Education Technical Brief

Early Grade Reading Assessment in Fragile Contexts

Early Grade Reading Assessment in Primary School, 2017 Tonkolili District, Sierra Leone, 2017, Agathe Freal

Challenges and Considerations

Amy Folan
Senior Education Advisor
amy.folan@concern.net

Shezleen Vellani
Education Advisor
shezleen.vellani@concern,net

Agathe Freal
Education Officer
agathe.freal@concern.net

EGRA in fragile contexts Considerations

Education is an enabling basic human right and a key component of humanitarian action as it provides immediate physical, psychological and cognitive protection during crises and is a major contributor to individual, community and societal resilience. Communities, parents, and children themselves prioritise education to build their future, even in the most challenging humanitarian contexts. Challenges to education provision are exacerbated in situations of crisis, directly affecting children's safety and wellbeing while they are the most in need to receive basic literacy and numeracy skills to give them opportunities to access information, health, income, equality and wellbeing benefits associated with education.

Concern's support to education began in 1972 and since 2003, Concern has been focusing on primary education, specifically the early grades (1 to 3). Due to Concern's increasing focus in emergency contexts, Concern also supports non-formal education activities to help children transition into formal school systems. Concern is providing direct support to schools and non-formal learning spaces at the community level to increase access to quality education for children in hard to reach areas and those affected by conflict and crisis. In our humanitarian action, we respond to the right to protection but also to the right to education. This may include the establishment of Temporary Learning Spaces, provision of Non-Formal Accelerated Learning Programmes including Basic Literacy, Numeracy and Psychosocial Support. Improving foundational literacy and numeracy skills in young children is a priority of Concern's.

Concern aims at improving the lives of extremely poor and vulnerable children in a sustainable way by increasing access to high quality primary education and supporting wellbeing.

The increased global focus on measuring improvements in learning outcomes has been incorporated into Concern's programmes for many years, shifting from proxy-indicators to monitoring the actual improvements in children's learning by applying tools such as the Early Grade Reading Assessment (EGRA). Using tools to measure learning outcomes, Concern seeks to assess children's reading levels and monitor their improvement throughout the course of an education programme or a school year. This informs the progress and quality of the programme and provides information on the learning needs of the children within the context in which we are working to allow a tailored approach to teacher training and literacy and numeracy instruction. Concern especially values the EGRA as a tool to inform programme quality in hard to reach and conflict affected areas as, especially in these contexts, it is crucial to ensure that Education does not only fulfils its protective role but also enables children to learn effectively.

The Early Grade Reading Assessment (EGRA), designed in 2006 by Research Triangle Institute (RTI) is an individually administered oral assessment of the foundation skills for literacy acquisition in early grades. Children are asked to identify letters, letter sounds, familiar words, decode non-real words, read a simple passage and answer questions about what they read. It is administered digitally using the Tangerine platform where possible.

While Concern has been using the EGRA tool for ten years, the use of the tool in fragile contexts still poses a number of challenges. Contexts of conflicts and fragility are complex and unpredictable, due to a lack of reliable information, fast changing environments, possible and sudden insecurity risks along with the significant number and complexity of stakeholders. That makes it complex to plan interventions or assessments, limiting the access to schools, restricting travel, and increasing the need to readjust interventions due to security context and flow of population while working with children living in extreme poverty. However, measuring improvements in learning remains crucial to ensure interventions are effective and children are not only protected but also empowered and given basic literacy, numeracy and life skills to access markets, health information, social and political networks and to further demand, exercise and enjoy all other human rights.

The following guidance was developed to provide Education teams working in fragile and conflict-affected states with practical guidance for administering Early Grade Reading Assessments. The content was developed to respond to country level needs and requests for technical support within a range of low income and crisis affected contexts in which Concern works. The guidance builds on the learning from Concern over the years and aims at supporting teams preparing, planning and factoring in possible risks and ensuring sufficient flexibility to carry out EGRAs.

Considerations and Lessons Learned

Concern has carried out literacy programs and utilised EGRAs to inform programming in a number of conflict and crisis-affected contexts including Afghanistan, Somalia, Syria and Niger. These assessments have been conducted within formal education support programmes (in schools), and non-formal education spaces and centres. The majority of experiences and lessons learned presented hereafter can be applied to both formal and non-formal education modalities.

1) Planning

EGRA Tool on Tangerine

Ensure the **tool is appropriate**. In some countries, partners have already developed EGRA tools, however, it is necessary to ensure this tool is appropriate to the target group and specific to the local context, dialect and language of instructions. Paying special attention to the language used in the tool can also ensure it is conflict sensitive in some areas with tribal tensions.

