



## LEARNING ASSESSMENT END LINE REPORT

December 2015



### USAID/EDUCATION CRISIS RESPONSE

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## ACRONYMS

ASER	Annual Status of Education Report
Creative	Creative Associates International
ECR	Education Crisis Response
EGMA	Early Grade Math Assessment
EGRA	Early Grade Reading Assessment
FGON	Federal Government of Nigeria
HQ	Headquarters
IDPs	Internally Displaced Persons
IRC	International Rescue Committee
LF	Learning Facilitator
LGA	Local Government Area
LGEA	Local Government Education Area
LMD	Learning Materials Development
LMDG	Learning Materials Development Group
MDA	Ministries, Departments and Agencies
MOE	Ministry of Education
NFE	Non-Formal Education
NFLC	Non-Formal Learning Center
NGO	Non-Governmental Organization
PD	Project Director
PRS	Performance Reporting System
PS	Primary School
PSS	Psycho-social Support
PY1	Project Year 1
PY2	Project Year 2
RARA	Reading and Access Research Activity
SDQ	Strengths and Difficulties Questionnaire
SEL	Social Emotional Learning
STTA	Short-Term Technical Assistance
TWG	Technical Working Group
USAID	U.S. Agency for International Development

## EXECUTIVE SUMMARY

The USAID-funded Education-in-Conflict Response Program (ECR) provides technical assistance to the Government of Nigeria in delivering non-formal education opportunities to internally-displaced (IDP) learners in the northeastern states of Gombe, Bauchi and Adamawa. The target population is between 6 and 17 years of age, comprised of boys and girls from different cultural backgrounds. The ECR learning intervention consists of X weeks of instruction in numeracy, literacy, social-emotional and vocational skills training, that has been designed to respond to needs and gaps that IDP children face due to disruptions in education caused by insurgency in combination with other environmental risks. The program is designed to promote their opportunities to become resilient learners with pathways to enter or re-enter the formal education system. During the year, ECR ran 296 functioning learning centers across Adamawa, Gombe and Bauchi states, catering for the learning needs of over 14,000 learners.

This is a report of program evaluation findings of intervention results from the first year of the project, and its first cohort. An end-line assessment was conducted in October 2015, in which 234 program beneficiaries counted among the 300 learners from 15 learning centers who participated in the July 2015 baseline assessment. In addition, 66 replacements and 350 learners were added to the end line sample. The ECR evaluation sought to answer four important questions:

1. What were the learning gains of program participants with respect to numeracy, literacy and social-emotional skill development?
2. Were there any observed differences in learning across genders, states and age groups?
3. What changes in teacher instructional practice occurred during the program period for this cohort that might help explain learning gains?
4. What additional factors, such as independent reading habits, eating before school, and dual program enrollment might be contributing to any learning gains observed?

**Methodology.** Local, trained enumerators conducted the baseline and endline assessments that serve as the basis for performance comparison. The instruments that were used include: the Annual Status of Education Report (ASER) test tools, which measure learning achievement in Reading (Grade 2 Hausa) and Numeracy; the Strengths and Difficulties Questionnaire (SDQ), which measures learners' overall mental health/well-being status; and the Classroom Observation Form, which is used to observe the teaching/learning activities in the classrooms. (Please see the Annex section of this document for samples of these tools.) From these data, ECR has drawn the following key findings for each research question:

**Learning gain findings.** Post-ECR intervention findings indicate a modest yet important gain in reading levels as measured by the ASER. Learners reading at zero level (no letter recognition) decreased by 36% while learners able to read words, paragraphs and stories increased by 33%. Emergent Grade 2 fluency in Hausa as evident in paragraph and story level reading increased by 10%. Numeracy levels also increased from zero level and the

lowest levels of number recognition (-20%) to operations levels associated with addition, subtraction and division (+19%) (See the summary tables below).

**Participant Reading Levels at both Baseline and End Line (N=234 participants)**

Reading Level	Baseline	Percentage	End Line	Percentage	Difference
Zero	140	47%	24	10%	-36%
Letter	59	20%	52	22%	3%
Word	24	8%	73	31%	23%
Paragraph	20	7%	28	12%	5%
Story	57	19%	57	24%	5%
<b>Grand Total</b>	<b>300</b>	<b>100%</b>	<b>234</b>	<b>100%</b>	

**Participant Numeracy Levels at both Baseline and End Line (N=234 participants)**

Numeracy Level	# Baseline	Percentage	# End Line	Percentage	Difference
Zero	32	11%	15	6%	-4%
No. Recognition (1-9)	121	40%	58	25%	-16%
No. Recognition (10-99)	105	35%	85	36%	1%
Addition	13	4%	42	18%	14%
Subtraction	28	9%	32	14%	4%
Division	1	0%	2	1%	1%
<b>Grand Total</b>	<b>300</b>	<b>100%</b>	<b>234</b>	<b>100%</b>	

Moreover, learners in Cohort 1 also showed modest improvement in well-being, as measured by the deficits-based Total Difficulties Subscore of the SDQ, and the reduction in learners' who self-report having social-emotional difficulties at abnormal deficit levels from 13% to 2% over the intervention period.

**Disaggregated learning findings.** The end line assessment also examined disaggregation for age, gender and state and found the following:

- **Age.** Data continue to show an increase in Grade 2-level literacy in Hausa as children move from 6-8 years of age to 15-17 years of age, with story-level performance gains of over 40% - double the sample average. In numeracy, younger children (9-14 years old) are moving towards higher number recognition (41%), while older 15-17 year olds are mastering addition (37%) and subtraction (28%) – double the sample averages for those skills levels;
- **Gender.** In basic numeracy, boys improved more than girls from baseline to endline, with greater reductions in zero-level boys who are unable to count, and greater increases in 10-99 number recognition, addition, subtraction and division. In literacy there is a 7% gender difference in favor of boys able to read at the word, paragraph and story levels, and a 2% margin above the sample average (20%) at the word level;
- **State.** When compared to the proportion of students able to read at the paragraph and story levels (26%) at baseline, Adamawa (28%), Bauchi (36%) and Gombe (32%) have exceeded baseline, with 8% disparity across Adamawa (low) and Bauchi (high).

**Teaching practice findings.** Student gains are accompanied by modest increases in the number of teachers meeting minimum teaching standards, as determined by Ministry-approved cut-points and weights for specific teaching and learning practices observed and recorded by enumerators. The performance level in teaching instruction in general is good, with over 85% of all facilitators exceeding minimum standards in four categories of instructional practice, as set by the Ministry of Education. Teacher practices in classroom pedagogy associated with reading were stronger than in the areas of classroom management, discipline and time management (teaching methods), instructional content and assessment. Use of scripted lessons appears to be lower than the use of the practices that scripted lessons contain, and may signal adjustments and reinforcements are necessary. The most significant gains were recorded in reading practices, positive discipline and questioning strategies.

**Other variables findings.**

- Student who practice “individual reading” outperform students who do not on numeracy tasks;
- Reading practice “every day” was correlated with higher reading levels; just over 10% of students who “never” read texts were able to read paragraphs and stories;
- Students enrolled in multiple programs did not perform better those enrolled in the ECR NFLC program only;
- “Eating before” school does not appear to affect the proportion of students reading at different skill levels, yet it appears to positively affect the proportion of students performing numeracy tasks at high skill levels.

**Recommendations.** On the basis of these findings, ECR recommends that:

- Although minimum standards of teaching are being surpassed, and effective reading pedagogies are evident in classroom use, specific individual practices, such as teaching scripted lessons are not as widely evident in classrooms, and that further teacher professional development is necessary to ensure better quality instruction (fidelity of implementation of the ECR intervention);
- There is a need to look carefully at program non-completion in follow-up analyses; as well as correlations between classroom practice and social-emotional competence (program quality) on the one hand, and reading and numeracy gains on the other;
- As the implementation period was curtailed for Cohort One, program managers may wish to vary not only the quality the dosage and length of the intervention in order to move a greater proportion of learners into the range of fluency (and comprehension) at Grade Two (2), and into subtraction and division with respect to numeracy. Moreover, for learners at risk, it may make sense to either tier or further differentiate instruction for those students with “zero” levels at baseline such as to ensure that the performance lags/gaps in skill development are closed during the ECR intervention period (dosage). Gender, state and age gaps may close through continuous assessment and progress monitoring.

Considering the various factors that characterize the IDP learners to whom these end line assessment tools were administered since the commencement of the intervention, efforts have been made to ensure that the findings reported here are a true reflection of the changes in the literacy/numeracy competences of the learners as well as their mental/emotional development. However, as already noted in the baseline report, the findings should neither be generalized to other non-formal learning centers in northeast Nigeria, nor be cited as definitive evidence that the full extent of change is solely attributable to ECR interventions.

## INTRODUCTION: EDUCATION IN A STATE OF FLUX

The northern part of Nigeria has for long been regarded as educationally disadvantaged. However, this status has been further aggravated by various forms of social, political and religious conflicts that have plagued the region for decades, the latest being the Boko Haram insurgency. These different shades of violence and insecurity have resulted in high level of poverty, and an ever increasing number of involuntarily mobile population—the Internally Displaced People (IDPs). A huge proportion of these IDPs are women, children, young boys and girls. Many of these had never had any formal education, while the few that were in school before the crises had to abandon schooling as they fled for dear lives with their families. This recent spate of displacements has thus further increased the number of out-of-school children and youths of school age in the North, especially the badly hit North Eastern states of the country and the adjacent (and relatively peaceful) states of Bauchi, Gombe and Adamawa which have been playing hosts to the fleeing IDPs. Unfortunately, these states already have their own social and economic challenges and therefore lack the carrying capacity to absorb the influx into their educational system.

Even if these states were to have the capacity to absorb the IDPs, a number of psycho-social issues of these learners would make their seamless absorption into regular schools and curriculum an unrealistic expectation. For instance, many of the IDP children have had first-hand experience of violence perpetrated against them, their immediate family members and/or their communities; they have been forcibly removed from familiar terrain, and had their varied educational experiences truncated. The recent Boko Haram insurgency particularly had been launched as an overt declaration of hatred for Western education; a message that perhaps had begun to take roots in the impressionable minds of young Nigerians. As a result, beyond the development (and assessment) of literacy and numeracy competencies of the IDP learners, the social emotional competencies also deserve attention. Therefore, the focus again is on the multi-pronged process of facilitating the literacy and numeracy skill development of the learners as well as their social emotional competencies, while living and learning under the constant fear of further attacks and often dim hope of returning to their communities again.

The ECR curriculum offered to the IDP learners is tailored to meet their educational and emotional needs especially, and the needs of their host communities as well, considering the fear of Boko Haram and other ethno-religious crises that has put the entire region of the country on the edge. This curriculum is being implemented through non-formal learning centers, adolescent girls' centers and youth centers in the different host communities in partnership with other organizations with similar focus, and with the support from formal schools in the three focal states.

## THE ECR CURRICULA AND CORRESPONDING ASSESSMENT

The ECR project is aimed at increasing the IDP's access to learning through non-formal education channels. This has been done through the adaptation of the Non-Formal Learning Center (NFLC) curricula on literacy and numeracy skills development and the inclusion of separate lessons that are meant to enhance the IDPs' social and emotional competencies. As a result, the assessment exercise is meant to gauge the progress that the IDP learners

have made in Reading, Numeracy and their social emotional well-being and their responsiveness to the ECR learning intervention. It also seeks to measure how the ECR curricula, the teaching and learning environment, learning facilitators and parents have contributed to this progress.

### **About the ECR Intervention and its Evaluation**

The ECR IDP and out of school children and youth learning intervention consists of 9-hour of instruction per week learning sessions, broken into three hours per day for three days as convenient for the learners and their peculiarities. The ECR's 9 hours of weekly instruction is delivered for a period of 18 weeks. The weekly distribution of time across the different areas is Reading: 3 hours 45 minutes; Numeracy and SEL: 2 hours 15 minutes each; and Recreational Activities: 45 minutes. Over 14,000 learners participated in the program in three states. The national non-formal education curriculum includes 72 hours each of literacy instruction in Hausa numeracy instruction and social studies/psycho-social skill making a total of 216 hours for the basic literacy course. However, the adapted curriculum implemented by ECR, called the enhanced non formal education curriculum has infused socio-emotional learning and also a few more topics from the formal reading and math curriculum and we offer 324 hours (150%) at nine hours per week for 36 weeks' duration of the course as the children have more time and require more engagement in view of the enhanced curriculum.

