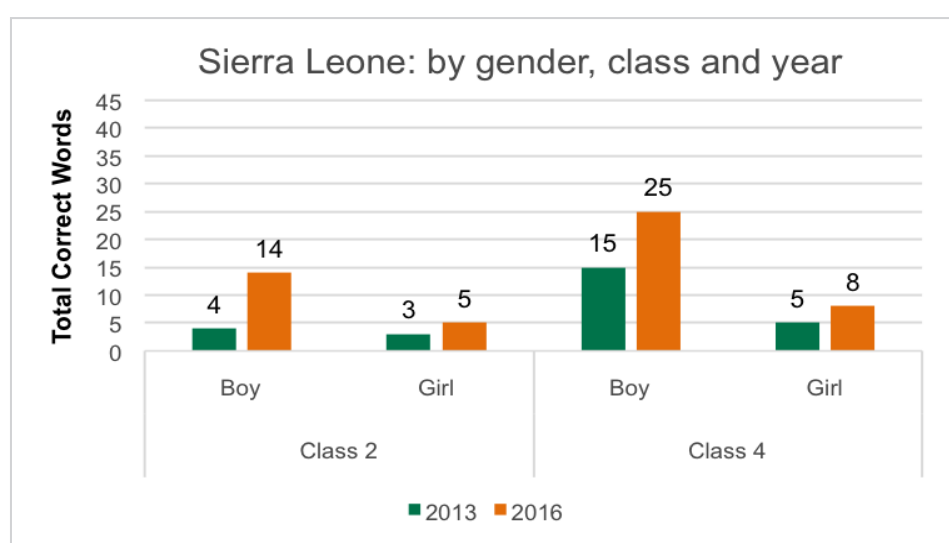
³¹. $T(296)=3.39$; $p=0.001$

These gaps in scores have grown since the 2013 baseline, when both boys and girls were averaging less than 1cwpm in both languages and 94% of students were scoring zero in the assessments (though girls were marginally more likely to score zero than boys³²). The differences are reflective of the national literacy rates in Niger where the average literacy rate for ages 15-24 are 52% for men and 23% for women (UNICEF, 2016) and represent the lack of value placed on girls' education by Nigerien society. To close this gender gap, gender-based initiatives are now being incorporated by Concern into the wider literacy intervention programme in Niger.



Across all the countries considered in this exercise, gender disaggregated scores are perhaps most worrying in **Sierra Leone**. In this context, school related gender based violence (SRGBV) is highly prominent, with girls experiencing high levels of sexual abuse and exploitation. Almost 68% of sexually active teenage girls will get pregnant, with the average age for pregnancy being just 15 (Farzaneh 2013). These numbers have increased following the Ebola outbreak (Folan 2015). Girls who were 'visibly' pregnant, were not permitted to return to school until after pregnancy (Amnesty International 2015). This policy added to the wider societal pressures on girls to drop out to fulfil roles in the home or farm after Ebola. As a result, girls' attendance and retention in schools have fallen.

Even though mean reading fluency scores have marginally increased, from 3cwpm in 2013 to 9cwpm in 2016 for Class 2, and from 10cwpm to 18cwpm for Class 4, the disparity in scores between boys and girls has grown significantly since the baseline assessment. The average reading fluency score for girls is now 6cwpm compared to 19cwpm for boys³³. The likelihood of scoring zero is significantly altered by gender, with 87% of girls in Class 4 in 2016 scoring zero, compared to 62% of boys³⁴, while the zero score breakdown for girls and boys in Class 2 in 2015 was 79% and 66% respectively. This highlights a deepening of the gender disparity in scores from 2013, where 63% of girls and 49% of boys scored zero in oral reading fluency. In line with this, boys outscore girls across each year and in both classes in most EGRA subtasks, with differences in scores remaining significant through.³⁵



³². $\chi^2=8.04$; $p=0.004$

³³. $T(269)=3.87$; $p=0.000$

³⁴. $\chi^2(1)=10.420$, $p=0.001$

³⁵. $F(1, 874)= 46.348$, $p=0.005$

VIOLENCE AND CHILD PROTECTION

The prevalence of violence and students' experiences of violence in both the home and school undermines a child's fundamental right to safety and security and can impede their cognitive development. Schools are intended to be safe, protective spaces for children; spaces in which children can learn in a safe, supportive and secure environment. For children affected by crisis or conflict, establishing a sense of normality and security for children is crucial to help them cope, recover and return to learning. The negative impact of violence on children is visible in the results taken from analysis of EGRA results, where students who report experiencing violence, either in home or in school, score significantly lower than children who do not experience such acts in each country where data is available.