If there is no existing or appropriate tool, it can be **developed or adapted** in line with the protocols outlined in the EGRA Toolkit. This should be done with the participation of local teams and can be developed or adapted with technical support.

Involve **members of different teams** (M&E, Education or Management staff) in the review and adaptation of the tool (content, form and building process). The team will therefore be more autonomous in situations where international or technical support staff cannot travel or have limited access.

For example, the tool can be designed with different working groups coordinated by a technical focal point:

- **Review, adaptation and development of content**
  - **Local Education teams** to review/adapt/develop the content according to the different subtasks (identifying appropriate local familiar words, developing non-reading words to decode with limited number of phonics in the local language and script, finalising text and comprehension questions etc)
  - Where possible and appropriate, Ministry of Education representatives should be engaged in the process to ensure alignment with curriculum and validation of the tool

- **Rendering the tool to Tangerine**
  - The **M&E and Education teams** to render the tool on Tangerine. A first template of the tool can be built (in English or French) by external technical support according to the number and type of subtasks agreed by the local Education teams. The structure of this tool can then be used and adapted by the M&E and Education teams to be translated to the appropriate script. The local M&E and Education teams will then be able to finalise this tool by inputting the subtasks in the local language and script (according to the content developed by the first working group).

Plan all these steps with enough **time** for each step: develop and review the content with the team, input the content into the tool, test the tool and make necessary changes to finalise.

Once the tool is developed, organise a **meeting with the teachers or facilitators** to plan the rollout. The meeting should be conducted prior to the survey to ensure that teachers or facilitators from schools or learning centres where the assessment will take place are aware of the process and purpose of the assessment. They should not be informed of the content of the tool (to ensure this does not influence their teaching). They should be reassured that the assessment does not aim to assess their teaching, and that the data will not be linked to the teachers or individual students. They should also be involved in planning the assessment with the enumerators to decide on the best time and dates for the assessments to be carried out and ensure it does not compromise planned events or exams.

Define targets and level of disaggregation

As for EGRA in any context, a benchmark for the minimum expected fluency (number of correct words per minute read) at the end of 3 years of education or equivalent has to be set. The **benchmark** should be aligned to international research on literacy proficiency that is expected at the end of grade 3, contextualised for the country and language and defined in consultation with authorities where possible. 45 correct words per minute (cwpm) is the minimum level of fluency required at the end of grade 3 for children to succeed in their education. Considering the low resource, marginalised areas in which Concern works, and interruptions to education caused by conflict and displacement, cwpm scores within programme areas are often significantly lower than this minimum standard. However, Concern is committed to supporting children to achieve quality education regardless of their circumstance or context, and will not lower benchmarks below this minimum standard, or the contextualised minimum standard in the specific country context. As the goal is to equip learners with the skills to succeed in education, lowering benchmarks would not allow us to effectively monitor the quality of the education system.

Once the standard benchmark for fluency is set, define **realistic and achievable targets** (% of children achieving the set standard) for achieving this benchmark, based on the context and length of the programme. To define the target, consider the situation of your target group and the timeframe of your programme. For proposal or reports, explain the situation of the group and the reasoning behind your target. The targets should be realistic, even if they are low and only increasing incrementally over time, as this can be justified (for example by children's psychosocial state, gap in education etc) and the results can be presented by subtasks to reflect improvements in the different skills which once improved, will in time impact on the percentage of children reaching benchmark.

To take into consideration when defining your targets:

- Some of the programmes might need to have a very strong **focus on psychosocial support** for the first weeks before increasing the time of learning to ensure children are ready to learn, this needs to be considered and explained when considering the length of your programme and the potential improvements in learning outcomes.

- Education programs in fragile contexts target very **diverse beneficiaries**, including different age groups, ethnicities, boys and girls, various categories of vulnerable children and youth such as orphans, child labourers, and learners with disabilities. This is to be considered and can to some extend be taken into account in the **disaggregation** (sex, age, type of disability according to Washington Group questions).

- When possible and applicable, combine your EGRA assessments with **PSS assessments** so that you can reflect the two level of improvements with different targets. This can also support your explanations related to EGRA targets according to the psychosocial state of the children and their readiness to learn (which can ease the acceptation of PSS intervention at different levels).

Conflict Sensitivity

- Plan the tool and assessment in a way that is **transparent** and communicate as much as possible with all stakeholders. If changes are necessary due to evolving conflict or crisis dynamics, ensure open and frequent communication.