While in the learning centers, the learners are provided with one snack (usually consisting of locally sourced snacks or biscuits) and they are exposed to instructions in numeracy, reading and social and emotional learning. Their regularities in the centers also included recreational activities.

In terms of instructional system supports provided with ECR assistance, the learning facilitators (called teachers in the formal school setting) received and five-day intensive training on how to deliver instructions in these areas and also on how to cater for the children, given their traumatic situations. The intensive 5-day training on non-formal education program was delivered across all three project states, with no variation in program design or dosage, and data from all learning centers support near 100% fidelity in delivering the ECR program as intended by the project and the Nigerian government. In addition to the intensive training, ECR also provided the LFs with Mentors, whose responsibilities are to support the LFs in their roles of instruction delivery and care for the children. Other system supports provided by ECR include (a) revised curriculum guides and teaching materials that support literacy, numeracy and SEL, and (b) parental and community guidance (X hours/manual/planning process) on how to provide a supportive, safe and enabling learning environment in working with school leaders.

The project also provided teaching and learning materials for both the children and the learning facilitators. The materials included exercise books, textbooks and writing materials for the children while the LFs were provided with facilitators' guide, which has some scripted lessons in numeracy, reading and socio emotional learning, instructional charts for teaching numeracy, reading and SEL, as well as notebooks for record keeping and writing materials.

To measure the effect of the ECR intervention, the following tools have been adopted for use:

**Literacy and Numeracy:** Literacy and numeracy are the two legs on which any meaningful basic or post-basic education rests. They are also central to the education program offered by ECR to the IDP learners. As a result, ASER is a tool adapted and re-designed to measure the level of literacy and numeracy development of the learners since their enrolment in the participating schools or non-formal learning centers. The tool requires the children to read some letters of the Hausa alphabet, simple words, sentences and passages in Hausa, and to perform basic arithmetic.

**The Social Emotional Learning (SEL) Curriculum:** Social and emotional learning involves acquiring and effectively applying the knowledge, attitudes, and skills to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions (CASEL, 2013a, 2013b)<sup>1</sup>.

The SEL element of the intervention is meant to mediate the impacts of toxic stress on the brains of the students, enhancing social and emotional skills of the IDP learners to enable healing and growth into self-adjusted adults and productive members of their society. In the ECR project, SEL is taught as a subject and is also infused into the reading and math lessons. This approach ensures that the Learning Facilitators give a double-pronged attention to the social emotional well-being of the learners. And this is sorely needed considering the challenging circumstances of the learners which place them at a higher risk of either becoming easy recruits for the insurgents as they grow older or becoming maladjusted individuals with jeopardized futures.

**The Strengths and Difficulties Questionnaire (SDQ)** is one of the assessment tools used in both the baseline and in this end line assessment. It is a proxy measure of social-emotional competence and has been used in many countries for measuring children's and youths' psycho-social well-being. The SDQ is a 25-item questionnaire and is being used to measure the social and emotional well-being of the IDP learners in the first year of the intervention. The 25 items include statements that measure dimensions of the learners' common social-emotional deficiencies in 'self-report' and 'parent report' formats. The 25 items in the SDQ measure are in five sub-groups: Emotional problems, conduct problems, hyperactivity scale, peer problems, and pro-social problems, with each sub-group having five questions. Scores on the SDQ range between 0 and 40, with higher scores indicating higher potential of social and emotional disorders. The SDQ scores can be used as a continuous variable or as a categorical variable, with the scores categorized into three bands.

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<sup>1</sup> Collaborative for Academic, Social, and Emotional Learning. (2013a). CASEL schoolkit: A guide for implementing schoolwide academic, social, and emotional learning. Chicago, IL: Author

**Collaborative for Academic, Social, and Emotional Learning. (2013b). 2013 CASEL guide: Effective social and emotional learning programs — Preschool and elementary school edition. Chicago, IL: Author.**

When the three-banded categorization is adopted, a total point score within 0-11 range is regarded as “Normal,” 12-15 range is considered to be “Borderline,” while 16-40 is regarded as “Abnormal.” (More information about this tool can be found at <http://www.sdqinfo.org>)

## SOCIAL-EMOTIONAL WELL-BEING AND LEARNERS’ ACADEMIC PERFORMANCE

Evidence shows a strong positive link between learners’ social emotional development and academic progress. When learners are socially and emotionally well-adjusted, their chances of understanding and retention in the classroom increase. According to Weissberg and Cascarino (2013)<sup>2</sup>, “Positive learning environments help students learn and further develop social-emotional competencies; schools filled with socially and emotionally skilled students are more caring and safe.” And that “social and emotional skills are critical to being a good student, citizen or worker.” Studies have shown that social-emotional learning has significant effect on learners’ academic performance (Farrington et al., 2012; Sklad and colleagues, 2012; Durlak et al., 2011; Zins, Weissberg, Wang, & Walberg, 2004). Weissberg and Cascarino further cite that improved social and emotional skills resulted in fewer conduct problems, and reduced emotional distress as being among the evidence-based results of teaching SEL to elementary learners. They therefore advocate the inclusion of SEL in the curriculum of basic education classes (p.11).

This end line assessment, which is a follow up to the initial baseline assessment, is meant to determine how far the project has achieved its objective of enhancing the literacy, numeracy and social emotional development of the learners, who have been exposed to the ECR intervention outlined above. With the intervention just rounding off the first of its three-year cycle, this end line assessment is critical to ensuring that any gaps observed are addressed while the strong points are further strengthened in order to increase the gains for the beneficiaries beyond their unfortunate circumstances that brought them to the IDP centers in the first instance.

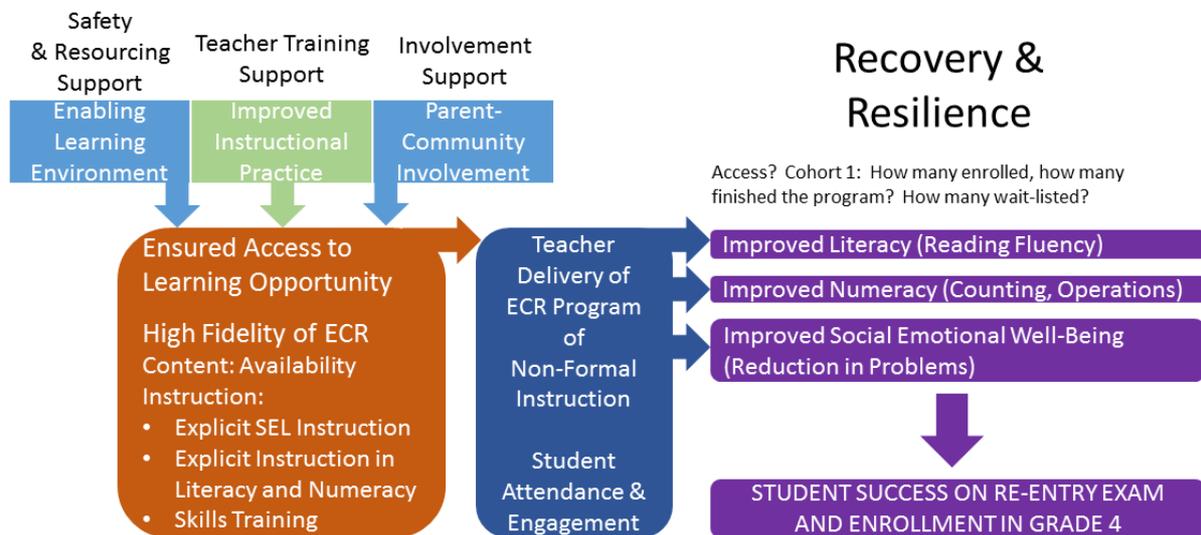
## PURPOSE OF THE END LINE ASSESSMENT EXERCISE

The end line assessment is meant to measure the effect of the ECR intervention program on the literacy, numeracy and social emotional development of the learners exposed to it. In

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<sup>2</sup> Weissberg, Roger P. and Cascarino, Jason. (2013). Academic learning + social-emotional learning — national priority, *The Phi Delta Kappan*, 95 (2), pp. 8-13, Accessed: 11-10-2015 at <http://www.jstor.org/stable/23617133> UTC; Farrington C.A. Roderick M., Allenworth E. Nagaoka, J, Keyes, T.S., Johnson, D.W. and Beechum, N.O. (2012). Teaching adolescents to become leaders – the role of non-cognitive factors in shaping school performance: a critical literature review. Chicago, IL: The University of Chicago Consortium on School Research; Sklad, M, Diekstra, R. De Ritter, M., Ben, J., and Gravesteyn, C. (2012) Effectiveness of school-based universal social, emotional and behavioral programs: Do they enhance students’ development in the area of skill, behavior and adjustment? *Psychology in the Schools*, 49(9) 892-909); Durlak, J.A., Weissberg, R.P., Dymnicki, A.B., Taylor, R.D. and Schellinger, K. (2011). The Impact of enhancing students’ social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82, 405-432; Zins, J.E., Weissberg, R.P., Wang, M.C. and Walberg, H.J. (EDs.) (2004). *Building academic success on social and emotional learning: What does the research say?* New York, NY: Teachers College Press.

broader terms, the assessment sought to determine the extent to which the intervention has succeeded in providing system supports that yield an enabling learning environment in non-formal learning centers, improved teacher instructional practices addressing both academic and social-emotional skills, and increased parental and community support for education in crisis and the resilience of their learners.



Therefore, as a follow up to the baseline assessment, the current exercise provides answers to the following questions:

1. What is the present status of the learners’ reading-related skills, attitudes and behaviors compared to what obtained at baseline?
2. What is the present status of the learners’ numeracy-related skills compared to what obtained at baseline?
3. What is the present status of teachers’ reading-related skills, practices, behaviors and attitudes compared to what obtained at baseline?
4. What is the present social and emotional status of learners compared to what obtained at baseline?

The design does not definitively enable ECR to determine whether the changes in performance between the time of pre-test and post-test can be attributable solely to its intervention, yet the findings will enable further ECR inquiry into the relationships between the variables affecting student performance, and into the adjustments to fidelity, dosage, intervention quality and adequacy of systems supports that might yield greater access to learning opportunities, better instruction and improved academic and social well-being. Pathways to recovery and resilience can then be better planned and prepared, particularly for the most vulnerable segments of the population.

## RESEARCH APPROACH

This end line assessment activity completes the pretest-posttest research design (absent a control group) that began with the baseline assessment conducted at the commencement

of the intervention. It seeks to provide a scientific basis for determining the gains of the intervention through the re-assessment of the recipients of the ECR intervention, using the various tools that were deployed during the baseline assessment exercise.

The exercise began with a comprehensive review of the assessment tools (ASER Reading and Mathematics assessment tools, social emotional learning tool (Strengths and Difficulties Questionnaire (SDQ)), and the Classroom Observation Protocol) in the light of the baseline report and the field experiences of the Non-Formal Learning Centers across the initial three project states. Aside from the need to fine-tune the assessment tools, the review exercise also afforded a few of the assessors and enumerators who were not involved in the baseline assessment to become acquainted with the tools and their administration for best results. The review was carried out by a team of enumerators and observers led by the Senior M & E Advisor.

To provide a good starting point, the group participated in a reflection session on the previously conducted baseline assessment. At this session, participants who were involved in the baseline assessment reported some of the challenges they faced during the exercise - some of which were due to the learning facilitators' inability to use scripted lesson, translating expressions from Hausa to English and vice versa. Other challenges include selecting underage IDP learners through random sampling from the class attendance register, disturbances from nearby classrooms which affected the classroom observation activities, and the reluctance of some facilitators to support the enumerators.

A review of the assessment instruments, ASER, SDQ, and Observation Tool revealed need for the following challenges in the previous baseline assessment tools to be addressed:

- Tools were submitted without enumerator's identity
- There were mix-ups in the identities of respondents to the questionnaires
- All items on the Learning Facilitator's Observation tool were not exactly the same for all enumerators

To remedy the observed deficiencies in the ASER assessment tools, participants were assigned to four sub-groups, asked to review the tools, and given the task to address their deficiencies. Two groups worked on the numeracy tools while the other two worked on the reading tools. The observations of the reviewers (some of which include the length of the paragraph and story level, and substituting six letter words with four letter words in the paragraph level) were incorporated by the M&E Specialist and his team. Participants also reviewed the Classroom Observation tool. An item that is meant to observe learners – "Asking the teacher questions" - was added to the Class Activities section of the tool.