School-related gender based violence

In **Haiti**, almost 44% of students reported that they had been punished in school in the last week, with 9% reporting being punished with a stick in class: the mean test score for these students was just 7cwpm compared to 24cwpm for others³⁶. A further 21% of students reported being punished by their teacher with the use of a belt, again test scores were lower than students who were not punished, at 9cwpm compared to 26cwpm³⁷.

In **Liberia**, students were asked how parents responded to news of the child's performance in school, initially to identify communication between the schools and home. Students were asked **the last time you did WELL on a test or assignment in school, did your parent(s) find out? If yes, what did your parents do?** 96% students stated that their parents were aware of the result in 2015, up from 92% in 2013. Students who reported that they were congratulated or encouraged by their parent after being told of the results scored significantly higher in reading fluency tests than those who stated their parents did nothing (15cwpm to 6cwpm respectively)³⁸.



³⁶. $T(371)=-3.31$; $p=0.002$

³⁷. $T(371)= 4.23$; $p=0.000$

³⁸. $T(121)=-6.67$; $p=0.000$

Students were also asked ***the last time you did NOT do well on a test or assignment in school, did your parent(s)/guardian find out? If yes, what did they do?*** Those who reported that their parents knew and did nothing (25%) scored significantly lower in mean reading fluency scores than children whose parents knew and took some action (74%), be it constructive or punitive, with mean scores of six and 15cwpm respectively³⁹. However, the type of action has a major influence over the score – where parents encourage the students, the score at 22cwpm is significantly higher than where parents react with physical punishment or verbal criticism (13cwpm)⁴⁰. Breaking this down further where parents criticise verbally there is a higher score at 16cwpm than when parents punished the student physically (9cwpm)⁴¹, virtually the same score as where parents do nothing. There has been little change in the proportion of students reporting physical punishment (18% at baseline, 21% in 2015).

Psychosocial support

The most extensive assessment of students' well-being was carried out with **Syrian children**, which is a core component of the programme for refugee students. Students were asked if they had experienced any of the following in the previous two weeks, and the frequency with which they occurred: if they had felt sad/upset; found it difficult to concentrate; had bad dreams; were involved in physical or verbal fights; or stayed by themselves while others were playing. For the purposes of reporting the in country program defines psychosocial distress as experiencing at least three such instances in the last two weeks; 24% of children reported at least three incidences of psychosocial distress in the last week. These children scored significantly lower than those who did not, at 11cwpm to 15cwpm.⁴²

In total, 36% of students reported experiencing at least one of the distress indicators. Over 40% of students reported either being verbally or physically abused in the previous two weeks, with 31% stating that they were beaten. Within this cohort, 13% of students reported that they were beaten by their teachers (16% of boys and 10% girls). The majority of students (56%) said they would not report teachers who beat them. When asked why they would not report the teacher, 52% replied that it was normal, while 7% stated that there was no one to tell. A further 23% report being screamed at by a teacher or another adult.

Barriers to the students' social integration into the wider community also exist. Students have limited interactions with local students, with only 37% saying that they have played with locals outside school. Of the students who reported being verbally abused in the last two weeks, 11% identified local students in the community as the perpetrators, with a further 8% stating it was local children in the host schools. Students who played with local children scored significantly better in the host community listening comprehension (scoring 27% comprehension) over those who did not (17%)⁴³.

In response to these baseline findings, the Syria response programme provides psycho-social support to children within safe learning environments. Teacher training on how to manage classes of children with diverse experiences of trauma and conflict is prioritised, so children's first experiences back in school in their host community is welcoming and supportive. From 2017, the programme will focus on training for both teachers and students on conflict resolution and building personal resilience and building community cohesion, providing opportunities for children from Syria and from host communities to play together and build healthy friendships.