- Consider the persons who will participate to the different stages (design, roll out, data cleaning etc) and ensure **diversity and representation** (ethnic groups, gender, hierarchical levels, language spoken). For the enumerators, think about how they are perceived and accepted where the assessment will take place (by the communities, children, partners, other staff) and plan the recruitment of enumerators if needed.

- Ensure the **responsibilities are spread** across different members of staff so as not to expose one person and ensure members of the management teams are involved throughout the process.

Inclusion and Disability

A critical barrier to improving access and learning of children with disabilities is the lack of data to allow a better understanding of the number and types of reported disabilities. This can only be achieved through regular and consistent collection and analysis of Sex, Age and Disability Disaggregated Data (SADDD1) at the start, throughout and at the end of each project. Practically, this means including questions around the disability status alongside other basic demographic information across all data collection. In line with global standards and practice, Concern collects Sex, Age and Disability Disaggregated Data using the Short Set of Disability Questions and the Child Functioning Questions to assess the disability status of children. Without this data, interventions or policy solutions are unable to respond to specific needs of these children with disabilities. However, these children should not be excluded from the education activities. Concern's programmes, especially in fragile contexts, aim to be as inclusive as possible and therefore children with disabilities might be included into learning centres or schools. When this is the case, these children should not be excluded from the sample. The EGRA data is not disaggregated by individuals but aims at assessing the system and programme. Children with disabilities are part of the system and programmes and the results should inform us on how to better integrate them and their needs into the teaching and facilitation methodologies.

2) Training

During the early **planning meeting**, everyone involved in the assessment (enumerators but also teachers/facilitators) should be made aware that the purpose of the EGRA is to better understand the level and needs of the children within the programme, and evaluate and adapt how we respond to it. The data is not disaggregated by individual children, facilitators or teachers and the purpose is to ensure the programme is responding to children's needs systematically. This preparatory meeting can also include planning of the assessment to involve both the enumerators and the teachers/facilitators.

As with conducting EGRA in any context, once the tool is ready for the assessment, the training of enumerators is critical to ensure they understand the purpose and process of the assessment as well as all content. For fragile and crisis-affected contexts, there are some additional training needs.

- The training on the tool will target enumerators, the M&E team and some key staff from the Education and management team. The teachers or Concern **Facilitators will not attend** the training and should not know the content of the tool to ensure their sessions will not be influenced by the content of the assessment.

- Ensure you have **appropriate** enumerators (number, gender, language spoken etc) according to the context. The enumerators can be external (recruited for the assessment) or internal (M&E team or other Concern staff members appropriate to work with children but not directly invested in the programme). As much as possible, choose enumerators experienced in dealing with children, especially vulnerable children.

- Make sure enumerators **understand their role** in administering the EGRA. If enumerators are from Concern M&E teams, ensure tasks are clear and explain the difference between their usual monitoring role with Concern and their role as EGRA enumerators.

- As much as possible, provide trainings to enumerators from the **different locations** where the assessments will take place. This will reduce future risks of transportation and access limitations.

- Adapt the training to the local capacity and ensure a strong focus on the approach to the child, the introduction, assessment explanation and consent question. This especially applies for the baseline and more so the baseline in NFE Centres as children have never done this type of assessment and are newly arrived in the NFE Spaces, which might be unfamiliar. This stress for children who might already be in situations of distress needs to be minimised with high child protection and PSS considerations to ensure the children are not put at additional risk. It will also limit the negative consequences the stress might have on their performances for the assessment.

- In addition to the enumerators, ensure different team members are also attending the training, including members of the M&E, Education teams and when possible management staff. When possible, have members from the Education team attend the training who would later be **present during the data collection**. This ensures that technical support is available during the assessment and that they have a common understanding of the tasks.

- After or during the training, **pilot the tool**. Even if the team of enumerators seems confident, it is crucial to try the tool with children before starting the assessment. The tool can be piloted through role-play and when possible, with children. The Education or Child Protection teams and facilitators can support in this piloting process by taking part in the role play and/or by observing the pilot with children to ensure the approach, tone and introduction speech is adapted to the children.

3) Sampling

Considering the context, security situation, access etc of the places where the EGRA is to be administered, it is important to think about different scenarios and have options and plans ready for each of them. There are some major aspects to take into consideration when doing the sampling:

- High and rapid **fluctuations in the enrolment and attendance numbers**. In areas with high levels of displacements, children could be enrolled or drop out at any moment throughout the year. They might also not be able to attend regularly due to the level of insecurity, curfews in their area of residence etc.