Participants were also taken through the process of administering the assessment tools through a series of simulation activities before they visited Labour House Non Formal Learning Center, Yola to pilot test the tools. The following stood out among the observations made after the pilot testing: some of the children performed well in literacy while some other did well in numeracy. There were only a few instances where learners performed commensurably well in both literacy and numeracy. During the numeracy assessment, some

children had difficulty recognizing that the two symbols ( $/$  and  $\div$ ) both refer to the same concept of division.

## Population and Sample Description

The population for the end line assessment exercise includes all learners who have been attending the ECR established non-formal learning centers (NFLCs) since April 2015 in the project year one in 21 Local Government Areas (LGAs) in Bauchi, Adamawa and Gombe states. The end line survey targeted 29 centers; 21 of these centers (one from each of the project LGAs) are non-formal learning centers for children aged 6 to 14 years; three of them (one from each of the initial project states) are adolescent youth centers for learners of age 14 to 17 years; three of them (one from each of the initial project states) are youth centers for learners of age 14 to 17 years; and the last two are centers for the physically challenged (one from each of Gombe and Adamawa states).

For reasons of comparison, the sampled centers and cohort of learners in the baseline were visited during the end line and were thus included in the sample. The baseline sample consisted of 15 centers and 300 learners (i.e. 20 from each center). The sample learners were selected at random during the baseline but were not informed that they would take part in the end line assessment prior to the data collection at the end line. The 14 new centers included in the end line sample were also selected using a simple random sampling technique. In addition, random sampling was used to select both the learning centers and the learners who constitute the sample for this exercise. This procedure yielded 25 learners from each of the centers, which did not participate in the baseline assessment. Altogether, 650 learners were selected from 29 centers to participate in the end line exercise. The tables below show the population and sample count for every state based on the learning centers' enrollment records.

**Table 1: Population and Sample Count of States based on Learning Centers' Enrolment Records**

States	Female	Male	Grand Total
<b>Adamawa</b>	108	117	225
<b>Bauchi</b>	105	95	200
<b>Gombe</b>	112	113	225
<b>Grand Total</b>	<b>325</b>	<b>325</b>	<b>650</b>

**Table 2: Population and Sample of Learning Centers**

States	Population Estimate Counts		Sampled Centers' Counts	
	Centers	Center Enrollment	Centers	Center Enrollment
<b>Adamawa</b>	99	4,666	10	484
<b>Bauchi</b>	98	4,751	9	439
<b>Gombe</b>	99	4,904	10	499
<b>Total</b>	<b>296</b>	<b>14,321</b>	<b>29</b>	<b>1422</b>

### **Assessment Instruments**

In line with the approach adopted during the baseline assessment, ECR used four research instruments to collect end line assessment data:

1. ASER Instruments
  - a) Reading-Numeracy Assessment Tools (3 Types)
  - b) Enumerators' Guide: Administering the ASER Reading Test
  - c) Enumerators' Guide: Administering the ASER Numeracy Test
2. SDQ Instrument
3. Learners' Questionnaire
4. Classroom Observation Tool—Reading Lesson

### **ASER INSTRUMENTS AND ADMINISTRATION**

ASER assessment tools are designed for oral administration to individual children (whether in- school or out-of-school). The Reading Test is focused on the respondent's mother tongue or language of the immediate environment (which in the context of the ECR project is Hausa).

ASER instruments (Reading and Numeracy Tests) are designed to be used for rapid assessment survey. They are therefore short and are focused on assessing basic literacy and numeracy learning. The reading and numeracy tests are meant to assess the respondents' basic reading and numeracy skills. Learners' performance in ASER tests is therefore meant to provide data for informed deliberations and decision making on the provision of basic education at local, state or national levels.

**ASER Reading Test** has 5 levels: Zero, Letters, Words, Paragraph and Story

**ASER Math Test** has 6 levels: Zero, Number Recognition (1-9), Number Recognition (11-99), Addition, Subtraction, and Division.

#### **Administration of the Instruments**

The ASER reading and numeracy tests were administered to all the sample children irrespective of their age. However, since the tests assess the learners' abilities to read Grade

2 level text, and contain reading tasks that vary in difficulty, the performance of each child can be used to determine his/her reading or numeracy level.

### **The Reading Test**

The ASER Reading test has five levels: The Story level (highest), Paragraph Level, Word Level, Letter Level, and Zero Level. The test begins with two paragraphs under Paragraph Level. The child is asked to read either of the two paragraphs. If the child reads the paragraph fluently and with not more than three mistakes, then the child is asked to read a longer text which is at a higher level of difficulty (tagged Story Level). A child that cannot read the Paragraph Level text fluently or makes more than three mistakes is given the Word Level task – the reading of words. If the child still cannot read four out of the five given words correctly, he/she is tested on recognition of letters. A child that cannot recognize letters is said to be at Zero (literacy) level. A child that successfully performs a lower level task (e.g. Letter Recognition) is given another chance to try the immediate higher level task (Word Recognition) in order to fully ascertain his/her ability/inability to perform the task and place him/her at the correct level of reading ability.

### **The Numeracy Test**

The ASER-Numeracy Test has six levels: Division Level (Highest), Subtraction Level, Addition Level, Recognition of 10-99 Level, Recognition of 1-9 Level and Zero Level. The test has a similar format to the Reading Test. The test starts with a subtraction task (subtracting two-digit from two-digit with carry-over). A child executes this task successfully is given a division problem (dividing three-digit by one-digit with remainder). However, If the fails the subtraction task, he/she is tested on addition. If he succeeds, he/she is allowed to try the subtraction again; but if he/she still cannot do the subtraction successfully, he/she is taken to the recognition of two digit numbers (11 – 99). If the child succeeds in doing this, he/she is asked to try addition again. But if he/she cannot solve the addition problem, this also proves difficult; the child is tested on recognition of one digit numbers (1 – 9). As is the case with the Reading Test, a child that successfully performs a lower level task (e.g. Recognition of 10-99) is given another chance to try the immediate higher level task (Addition) in order to fully ascertain his/her ability/inability to perform the task and place him/her at the correct level of numeracy ability.

### **Strengths and Difficulties Questionnaire (SDQ) Instrument**

The Strengths and Difficulties Questionnaire (SDQ) is a behavioral screening tool. It consists of a 25-item questionnaire to be completed by learners, and an equivalent 25-item questionnaire to be completed by the parents/caregivers of these children (See copy in appendix). The 25 items include statements that touch on the five SEL competencies in the curriculum:

- 1) emotional symptoms
- 2) conduct problems
- 3) hyperactivity/inattention,

- 4) peer relationship problems and
- 5) pro-social behavior.

The test generates a total difficulties score that can be used to approximate a child's general well-being, from the deficits and challenges they report.

The five subscales are: Emotional Distress, Behavioral Problems, Hyperactivity and Attention Difficulties, Peer Interaction Difficulties, and Pro-Social Behavior. When the results of all the sub-scales are added up, they give the Total Difficulties Scale of a child. Data collected from the administration of the tool on the children and their parents or caregivers are used to determine the SEL status of each learner. Below is a breakdown of the outcomes of the data obtained from the sample children for each subscale, followed by a report the overall SEL status of each child based on the Total Difficulties Scale Score.

**Scoring SEL Data.** The SDQ contains 25 questions sorted into 5 sub-scales. Four of these scales indicate potential problems while one is strength-related. The end line learning assessment used these subscales and scoring to determine the child's specific problems and strengths.

The total difficulties score is the overall measure that is being compared with the baseline score to determine changes in mental health/well-being of the respondents consequent upon the ECR intervention. As with the baseline assessment, the pro-social scale scores are excluded because they indicate positive social behavior and are strength-based.

**Table 3: Rating Scales and Sub-Scales for SDQ**

SUBSCALE (RATED 0-2, MAXIMUM SCORE OF 10)	SCORE AND DESCRIPTION	NOTES
<b>Emotional symptoms subscale (Questions 1-5)</b>	<b>Student/Parent report:</b> 0-3: Normal behavior 4: Borderline abnormal behavior 5-10: Abnormal behavior	
<b>Conduct problems subscale (Questions 6-10)</b>	<b>Student/Parent or Teacher report:</b> 0-2: Normal behavior 3: Borderline abnormal behavior 4-10: Abnormal behavior	Question 7 reverse scored*
<b>Hyperactivity/inattention subscale (Questions 11-15)</b>	<b>Student/Parent or Teacher report:</b> 0-5: Normal behavior 6: Borderline abnormal behavior 7-10: Abnormal behavior	Questions 14 and 15 reverse scored*
<b>Peer relationship problems subscale (Questions 16-20)</b>	<b>Student/Parent report:</b> 0-2: Normal behavior 3: Borderline abnormal behavior 4-10: Abnormal behavior	Questions 17 and 18 reverse scored*
<b>Prosocial behavior subscale (Questions 21-25)</b>	<b>Student/Parent or Teacher report:</b> 6-10: Normal behavior 5: Borderline abnormal behavior 0-4: Abnormal behavior	
<b>Total Difficulties Score = summed scores of questions 1-20.</b> (Adapted original scoring from 40 to 20 points for binary responses).	<b>Student/Parent report:</b> 0-13: Normal behavior 14-16: Borderline abnormal behavior 17 and above: Abnormal behavior	Mean = 20

**Total Difficulties Score.** This is generated by summing scores from all the scales except the pro-social scale. The resultant score ranges from 0 to 40 total points. This choice was informed by, and is consistent with the methodology used at the base line and to, in the end, allow for comparison as this is one of the purpose of this end line assessment. We have the data to interpret in both ways, for the baseline information, and subsequently for this end line, and for eventual comparison scores, we are only presenting the total difficulties scores.

### **The Uses of the Strengths and Difficulties Questionnaire**

It has already been indicated in the baseline assessment report that data obtained with SDQ can be used for several purposes. However, the focus of the ECR project is to measure the impact of the SEL will focus on evaluating outcomes of the SEL contents of the intervention on the learners by comparing the data obtained during the baseline and end line assessment.

While the data obtained during this end line assessment may not necessarily attribute the improvement or otherwise in the children’s SEL to the sole effect of the intervention (for

several reasons already canvassed in the baseline report), it is expected to document the degree and pattern of change in the children’s social and emotional development over time.

This, as already suggested, will help to draw attention to the kind of help or clinical support that the children might need. More importantly however, it will provide an evidence-based position of ECR on the learners’ SEL competencies as the project responds to the indicator on such competences.

### Learner Interview Instrument

A Learner Interview Instrument was administered orally to learners after they had completed the ASER-reading and ASER-math tests. The purpose of the interview was to gather information about the input of the children’s home environments and the activities at the learning centers in the learners’ demonstrated reading and numeracy abilities.

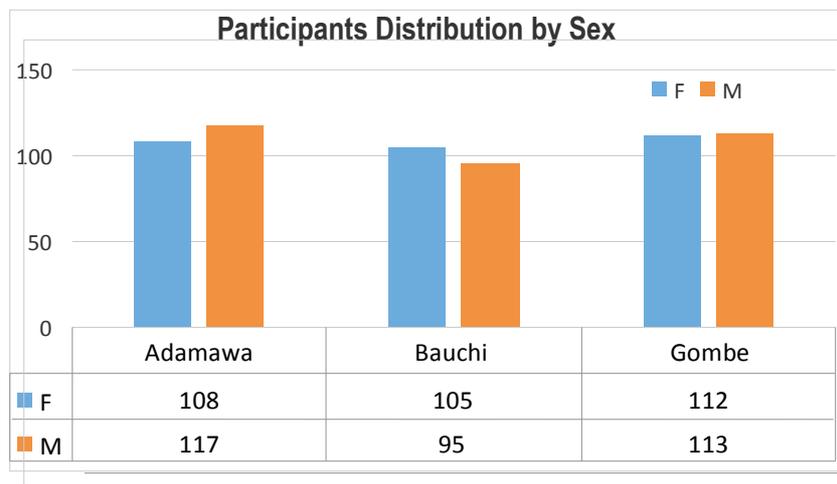
### Classroom Observation Instrument

The Reading Classroom Observation Instrument has four major parameters domains: teaching methods, instructional content, class activities, and assessment. The instrument provides a list of instructional strategies for teaching reading, engaging pupils, assessing pupil understanding, and providing feedback and corrective reinforcement. Observers recorded the observed reading lesson based on these parameters.