³⁹. $T(304)=-6.26$; $p=0.000$

⁴⁰. $T(126)=3.53$; $p=0.000$

⁴¹. $T(145)=-2.29$; $p=0.003$

⁴². $T(139)=0.0174$, $p=0.037$

⁴³. $T(220)=-2.42$; $p=0.016$

► Ayham, a teacher in an informal settlement in the Syria region, points at the number 4, written in Arabic on the blackboard, as a student counts the numbers. Photographer: Dalia Khamissy, 2015.



SCHOOL MANAGEMENT

The day-to-day management of schools can be disrupted for a variety of reasons brought about because of extreme poverty, or periods of emergency. This can affect the **age ranges** in classes, levels of student **absence**, and students being forced to **repeat grades** more often. These conditions present challenges to teachers, as different teaching methods are used for different age groups, and can adversely affect the reading scores of children.

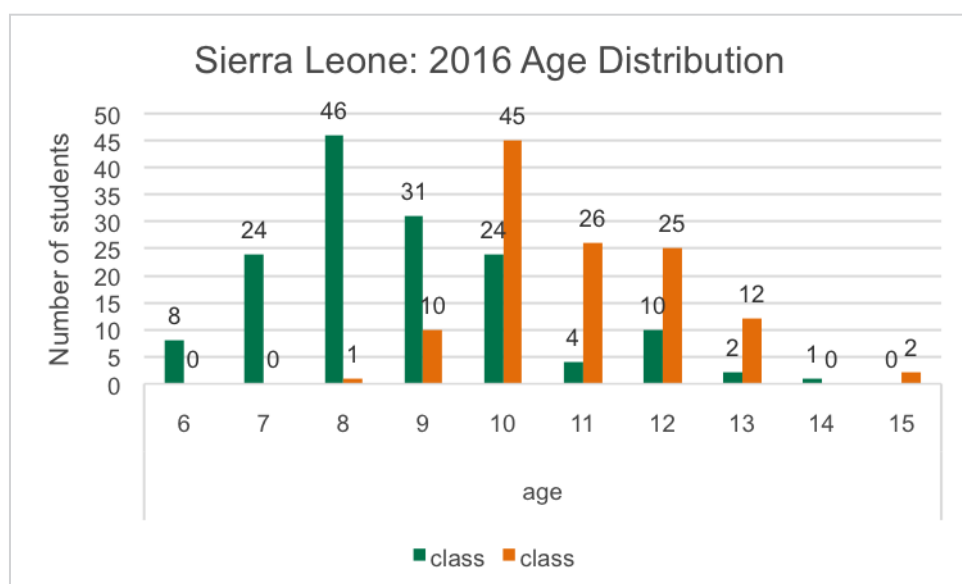
Age dispersion across classes

A repeated finding across assessments is the uneven distribution of ages across grades, with many countries having high numbers of students in early grade classes who are older than the official age for that group.

In **Sierra Leone**, fewer students were in the correct grade for their age by the end of the programme than in 2013. While 48% of students in class 2 (official age 6-7) and 40% in class 4 (official age 8-9) were in the right grade for their age in 2013, these numbers fell to just 21% and 9% in 2016. This may be a result of the closure of schools during the Ebola outbreak, and re-enrolment efforts made thereafter. This shift in age range is reflected in reading fluency scores, with students older than the official age ranges (older than 10 years) averaging 8cwpm compared to 3cwpm for those closer to the officially prescribed ages (under 10 years)⁴⁴. While more investigation is needed on the reasons for this, it is feasible teachers pace their lessons to suit older students, or younger children receive less attention.

In **Somalia**, the mean ages for students have also increased since the baseline assessment. In Grade 2, the average age for students has increased from seven years of age to 11.5 years. Similarly, the average ages for Grade 3 and 4 have increased to 11.5 years and 12.5 years respectively. This increase in age is significantly associated with reading fluency scores, with students older than 11 averaging 57cwpm

⁴⁴. $T(269)=3.140$; $p=0.002$



compared to 46cwpm for those younger than 11⁴⁵. The minimum age noted in Grade 2 was 8 years, while the maximum grade noted in Grade 4 was 16 years. This may be due to the persistent influx of internally displaced people (IDPs) over the past four years due to conflict and drought – many new arrivals to Mogadishu have never been to school before and opt to start in Grade 1. The absence of a wide-reaching education system in Somalia means that alternative options such as accelerated learning programmes are difficult to find. However, the shift in age clearly shows that solutions that are more flexible are needed – if children are twelve years old in Grade 2, many will find it difficult to stay in school by the time they reach Grade 5 when pressures of marriage and labour needs arise.