  - For assessments with a relative low number of students, the solution might be to administer the assessment to **all children** present the day of the assessment.

  - With a higher number to be assessed, it is important to consider the possibility to have fewer schools and students available than anticipated. You might then need to consider your margin of error (for example instead of using the usual 5% margin of error, 7% could be chosen – it would then need to be explained and detailed in the proposal or report with the rational for this adjustment).
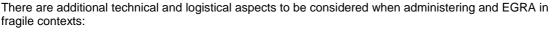
In formal schools

- In order to mitigate the risks associated with the assessment, the use of **cluster sampling** is strongly recommended. When using cluster approach each school counts as one cluster and random selection is done at the level of schools that will be visited to conduct data collection.

- When using cluster sampling, you can choose criteria to **stratify your school sample** to ensure the sample is representative of the programme. This means to divide the schools into groups with similar characteristics and then randomly select the sample proportionally to ensure representation. Identify the main criteria of stratification (not too many) and make your sampling according to these criteria. By mapping out the schools according to your criteria, you will have a list prepared by type of school so that, in the event that one of the schools selected for the sample is not accessible, you can easily find a replacement school of the same type for your sample. Your criteria could include: Community or Government schools, Formal or Accelerated Learning Schools, boys, girls or mixed schools, urban or rural school etc. In the event where your sample cannot be representative of some of your criteria, it is important to indicate it in your report and to take it into account in your data analysis.

- Where EGRA is repeated throughout the project cycle (baseline/midline/endline etc.) make sure that your **sampling process is coherent** throughout your assessments. If during your baseline you have experienced any systematic sampling constraints, e.g. related to stratification that as a result gave you access to only one type of school, make sure the constraints are repeated in the end line. Otherwise the results will not be comparable and it will be difficult/impossible to interpret them as a progress or regress. For example, if the security context during the baseline gave you no access to the rural schools where you work, this type of schools will not be included in your sampling for the end line and this should be considered when interpreting results.

- In fragile contexts it is also recommended to **test all children present on the day of data collection** (in a given grade). Step one is to gather the most up- to- date data on attendance rates in the sampled schools. Step two is to calculate an average attendance rate. Step three is to use this rate to calculate the number of children that you can expect to be present per school at the day of the assessment. From there, once you have your randomly selected list of school, you can choose enough schools to fill your minimum sample space and organize the data collection process. This will most likely significantly reduce the amount of schools the teams will need to travel to and therefore reduce risks and exposure in fragile contexts.

Summary of sampling methods for fragile context in comparison to stable contexts:

	Stable Context	Fragile Context
Key decision making criteria	Representativeness and Cost Effectiveness	Do No Harm, Duty of Care
General rule	**Stratified** (Community or Government schools, rural and urban, single sex or mixed schools) **Cluster Sampling** (school= cluster) **Sample distribution proportional** to the school size **Systematic random sampling** within selected schools **95% confidence** and **5% margin** of error	(Non-stratified) **Cluster Sampling** (school= cluster) **All children present on the day** included in the sample **Separate sampling** (and analysis) for **Formal** Schools from **Non-formal** Centres (accelerated learning etc.) **95% confidence** and **5% margin** of error
Exceptions	**Research** – simple random sampling **Small programs/projects** (a rule of thumb: less than 10 schools) – simple random sampling	**95% confidence** and **5%- 10% margin** of error - Only **where necessary and possible**: Stratified Cluster Sampling using the criteria that are most likely to account for a lot of variance in the school population (e.g. rural vs urban, Community or Government schools etc.) - In a situation where **specific schools** are **inaccessible** due to security, physical access etc. issues, we should **remove them from the sampling population** (school list) during the specific data collection period. * Should the access barriers be lifted at a later stage of the project implementation, the schools can be returned back to the sampling population. In other words, **removing an individual school** from the sampling population during one data collection period **does not mean that the school is automatically permanently removed** from the sampling population space in the next data collection exercise. ** Conversely, in a situation where all of **a specific type of school** (e.g. urban, government) **has been removed** from the sampling space due to access issues (security, physical access etc.) we should ensure that the subsequent sampling exercises are coherent in the approach and **we should continue to systematically remove the initially excluded type of schools** from the sampling population.
Special considerations	**Be aware of seasonal fluctuations in the enrolment and attendance numbers** **Avoid low attendance periods/days** of the year - Allocate proportionally the sample size per school taking into consideration the **most updated attendance data**	**Keep abreast of the rapid fluctuations in the enrolment and attendance numbers** **Avoid low attendance periods/days** of the year - Calculate the sample size per school taking into consideration the **most updated attendance data**

4) Rollout

There are additional technical and logistical aspects to be considered when administering and EGRA in fragile contexts:

- **Communicate with the communities** and with the teachers or facilitators so that they are expecting you, know how many people will come and why.