### Conduct of the End Line Assessment

**Figure 1: Participants' Distribution by Sex**

With the pilot testing over, the data collection exercise for the end line assessment took place in 29 non-formal learning centers across Bauchi, Gombe and Adamawa states. At each center, the data collection team tested and interviewed students, observed classroom lessons, and interviewed teachers, parents/caregivers. The



Annual Status of Education Report (ASER) tool was administered on learners in these learning centers to measure their learning achievements in reading and numeracy. The Strengths and Difficulties Questionnaire (SDQ) was also administered on the learners to measure their social emotional learning gains.

## FINDINGS

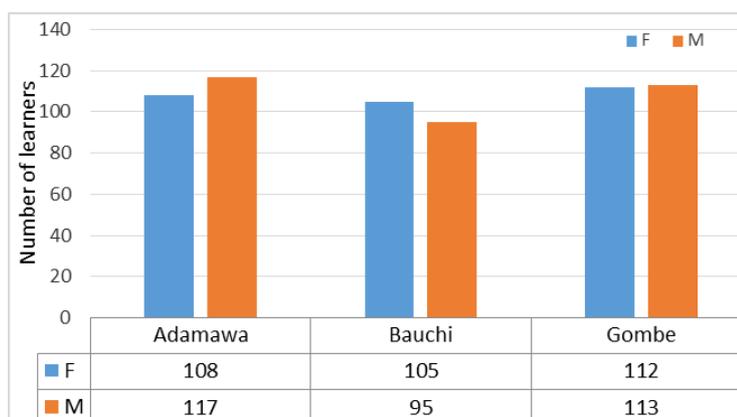
### Distribution of the Study Sample

The end line survey was conducted in 29 centers comprised of 21 Non-Formal Learning Centers (NFLCs) serving children aged 6 to 14 years; three adolescent youth centers for learners of age 14 to 17 years; three youth centers for learners of age 14 to 17 years; and two centers for the physically challenged. This sample represents roughly 10% of the (296) learning centers supported by the ECR project. All 15 learning centers that were visited during the baseline survey, comprising 11 non-formal learning centers, two youth centers and 2 adolescent girls' centers, were also included in the sample for this end line survey. The choice to increase the sample size by over 100% between baseline and end line assessment was informed by the need to use the end line to also establish the proportion of learners who can read and understand Grade two level texts. The choice of all the centers that form the sample were made through randomization (by balloting) during the enumerators training.

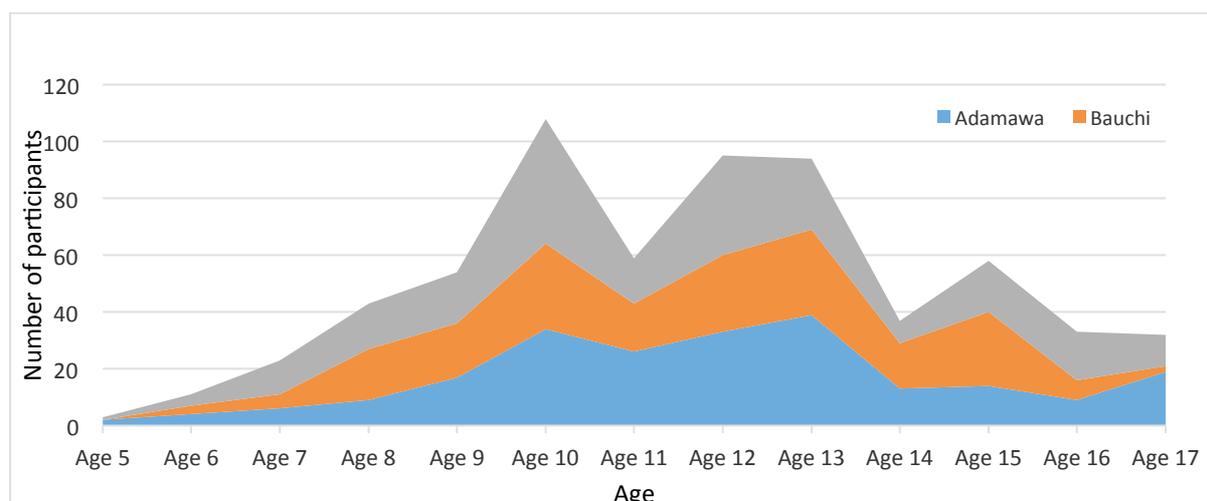
The 300 learners in the baseline assessment were also to be included in this end line assessment. However, in cases where a baseline participant could not be found in the centers at the time of end line data collection, he or she was replaced by another learner. In the end, 234 out of the 300 learners who participated in the baseline assessment were available during the end line assessment. Joining these 234 learners were another 416 learners (i.e. 66 who replaced the absent ones and another 350 chosen from the 14 centers that were not in the baseline assessment). Although the randomization process did not privilege any gender, the distribution of the sampled learners by gender shows some gender parity. Out of the 650 sampled learners (5 to 17 years old) 225 (108 female and 117 male) were from Adamawa State; 200 (105 female and 95 male) from Bauchi State and 225 (112 female and 113 male) from Gombe State.

**Figure 2: Participants Distribution by Sex**

The sampled learners were equally distributed across the two genders, as altogether, there were 325 (50%) male and 325 (50%) female participants from the three states. The composition of this sample compares well with the one used for during the baseline assessment, although larger.



**Figure 3: Participants Distribution by Age**



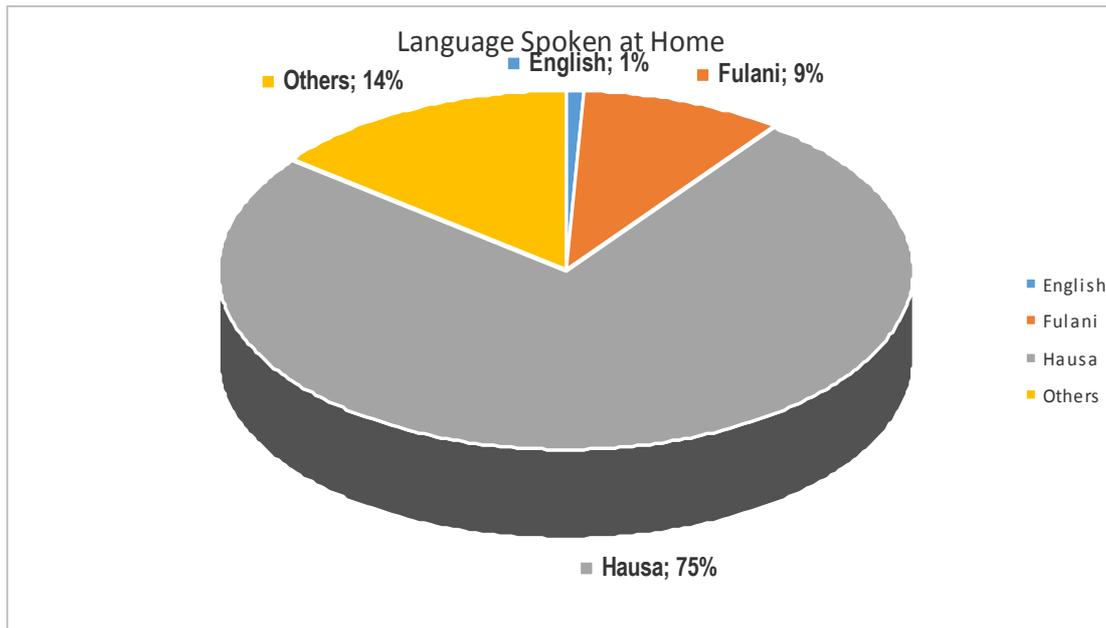
Similar to data obtained during the baseline, participants in this end line assessment were between the ages of 5 and 17. Although the assessment tools were designed for learners between ages 6 and 17, there were three 5-year-old ‘out of range participants’ among the sample. Generally, the majority of the sample were between the ages of 8 and 17 years. The bulk of the learners were either 10 (108), 12 (95) or 13 years of age (94).

For purposes of comparison, it is important to report the distribution of the learners in both the baseline and the end line assessments by gender. This is shown in Table 4 below.

State	Baseline			End Line		
	Male	Female	Total	Male	Female	Total
Adamawa	53	47	<b>100</b>	34	26	<b>60</b>
Bauchi	42	58	<b>100</b>	34	42	<b>76</b>
Gombe	60	40	<b>100</b>	60	38	<b>98</b>
<b>Total</b>	<b>155</b>	<b>145</b>	<b>300</b>	<b>128</b>	<b>106</b>	<b>234</b>

In the presentation of the findings, we present results on the totality of the sample in the end line survey involving all 650 learners surveyed. In addition, we also present a comparison of the findings in the baseline and in the end line assessments, focusing on the 234 learners who participated in both assessments. The former is to enable us respond to some indicators while the latter is to make us discern the impact of ECR interventions on the learners’ learning in the centers. The latter will be restricted to the learning achievements i.e. changes in the performance on the learners between the baseline and the end line assessments in reading, numeracy and socio emotional well-being of the learners.

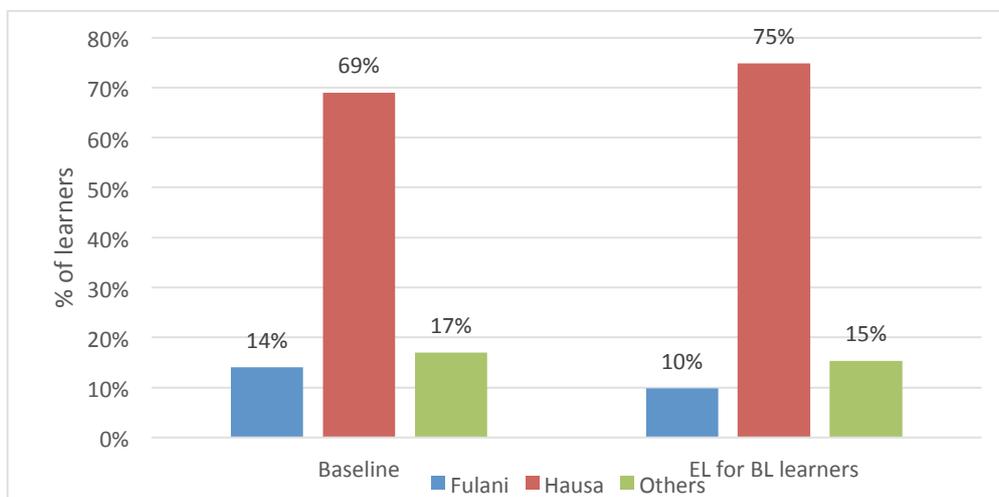
**Figure 4: Language Spoken at Home**



Some 75% of the learners who participated in this exercise were from Hausa-speaking homes. This represents a slight increase from the 69% who participated in the baseline assessment. Fulani speakers comprised 9% of the sample (marking a slight drop from 14% at baseline). Only 1% of the sample came from English speaking homes, and this profile of participant was absent at baseline. Approximately 14% of the sample students are speakers of other different languages, which also marks a drop from the 17% who participated in the baseline assessment. It is to be noted, however, that Hausa is the predominant language in the three states.

The argument could be made that the differences are due to the increase by one-half in new entrants taking part in the assessment. This necessitates a disaggregated comparison of the findings for those learners present in both assessments. Figure 5 below provides a quick comparison of linguistic backgrounds across pre- and post-test participants.

**Figure 5: Language Spoken at Home between Baseline and End Line**



As shown, the sampled learners are very similar linguistically and culturally, even though there seems to be a movement from Fulani and *others* to Hausa between baseline and end line assessments. This can be attributed to the fact that Hausa is a very common language along the learners and can very easily be adopted in any home.

## PERFORMANCE IN READING

There was a noticeable increase in the learners' reading performance compared to their performance during the baseline assessment. Less than 15% of the sample learners are still at zero level, compared to the performance during the baseline assessment when 47% those surveyed were unable to read letters or words. Over 25% of the sampled learners can recognize letters while over 30% are now at Reading level (paragraph and story levels). The table below shows the distribution of the 650 learners in reading at the end line assessment.