Grade repetition

In poorly managed education systems, grade repetition is a practice commonly used. The perception is that forcing children to repeat grades will help them to acquire the skills they failed to learn originally, even though this is not supported by evidence. Brophy (2006) identified three common negative effects resulting from grade repetition on (a) academic achievement, where grade-repeaters eventually fall further behind; (b) student self-esteem, peer relationships, and attitudes towards school; and (c) school operations – whereby high levels of grade repetition can lead to increased class sizes and classroom management problems.

Grade repetition does not deal with the root causes of learning failure, such as poor teaching practices, a lack of support for struggling students, absenteeism or a lack of teaching and learning materials. Children who are made repeat often do not receive the support needed to improve literacy, which is reflected in assessment scores. Instead, they are stuck in lower grades, and may drop out in upper primary because they are older than classmates and have greater external pressures to earn money and marry.

In **Liberia**, 45% of students reported having repeated a grade in school, down from 53% in 2013. Grade repetition was found to have a significant impact on oral fluency scores, with those who repeated a grade scoring 11cwpm compared to 15cwpm of those who did not.⁴⁶ Whether a student has repeated a year also has a significant impact on test scores in **Haiti**. Over 16% of students reported having repeated at least one grade with a score of 11cwpm compared to 25cwpm for non-repeaters in Creole reading fluency.⁴⁷

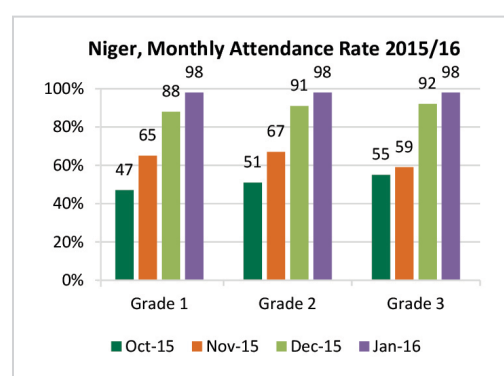
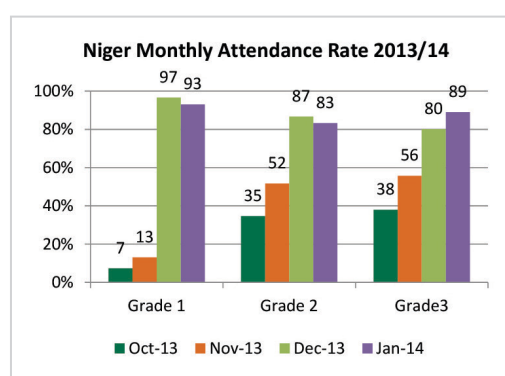
⁴⁵. $T(310)=3.33$, $p=0.001$

⁴⁶. $T(326)=-2.63$, $p=0.009$

⁴⁷. $T(373)=3.032$, $p=0.003$

Student Absences and interrupted schooling

The impact of school attendance on student literacy is substantial and is well reflected in the case of **Niger**. A baseline head count of students conducted in 2012 showed that an average of just 59% of enrolled students were attending school annually at the start of the programme. Concerted efforts were made by Concern to improve these attendance rates as part of the wider Hausa literacy intervention, to ensure that schools opened promptly at the start of the school year, and that parents knew the importance of sending children to school every day. These efforts yielded positive results and average student attendance for 2015 increased to 75%. Headcounts of students at the start of the school year in October also show an increase, from 33% in 2013 to 66% in 2015. This increase in attendance will have contributed to the overall increase in students' literacy scores from 1cwpm to 11cwpm in French and 20cwpm in Hausa in Grade 3, and to 4cwpm in Hausa and 6cwpm for French in Grade 2.