- Chose the **right time** for the roll out. While it is important to link the assessments with the learning cycles or school year, plan for a time that would allow the highest participation and therefore maximise the results. Examples could be to avoid periods of heavy rains, times of elections or political events, tribal celebrations.

- Plan for **another possible time** and budget if this needs to be rescheduled. Assessments are often postponed or cancelled amidst the heightened insecurity of rapidly shifting situations. Safety and security of participants and staff is the highest priority and teams can repeat a visits when the situation becomes safer.

- Plan time for the data collection. From the pilot, you will know the average time required per child. When planning your roll out, consider the average time per child and the number of children to be assessed. To this minimum duration, **add additional time**. This additional time will allow you to deal with possible delays in traveling to the site or the time to conduct the sampling on site. It will also ensure that enumerators have enough time with the children to do the introduction and make them feel comfortable.

- Consider **access to internet** before and after the rollout to download the tool and upload the assessments. This could mean having the team meet at the office before the assessment to ensure everyone has the tool and finishing the assessment early enough so that the team can return to the office to upload the results

- Prepare some **paper tests,** which could be used as a backup options if there are any issues with the tablets. This could be due to battery issues, heavy rains or the risk of using technology and tablets in unsafe regions.

- Prepare an **emergency or evacuation** plan. The team should know what to do if there are any incidents happening in the surroundings or any unexpected events. Have a **person nominated to record** any unexpected event, interruptions or disruption to the assessment process. This person will be in charge of writing down the time when it happens so that it can be referred to when cleaning and analysing the data.

5) Analysis

Once the data has been collected, it will need to be cleaned, analysed, reported and shared as appropriate. It should also be used to formulate recommendations and to feed back into programme design and implementation. In fragile contexts and according to all the points we have mentioned above, there are some additional aspects to consider with this last step of the EGRA process:

- **Clean the data** carefully and involve the team in the process. In fragile contexts, there might be a higher number of partially completed tests. This could be due to the child's stress and inability to finalise the survey or any event that might have interrupted the data collection. The team will know the times and dates when this happened and should be consulted to support with the data cleaning.

- In your report, **document** each step of the assessments and explain the different decisions that have been taken (sample size, date of the assessment etc). The contexts in which the assessments took place are fragile contexts or contexts of protracted conflict where there is a general atmosphere of violence and lack of transparency and that may negatively affect the value and trust placed in measures of student learning.

- When possible, **complement** your interpretation and report with any available monitoring and evaluation data (quantitative or qualitative), as this will support your hypothesis and arguments in your data interpretation. The monitoring should also include **attention to ongoing bias and conflict** dynamics within the instructional content, form, training, and other elements of program implementation.

- Consider all the points mentioned above in your interpretation with the documentation of the process and the **situation of the rollout.** If many children have refused to be surveyed or they seemed stressed before the test was conducted, is it important to mention these tensions as it is possible that it led to underperformance and therefore should be considered in the interpretation of the results.

Conclusion

Maintaining education interventions in times of conflict and crisis is paramount to children's protection and development. Education actors in fragile contexts should not only ensure children are safe and being protected, they should also proactively include interventions to improve the foundational literacy skills of learners. While we have seen that assessing learning in these contexts can be challenging, previous EGRA data (from Concern Somalia and Afghanistan) has demonstrated the potential for improvement even during a protracted violent conflict. As highlighted in this document, some measures can be taken to ensure EGRAs can be carried out, even in difficult contexts. Emergencies interrupt education but we should be able to effectively measure learning and assess and adapt to the new needs of students in order to design literacy interventions that help learners and educators cope with the disruptions to their lives and their education systems.

Additional Resources

EGRA toolkit

EGMA toolkit

Finding Words - A further analysis of Early Grade Reading Assessments in vulnerable communities, Concern

Understanding what works in Oral Reading Assessments, UNESCO Institute for Statistics

- Conducting an Early Grade Reading Assessment in a complex conflict environment: Is it worth it? By Karyn Beattie, Concern Worldwide and Jenny Hobbs, Concern Worldwide and University College Dublin p.157
- Administering an EGRA in a post- and an on-going conflict Afghanistan: Challenges and opportunities. By Homayoon Shirzad and Aine Magee, Concern Worldwide p.170