**Table 5: Assessment of Learners' Performance in Reading at End Line**

Reading	Female	Male	Total	Percent (%)
Zero	35	36	71	11%
Letter	101	74	175	27%
Word	96	100	196	30%
Paragraph	35	43	78	12%
Story	58	72	130	20%
<b>Grand Total</b>	<b>325</b>	<b>325</b>	<b>650</b>	<b>100%</b>

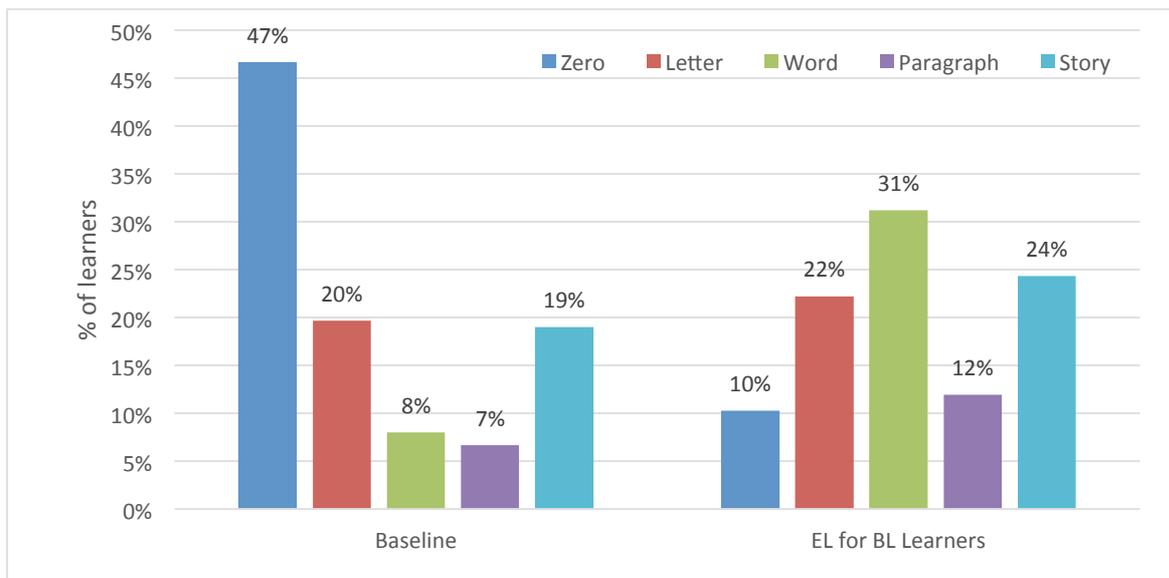
In comparison to the performance of learners who participated in both baseline and end line assessments, Table 6 below provides a summary of their performances in both assessments as it relates to reading.

**Table 6: Participant Reading Levels at both Baseline and End Line**

Reading Level	Baseline	Percentage	End line for Base line Learners	Percentage	Difference
Zero	140	47%	24	10%	-36%
Letter	59	20%	52	22%	3%
Word	24	8%	73	31%	23%
Paragraph	20	7%	28	12%	5%
Story	57	19%	57	24%	5%
<b>Grand Total</b>	<b>300</b>	<b>100%</b>	<b>234</b>	<b>100%</b>	

As the results above show, there is a clear improvement in the reading performance of learners from the baseline to end line. For example, while about half of the learners were at zero level i.e. they could not even recognize the letters of the alphabet at the baseline, only 24 (representing about on tenth) were still left at the zero level at the end line – a reduction of 36%. Even though the number of learners at the story level remains the same at the baseline and end line assessments, it is clear that in terms of proportion of learners, more learners (+5%) are located here at end line than at the base line, with similar gain at the paragraph level (+5%). Pre-post comparisons are visually depicted in Figure 6 below.

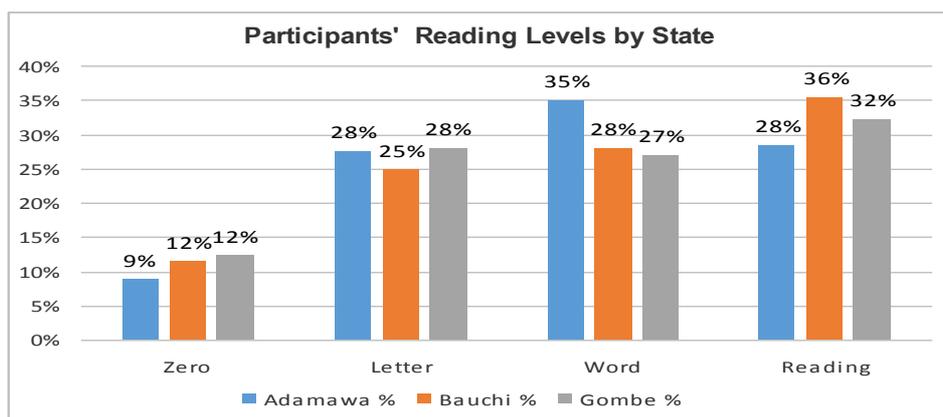
**Figure 6: Participant Reading Levels at Baseline and End Line**



**Disaggregation.** Next, we explore how the entirety of the 650 learners in the end line sample are performing in reading; and how they perform together with other variables. This analysis enable us discern reading performance of the learners and to report on specific program indicators.

**State.** First, let’s look at the performance of the learners, according to the different states in which the project intervened (see Figure 7 below).

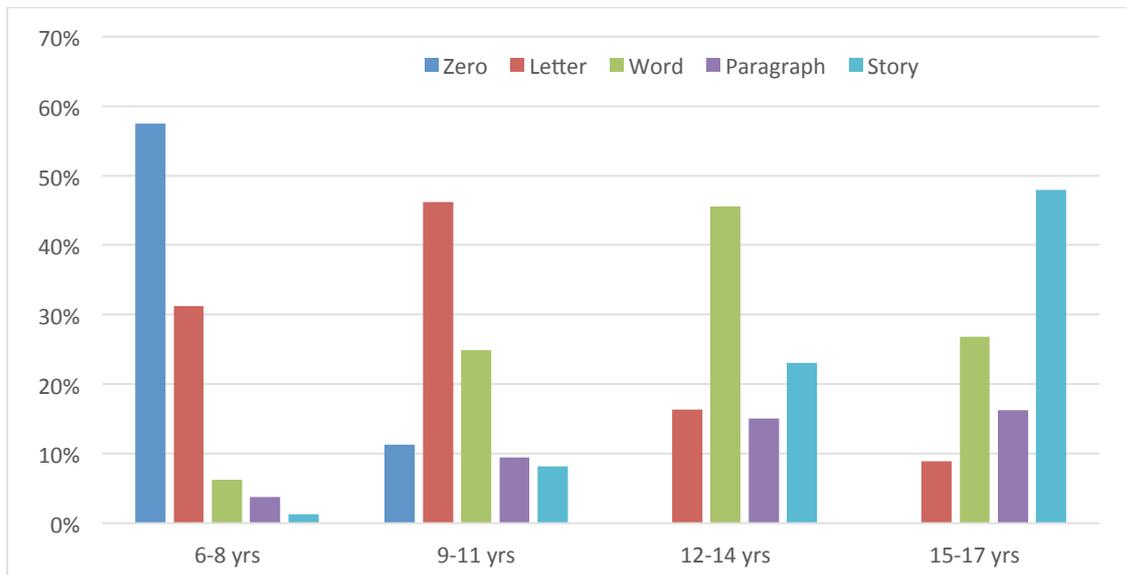
**Figure 7: Participant Reading Levels by State**



From this chart, we see that end line sample learners from Adamawa, Bauchi and Gombe have made gains in literacy compared to their performance during the baseline assessment, when the majority of the participants performed at zero level. A higher proportion of learners from Bauchi State performed at reading level (36%), followed by learners from Gombe State (32%) and Adamawa State (28%).

Age. Next, we explore how participants of different ages performed on the ASER reading assessment in Figure 8 below.

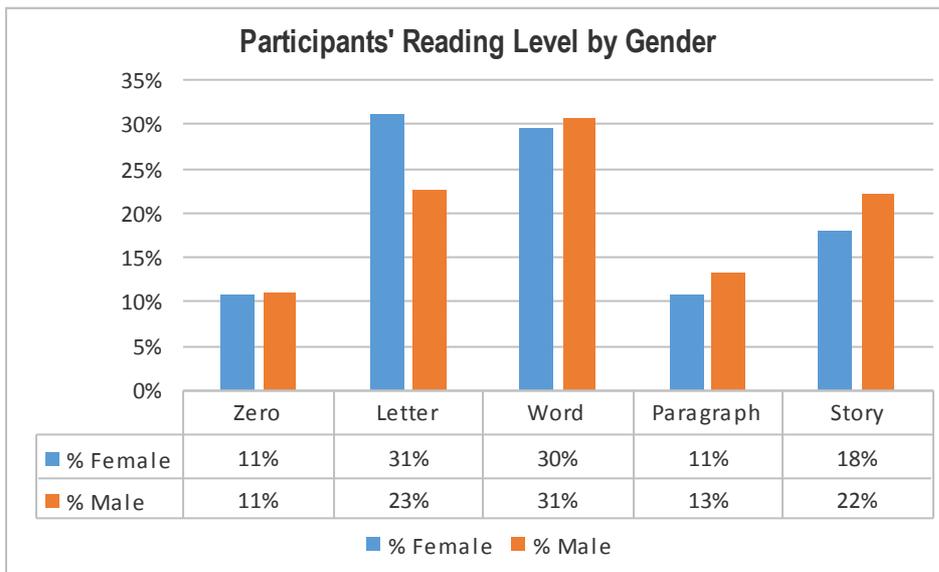
**Figure 8: Participant Reading Levels by Age**



As the graphs show, we find marked differences in reading skills across the different ages. While there is a reduction in the proportion of learners located at the zero level as age increases, there also seems to be a corresponding increase in the proportion of learners located at both the paragraph and the story levels of reading. At the word level, there is an increase in the proportion of learners from 6-8 years as well as an increase in 12-14 years old learners, while we note a reduction in the proportion of learners in the age group 15-17 years at that level. However, it might be argued that older learners are not staying at the word level, but are moving to either of the two upper levels (i.e. paragraph and story levels). Figure 8 shows that the age of the learners is a potent factor in the determination of the performance level at which they read.

Gender. Figure 9 enables us to examine the level of reading performance by gender.

**Figure 9: Participant Reading Levels by Gender**

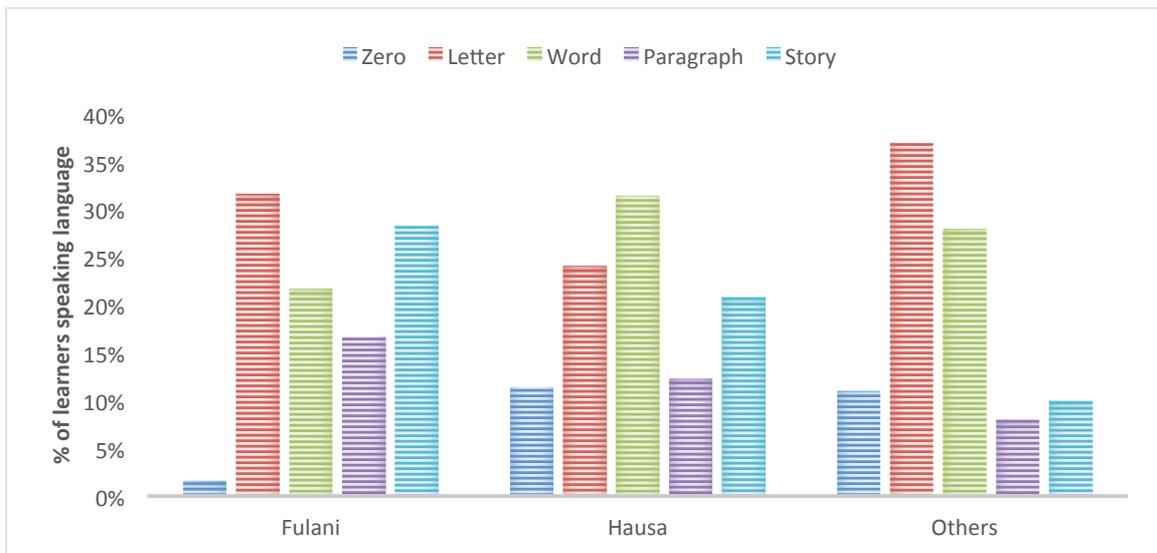


Generally, male participants performed better than their female counterparts across the various reading levels, with girls and young women lagging behind boys and young men with respect to reading skills acquisition at the paragraph and story levels.

**Additional Factors.** Our analysis of disaggregated data also includes a look at the similarities and differences across a broad range of cultural, economic and behavioral factors that might contribute to our understanding of reading performance gains presented above. Specifically, ECR examined home language (cultural), eating meals prior to instruction (economic proxy), and reading behaviors associated with dual enrolment and individual reading practice.

Home language. As seen in Figure 10 below, the participants originating from Hausa-speaking households do not necessarily perform better on ASER reading assessments than learners from other language backgrounds. For example, a slightly larger proportion of Fulani speakers perform at the paragraph and story levels than their Hausa counterparts. However, those from other home language backgrounds appear to perform at lower reading levels than their Hausa-speaking peers.