In **Haiti**, school absences also has a strong impact on reading fluency; here 45% of students reported missing at least one day and 27% reported missing two or more days of school in the previous week. These students scored significantly lower in Creole reading fluency, at 11cwpm when compared to students who reported missing no school, at 29cwpm⁴⁸.

The onset of emergency situations and protracted conflict can cause substantial disruptions to students schooling. In the **Syria Region**, over 64% of students answered the question “**how long have you been out of school for?**” because of the conflict in Syria⁴⁹; 98% of these students reported that they had experienced some form of interruption to their schooling, with 50% stating they had been out of school for at least a year. These breaks from education contribute to age skewing within the class room and highlights the need for teachers of refugees to be trained in the best strategies to cope with multi-level, multi-age classes.

HOME ENVIRONMENT

A major determinant of a child's well-being and learning success is their home environment. A home life which is supportive of education, where parents engage positively with children's educational attainment is associated with strong evidence of benefits for children's learning outcomes, including, language growth, reading achievement and writing, and the later enjoyment of books and reading, understanding narrative and story (Weinberg, 1996).

⁴⁸. $T(213)=2.748$; $p=0.007$

⁴⁹. 64% of students could report if they had experienced an interruption to their schooling. The remaining 36% stated “don't know” in response to the question “how long were you out of school for?”

Parental literacy

In **the Syria Region**, 70% of children reported that at least one parent could read, with 47% reporting that both parents could read, a higher proportion than in other country samples, but in line with the pre-war literacy rates noted in Syria. Students with at least one literate parent had a mean test score of 15cwpm compared to 11cwpm for those who do not, which is statistically significant⁵⁰. Students who reported both parents read performed better still, at a mean test score of 16cwpm.

Homework help

In **Liberia**, students reported increases in homework support from family members, with 61% of students saying that they receive help after school, up from 49% in 2014. Siblings were the greatest source of help at 31%, followed by fathers at 15%. However, students who reported that they had received homework help had no statistically significant difference in scores over those who did not. This may be due to the high levels of illiteracy in Grand Bassa, with children receiving homework help from siblings (31%) or fathers (15%) who themselves are unable to read.

In **Afghanistan**, 93% of students reported receiving help with their homework from a family member. The number of Grade 2 students receiving help also increased from 44% in 2014 to 91% in 2016, while in Grade 3, it rose from 41% to 94%. The source of support does appear to be significant, with **Afghan** students who received help from older sisters observed to score higher than those who received help from other family members (25cwpm to 18cwpm). However, due to sample size it was not possible to assess if these differences were statistically significant.

►
Madeha, attending
a Community-Based
Education Centre in
Kohistan, Afghanistan @
Vijay Raghavan, Concern
Worldwide, Afghanistan
(2015)



Not eating

Food insecurity remains prevalent in many of the extremely poor communities in which Concern operates. Over 51% of children in **Liberia** reported not eating breakfast before coming to school on the day of assessment, while a further 40% reported not having any lunch in school the previous day, a decline from 50% in the baseline assessment. Reasons for this are not clear, and may have been due to increased poverty at household level post-Ebola, a decrease in government-supported school feeding programmes, or other factors. However, our analysis shows that students who did not eat lunch scored 4cwpm lower than those who did (11cwpm to 15cwpm respectively)⁵¹.

⁵⁰. $T(275)=-2.08$, $p=0.038$

⁵¹. $T(301)=2.32$, $p=0.01$

CONCLUSION: IMPLICATIONS FOR PROGRAMME PLANNING

The findings in this paper show that **targeted literacy interventions can effect significant improvements in children's learning in the poorest and most vulnerable contexts**. To consistently achieve these improvements across all programmes in the future, the following recommendations are made:

1. Maintain a **holistic approach** to literacy interventions. Concern's three-strand approach for pedagogy improvement (teacher training, in-classroom mentoring and the provision of teaching/learning materials) provides a minimum framework for all programmes. This is implemented within wider programmes that work at home, school, community and national levels to improve access to education (attendance), the quality of education and student well-being. The findings of this paper demonstrate the many external influences on a child's capacity to learn, including home support, experiences of violence, disruptions to the education system and weak school management. Literacy interventions need to be situated within a broader response to these influences.
2. Prioritise **phonics-based literacy instruction** and teaching practices that allow children to access print and practice reading and writing. EGRA data clearly shows the need for children to develop letter-sound recognition and skills for independent word de-coding. Providing teachers with tools to allow children to learn and practice these skills individually through reading (rather than relying on rote learning) is key to enabling emerging readers.
3. Promote **mother-tongue literacy** instruction. EGRA findings evidence the positive effect of children learning to read in their mother-tongue. Where possible, Concern programmes should build the capacity of education systems to teach through mother-tongue. Where policy frameworks do not allow this, Concern should advocate for, and implement pilot programmes to prove the effectiveness of mother-tongue literacy in that context. Bilingual programmes should follow a sequence where children learn to read and write with fluency in their mother-tongue first, and then transition into a second language literacy.
4. Investigate and respond to **gender disparities**. All EGRA data should be sex disaggregated to allow a complete analysis of differences between girls and boys. Where differences are identified (at baseline level or as the programme progresses), further investigation into the root causes of these differences is needed. As part of a holistic programme, any literacy intervention should maintain the scope to work on gender equality within the classroom, community and wider education system.
5. Literacy interventions should not be put on hold during times of **conflict and crisis**. Instead, education in emergency responses should proactively include interventions to improve the foundational literacy skills of learners. EGRA data from Somalia and Afghanistan demonstrate the potential for improvement even during a protracted violent conflict. EGRA data from Sierra Leone shows the gains that can be made during and following a long period of school closure if the programme maintains a strong focus on literacy, while EGRA data from Liberia shows that halting a literacy intervention can lead to long term losses for children's progress. Emergencies interrupt education – literacy interventions should assess and adapt to the new needs of students to help them cope with the disruptions to their lives and their education systems.
6. Maintain **ambitious targets** for students. The purpose of an EGRA is to assess the effectiveness of an education system in meeting the needs of students. It is important for EGRA targets to focus on minimum standards. This paper demonstrates the ability to effect real change in the most challenging of circumstances. A literacy intervention should have no smaller target than ensuring that all learners can read fluently by grade 3, so targets lower than 45cwpm should not be considered.