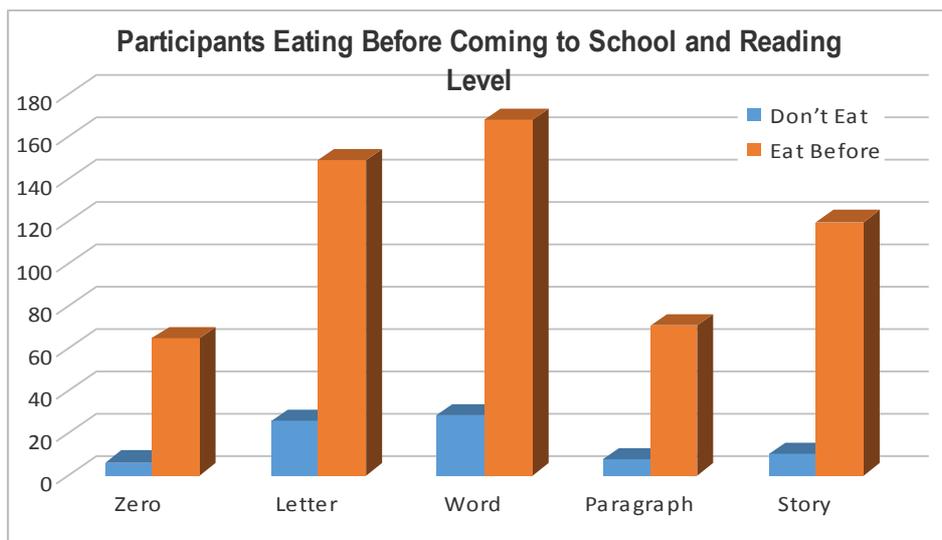
**Figure 10: Participants' Home Languages and Reading Levels**



The evidence in the chart above shows that the language spoken at home by the learners does not significantly affect their outcome in the reading assessment. This may not be unconnected with the fact that the reading lessons and assessment focus on Hausa reading, a language that almost all of the learners speak reasonably well.

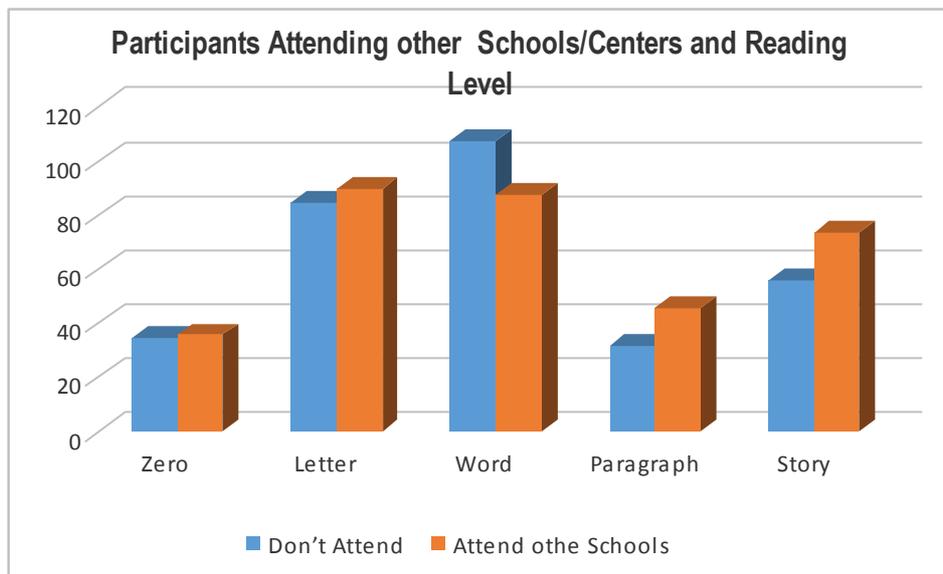
Eating Before Coming to School/Learning Center. As Figure 11 shows, children who reported that they eat before coming to school performed significantly better at all levels of literacy tested than those who claimed not to be eating before coming to school.

**Figure 11: Participants' Eating Before Coming to School and Reading Level**



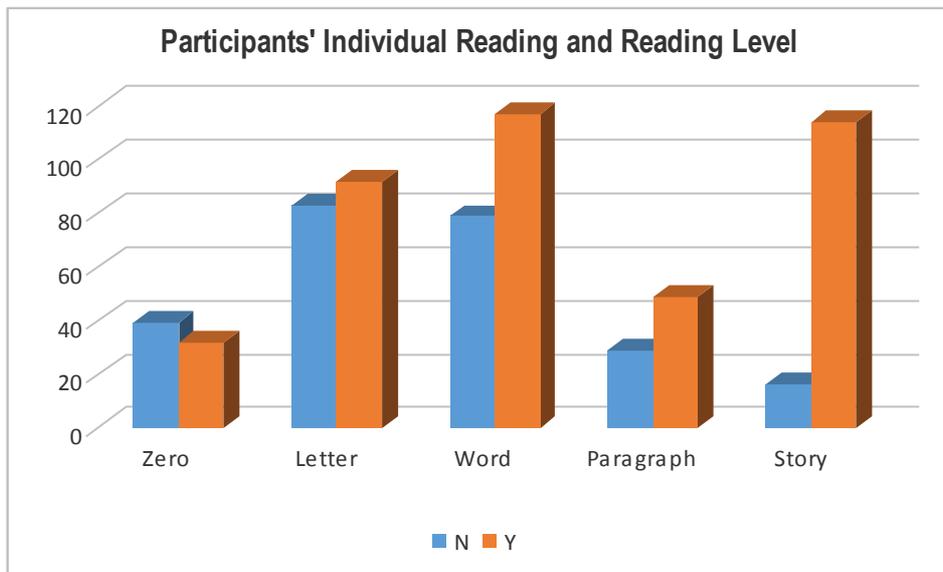
Dual Enrolment Learning. As Figure 12 shows, learners who claimed to be attending other schools/centers aside from the non-formal learning centers where the assessment took place performed a little better than those who do not, especially on the higher end of the Reading levels (paragraph and story levels), yet they appear to be more present proportionally at lower levels as well (zero and letter).

**Figure 12: Participants’ Attending Other School/Centers and Reading Levels**



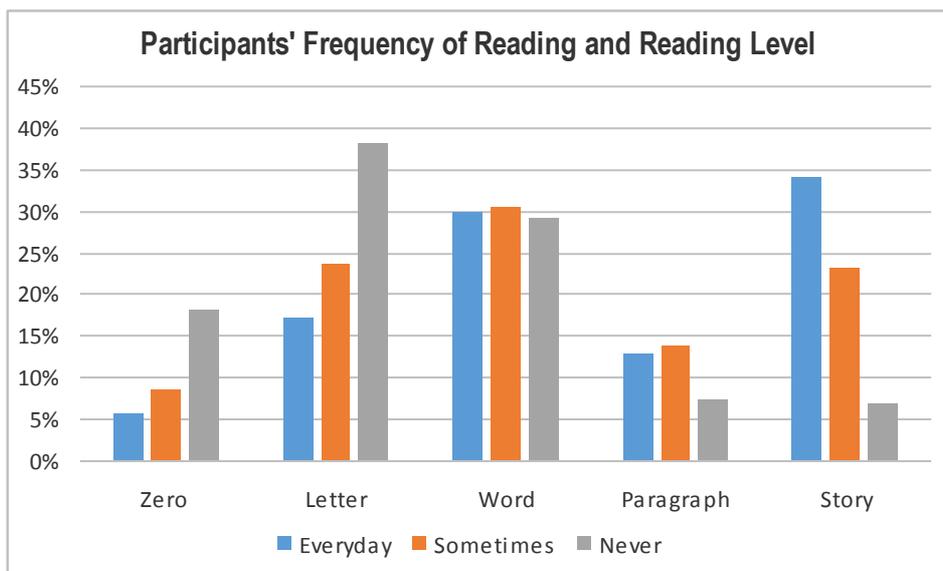
Individual Reading Practice. As Figure 13 below suggests, program participants who engaged in individual reading performed better than those who did not. The difference in performance becomes more pronounced at the Word, Paragraph and Story levels. This finding could be explained by the efficacy of the instructional approach adopted by ECR. Apart from direct instruction by the facilitator, who uses scripted lessons prepared by experts in reading, they (the facilitators) are regularly mentored to ensure that learners are presented with opportunities for private reading. The mentors are themselves experienced teachers who regularly provide supports and mentorship to the facilitators under the supervision of ECR staff.

**Figure 13: Participants' Individual Reading Practices and Reading Levels**



As Figure 14 below illustrates, participants who admitted to reading *everyday* were mostly located at the highest level of Reading tested (Story). They were followed by those who read *sometimes* and those who never read. The texts they read could be located in the classrooms or at their various homes. The facilitators are usually guided and mentored to give reading texts to the learners at every opportunity. This is an activity that will be reinforced during the second year of the project as the project has also finalized plans to introduce simple read aloud texts in the reading lesson and at different times when the learners are in school. This will further improve the reading performance level of the learners.

**Figure 14: Participants' Frequency of Reading and Reading Levels**



## PERFORMANCE IN NUMERACY

Table 7 below shows how the entire 650 learners that participated in the end line assessment are located in term of performance in numeracy during the end line assessment.

**Table 7: Participants' Numeracy Levels at both Baseline and End Line**

Numeracy	F	M	Total	%
Zero	29	24	53	8%
No. Recognition (1-9)	114	79	193	30%
No. Recognition (10-99)	97	120	217	33%
Addition	44	54	98	15%
Subtraction	37	40	77	12%
Division	4	8	12	2%
<b>Grand Total</b>	<b>325</b>	<b>325</b>	<b>650</b>	<b>100%</b>

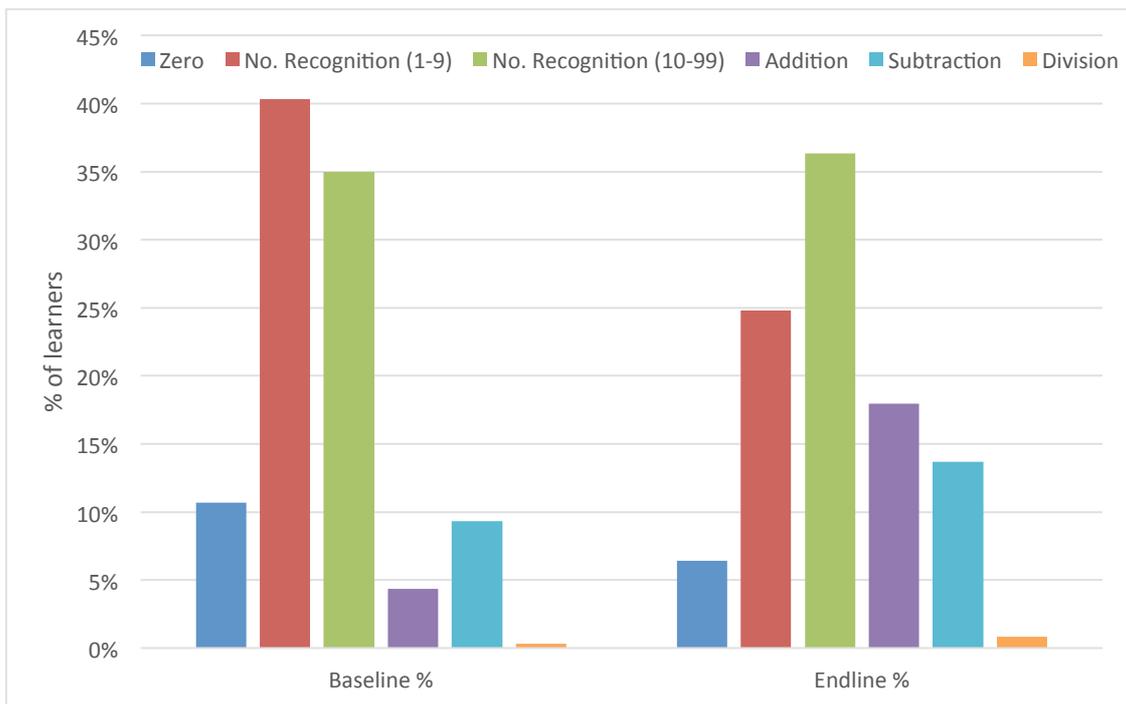
From the table, it is clear that about one-third of the learners are located in number recognition (10-99) level and another 29% located above that level. While the location of a third of the participants at number recognition 10-99 is comparable to the proportion (35%) of learners located at the same level at baseline, 29% located above it is an improvement in performance as only 14% were located above that level at baseline. We recognize that the argument can be made that the new entrants into the assessment at end line could be responsible for this improvement. Thus we follow the learners who were in both assessments as contained in the table below.

**Table 8: Participants' Numeracy Levels at both Baseline and End Line**

Numeracy Level	Baseline	Percentage	EL for BL Learners	Percentage	Difference
Zero	32	11%	15	6%	-4%
No. Recognition (1-9)	121	40%	58	25%	-16%
No. Recognition (10-99)	105	35%	85	36%	1%
Addition	13	4%	42	18%	14%
Subtraction	28	9%	32	14%	4%
Division	1	0%	2	1%	1%
<b>Grand Total</b>	<b>300</b>	<b>100%</b>	<b>234</b>	<b>100%</b>	

The evidence in Table 8 above indicates that, while at the baseline, over half (51%) of the learners (153) were located below the number recognition (10-99) level, less than half of that i.e. only 73 of the learners (31%) are located below that level at end line assessment. Similarly, only 42 learners had numeracy skill levels that exceeded number recognition at the baseline (13%) whereas a full 33% of the learners assessed at end line were able to complete addition, subtraction or division-related operations. Figure 15 below provides a clearer graphical representation of the proportional changes in numeracy skills from baseline to end line.

**Figure 15: Participants' Numeracy Levels at Baseline and End Line Assessments**

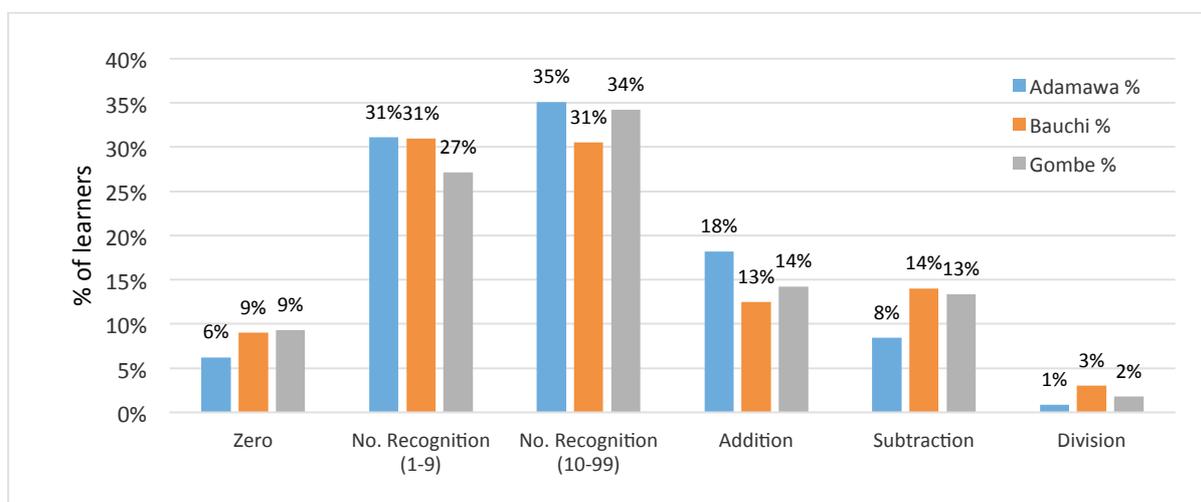


The findings lend support to a partial conclusion that some element of the positive change may be attributable to ECR's intervention and the efficacy of its methodology and other strategies – in the absence of a control group.

**Disaggregation.** We would like to now turn to an analysis of disaggregated numeracy data that explores variations and similarities across Nigerian states, genders and age groups.

State. We first examine how the 650 learners in the end line assessment are performing in numeracy across the three states served by the project intervention. Figure 16 graphically presents the comparison of student numeracy skill levels as assessed via the ASER.

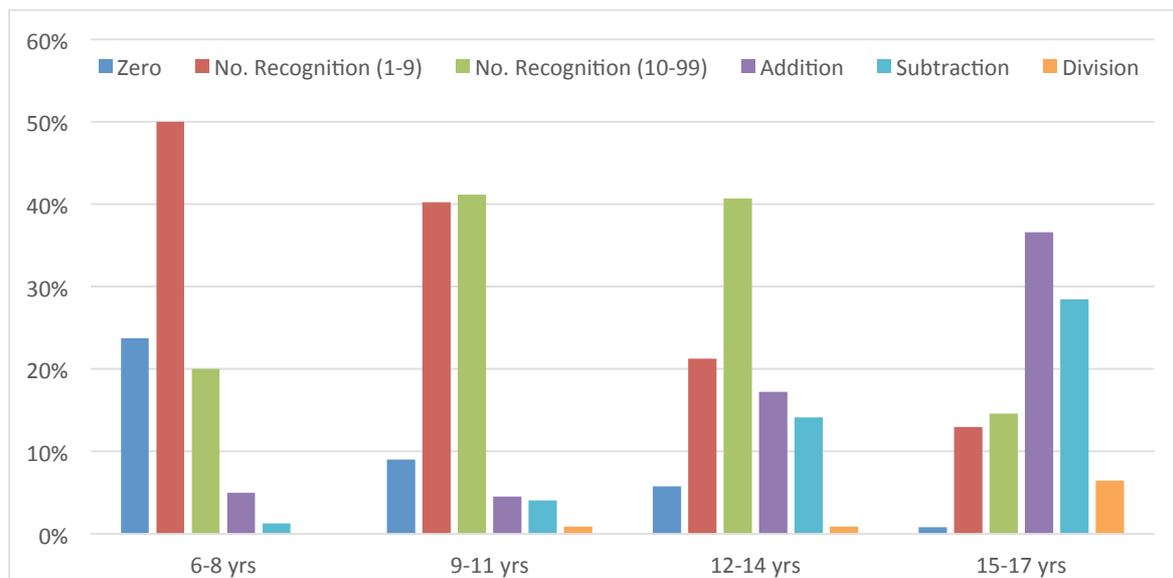
**Figure 16: Participants' Numeracy Levels by State**



As seen in the bar charts, we find relatively small differences in learner performance across the three regions. Approximately 31% of the learners in Adamawa and Bauchi performed at one-digit Number Recognition level, while 27% of the learners in Gombe performed at the same numeracy level – a difference of 4%. Similarly, between 31% and 35% of the learners from the three states are at two-digit Number Recognition level, with higher proportions of learners from Adamawa and Gombe states than their counterparts from Bauchi. If examining addition and subtraction skill proportions together, we find similarity in proportions across Adamawa (26%), Bauchi (27%) and Gombe (27%), with significant differences in the distribution pattern in Adamawa, where a lesser proportion of learners is performing subtraction (8%) in comparison to peers in Bauchi and Gombe (13-14%). Performance was generally low at the Division level with Bauchi leading among the three states. In general, the performance of the learners in this survey is better than their performance during the baseline assessment with the increase of learners on the Addition level from 4% to 15%; those on Subtraction level from 9% to 12%, and those on Division level from 0.3% to 2%. 8% of the learners are now at zero level, down from the 10.7% during the baseline assessment.

Age. In Figure 17, we examine numeracy skill level with respect to three-year age bands beginning with 6-8 year olds, and ending with 15-17 year olds.

**Figure 17: Participants' Numeracy Levels by Age**

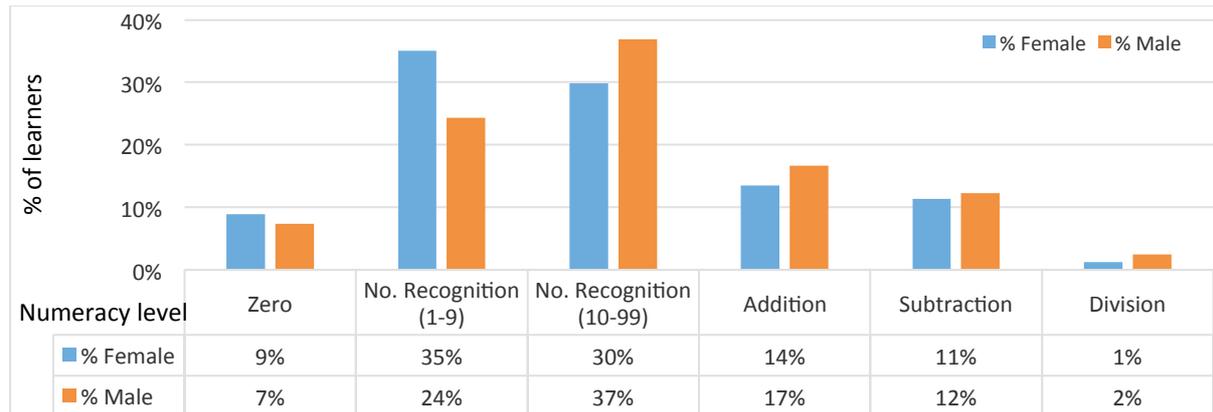


As the graphic indicates, most of the learners in the age groups of 6-8 year olds, 9-11 year olds and 12-14 year olds are located in Number Recognition levels. The mode or most commonly recorded numeracy level is Number Recognition 1-9 (half of the 6-8 year olds); and Number Recognition 10-99 (over 40% of each of the 9-11 year olds and the 12-14 year olds). In the 12-14 year olds by 12-14 however, we see further gains to right of the mode, and a significant reduction to the left. We see significant growth in addition and subtraction levels with significant declines in Zero and Number Recognition 1-9, although the modal value and proportion is relatively unchanged. In the age group 15-17 years, learners are mostly located in the upper sub-skill levels of numeracy. The data clearly shows that learners' numeracy skills are improving with age. It is also evident that the proportions of

the learners located in Addition and Subtraction levels increase with age. However, there is still a generally low performance in Division level across all age groups.

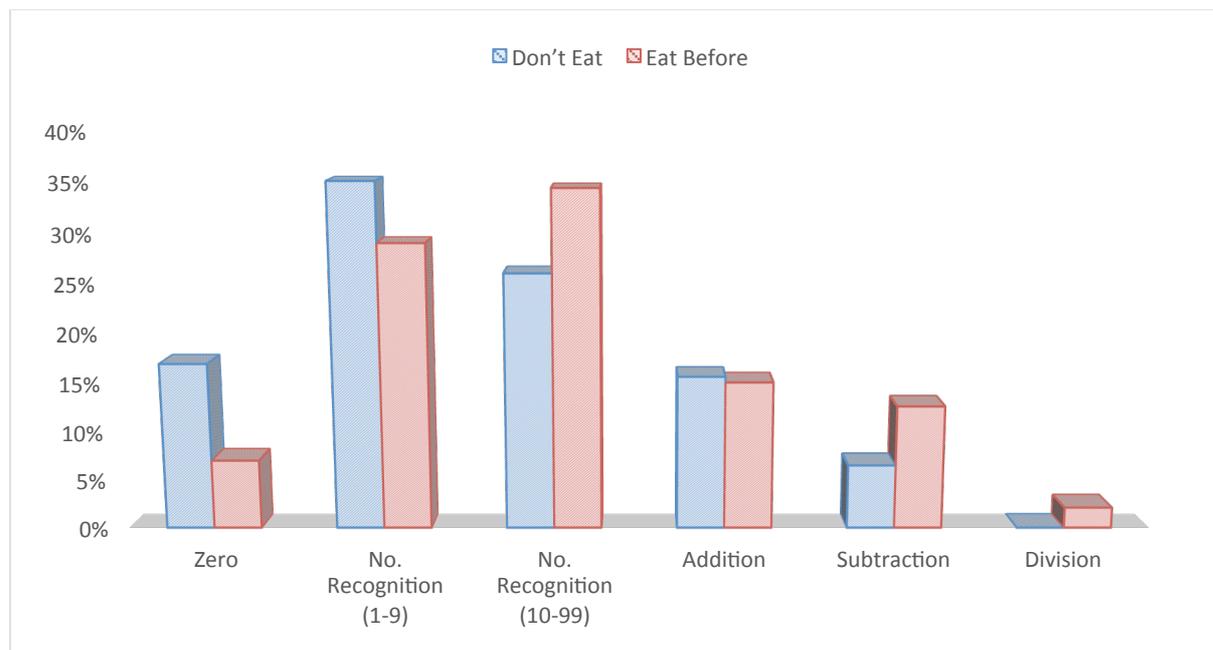
Gender. The male participants performed better than their female counterparts in 2-digit Number Recognition, Addition, Subtraction and Division, just like they did during the baseline assessment, but with increased margin. The performance of the learners who were tested at both the baseline and the end line assessments

**Figure 18: Participants' Numeracy Levels by Gender**



Eating Meals Prior to School. Participants who eat before going to school performed significantly better than those who do not by very wide margins at all levels of the numeracy test. There is a strong correlation between the children's performance in numeracy and their eating pattern. That those who admitted to eating before coming to school performed far better than those who were not eating before coming to school across all the numeracy sub skills is not surprising.