Bibliography

- Abadzi, H (2006) "Efficient Learning for the Poor: Insights from the Frontier of Cognitive Neuroscience" *The World Bank Reports: Directions in Development* (Paper 36619) Washington D.C:World Bank
- Amnesty International (2015) "Shamed and Blamed: Pregnant girls rights at risk in Sierra Leone" *Amnesty International Reports: AFR 51/2695/2015*, London: Amnesty International
- Bialystock, E. (2006) *Bilingual in Development: Language, Literacy and Cognition*. Cambridge: Cambridge University Press.
- Brophe, J (2006) *Grade Repetition: Education Policy Series* (6). Paris: UNESCO, International Institute for Educational Planning and International Academy of Education
- Dutcher, N. (2004) *Expanding Educational Opportunity in Linguistically Diverse Societies*. Washington, DC: Center for Applied Linguistics.
- Evans, M.D.R., Kelley, J., Sikora, J. and Treiman, D.J. (2010). "Family scholarly culture and educational success: Books and schooling in 27 nations". *Research in Social Stratification and Mobility*. Vol. 28;(171-197)
- Farzaneh, N (2013) "Sierra Leone: an evaluation of teenage pregnancy pilots in Sierra Leone" *UNICEF Evaluation Reports*, Accessed 19.12.2016: https://www.unicef.org/evaldatabase/index_72952.html
- Folan, Amy (2015) *Shamed and Blamed: protecting the rights of pregnant girls in Sierra Leone* Concern blogs <http://blog.concern.net/shamed-and-blamed-protecting-the-rights-of-pregnant-girls-in-sierra-leone>
- Fuchs, L. Fuchs, D. Hops, M.K and Jenkins, J.R (2001) "Oral Reading Fluency as an indicator of Reading Competence: A Theoretical, Empirical, and Historical Analysis" *Scientific Studies of Reading* Vol 5. (3)
- Geva, E. (2006) "Learning to Read in a Second Language: Research, Implications and Recommendations for Services" *Encyclopedia on Early Childhood Development* (Eds. R. Tremblay, R. Barr, and R. Peters. Montreal) Quebec: Centre of Excellence for Early Childhood Development. Accessed 20/12/2016: www.child-encyclopedia.com/documents/GevaANGxp.pdf
- Gove, A. and Cvelich, P. (2010) *Early Reading: Igniting Education for All. A report by the Early Grade Learning Community of Practice*. Research Triangle Park, NC: Research Triangle Institute.
- Gove, A., Wetterberg, A. (2011). *The Early Grade Reading Assessment: Applications and Interventions to Improve Basic Literacy* (RTI Press Publication No. BK-007-1109) Research Triangle Park, NC: RTI Press.
- International Rescue Committee – Afghanistan (2014) *Basic Education for Afghanistan Consortium: Early Grade Reading Assessment and Early Grade Mathematics Assessment – Afghanistan Endline Report* IRC: New York
- Lindsay, J. (2010). *Children's Access to Print Material and Education-Related Outcomes: Findings From a Meta-Analytic Review*. Naperville, IL: Learning Point Associates.
- RTI (2014) 'Topical Analysis of Early Grade Reading Instruction: EdData11 Task Order 15: Data for Education Programming in Asia and Middle East' Research Triangle Park, NC: RTI Press
- Save the Children (2015) "The Cost of War: Calculating the Impact of the collapse of Syria's Education System on Syria's Future Save" *The Children Special Report with the American Institutes for Research* London: Save the Children; Accessed 19.12.2016 http://www.savethechildren.org.uk/sites/default/files/images/The_Cost_of_War.pdf
- Scarborough, H. S. (2002). "Connecting Early Language and Literacy to Later Reading (Dis)abilities: Evidence, Theory, and Practice". Pp. 97–110 in *Handbook of Early Literacy Research* (vol. 1). (Eds. D.K. Dickinson and S.B. Neuman) New York: The Guilford Press.
- UNDP (2013) *Gender in Somali UNDP Briefs: Somalia Country Office – Gender Unit* Mogadishu: UNDP; Accessed 19.12.2016: http://www.undp.org/content/dam/rbas/doc/Women's%20Empowerment/Gender_Somalia.pdf
- UNESCO (2008) *Improving the Quality of Mother Tongue-based Literacy and Learning: Case Studies from Asia, Africa and South America*. Bangkok: UNESCO Asia and Pacific Regional Bureau for Education. Accessed 20/12/2016: <http://www.unescobkk.org/index.php?id=9050>
- UNESCO (2014) *Global Monitoring Report for Education for All: Teaching and Learning: Achieving Quality for All* Paris: UNESCO Press
- UNESCO (2015) *Education for All Global Monitoring Report* Paris: UNESCO Press; Accessed 20.12.2016: [<https://en.unesco.org/gem-report/#sthash.vwd5Vlij.dpbs>]
- UNESCO statistics (2016a), *Somalia Distance Education and Literacy Statistics 20000-2006 (no later data available)*; Accessed 19.12.2015: <http://www.unesco.org/ui/litbase/?menu=4&programme=100>
- UNESCO statistics (2016b) *Enhancement of Literacy in Afghanistan Program*; Accessed 12.19.2016 <http://www.unesco.org/new/en/kabul/education/enhancement-of-literacy-in-afghanistan-ela-program/>
- UNICEF (2016) *Statistics – Niger at a glance*; Accessed 19.12.2016 https://www.unicef.org/infobycountry/niger_statistics.html
- Weinberger, J. (1996). "A longitudinal study of children's early literacy experiences at home and later literacy development at home and school" *Journal of Research in Reading*, 19(1), 14-24.
- World Bank Data Bank (2016) *Afghanistan Statistics (2000-2013: no later data available)*; Accessed 12.19.2016; <http://data.worldbank.org/indicator/SE.PRM.ENRR>



FINDING WORDS

A further analysis of Early Grade Reading Assessments
in vulnerable communities

Acknowledgements

This paper has been produced by Jenny Hobbs, Senior Education Adviser and Emma Tobin, Research Assistant at Concern Worldwide in December 2016. Our thanks to all of the Country teams involved in implementing our education programmes and collecting the EGRA data and the communities who work with our teams in our education programmes.

For further information on Concern Worldwide's education work, please contact

Lincoln Ajoku, Education Adviser lincoln.ajoku@concern.net