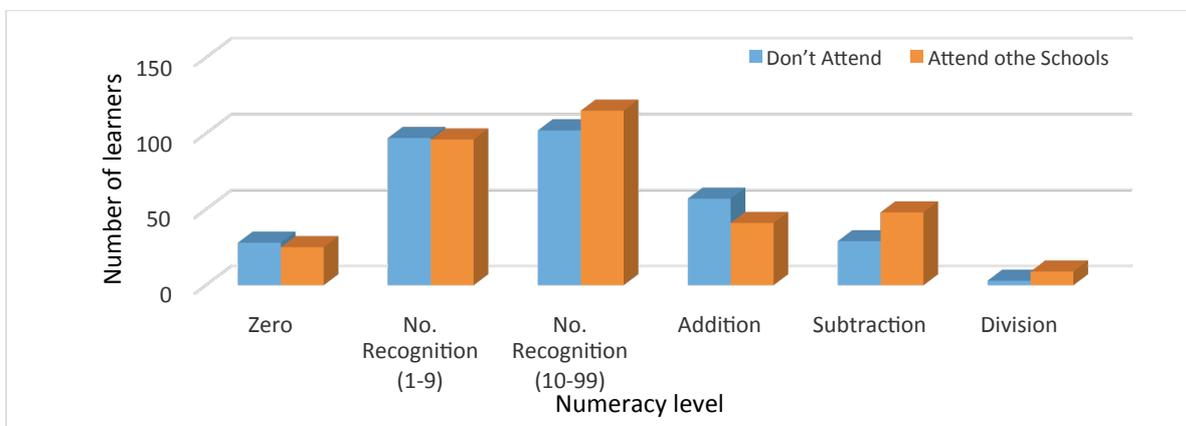
**Figure 19: Participants' Eating Habits and Numeracy Levels**



What is however surprising is that the trend is still the same even for those who are located in the zero level – many of the learners in the zero level claim to eat before coming to school. Given the IDP status of the participants, this may not be a strong indicator of the children’s (or their parents’/caregivers’) socio-economic status. However, it did show how much attention was being given to the basic need of the IDPs by those concerned, since the intervention did not include school feeding. And it also shows the importance of feeding for the children’s educational development. Thus the call can be made for the feeding program of ECR to be intensified.

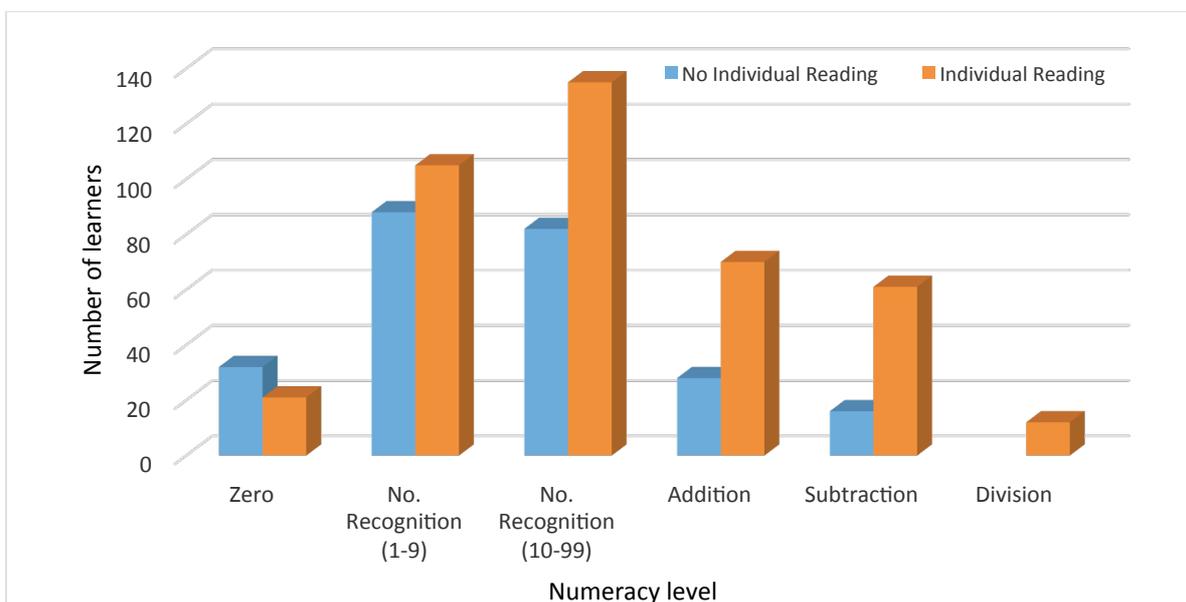
Dual enrolment in other programs. Participants who attend other schools/centers besides the non-forma learning centers on the four higher levels of Numeracy tested. Surprisingly, those who do not attend other schools/centers out performed those who do in Addition.

**Figure 20: Participants’ Attendance at Other Schools/Centers and Numeracy Levels**



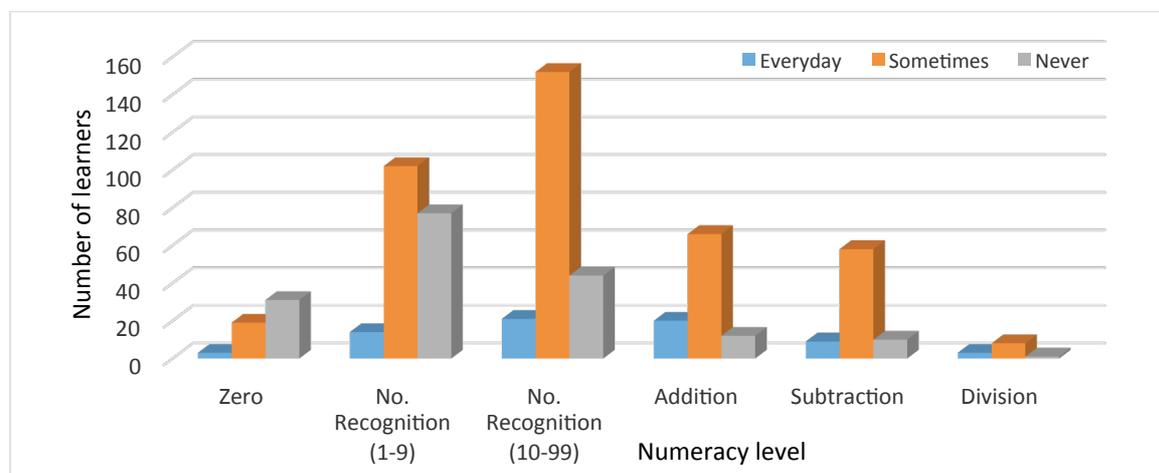
Individual Reading Practice. Those who admitted to engaging in individual reading performed better than those who do not read. Learners who do not engage in individual reading failed to perform at the Division level.

**Figure 21: Participants’ Individual Reading Practices and Numeracy Levels**



Participants who read ‘sometimes’ performed better across the top five Numeracy levels. Curiously, those who claimed to be reading everyday were outperformed by those who never read ‘every day’.

**Figure 22: Participants’ Frequency of Reading and Numeracy Levels**



## CLASSROOM OBSERVATION

The classroom observation instrument provides a list of instructional strategies for teaching reading, engaging pupils, assessing pupil understanding, and providing feedback and corrective reinforcement. Observers, who were trained enumerators in the assessment, observed the lesson and recorded whether they observed the center facilitator<sup>3</sup> (teacher) utilizing these strategies and materials while teaching the children) and scored the facilitator on a three-point scale from 1 (observed “Never”), 2 (observed “Sometimes”) and 3 (observed “Most of the Time”), and then averaged the score.

In handling the data generated through classroom observation, ECR adhered to the TWG-approved standard for effective performance. The standard prescribes the criteria to be used in assessing teachers’ performance as well as set the minimum threshold for each criterion. The table below briefly describes the criteria and the associated thresholds.

**Table 9: Teacher’s Performance Assessment Criteria**

Section	Title/Description	Weight % (overall)	Minimum Threshold
<b>Section A</b>	General teaching practice	15	9
<b>Section B</b>	Teachers’ activities	20	12
<b>Section C</b>	Learners’ activities	30	18
<b>Section D</b>	Assessment	10	6
<b>Section E</b>	Social & Emotional Environment	10	6
<b>Section F</b>	Records	15	8
<b>Total</b>		<b>100</b>	<b>64</b>

<sup>3</sup> The Learning Facilitator is the nomenclature in the non-formal education setting used to denote the teacher in the formal school setting. The two – facilitator and teacher are used interchangeably in this report

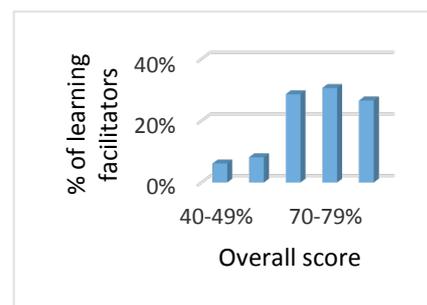
However, the observation instrument, which had been designed and used for the baseline does not have Sections E and F; and because of the need for comparison, we decided to stay with the instrument as used at baseline. Consequently, the analysis presented here is based on the assessment scores of 75 for Sections A, B, C and D, with the minimum threshold of 50 (60%). Another important criteria is that a facilitator (teacher) scoring 80% overall (e.g. a score exceeding the total minimum threshold), MUST also attain the minimum threshold score in each of the assessment sub-areas in order to be considered proficient. Consideration of these five conditions informs the following analysis presented in tables and graphs.

**General teacher-facilitator performance and proficiency.** Below is the general performance of the learning facilitators in the end line assessment. To arrive at the individual facilitator’s score (%) the total score in each of the item under each assessment area (1, 2 or 3) are summed up and percentage computed. Table 10 below shows a summary of the facilitators’ score percentages and the distribution of total scores they received across the three states.

**Table 10: Summary of Facilitators' Performance (%)**

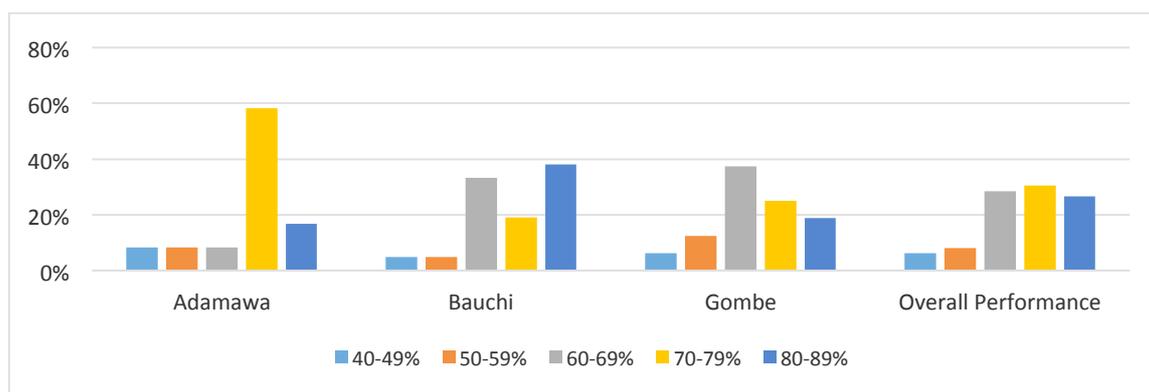
Range	Adamawa	Bauchi	Gombe	Overall Performance
40-49%	8%	5%	6%	<b>6%</b>
50-59%	8%	5%	13%	<b>8%</b>
60-69%	8%	33%	38%	<b>29%</b>
70-79%	58%	19%	25%	<b>31%</b>
80-89%	17%	38%	19%	<b>27%</b>
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Figure 23: Facilitators' General Performance**



With over 85% of the teachers scoring above 60%, we see that the performance level is good in general terms. There are between 10% (Bauchi) and 19% (Gombe) of facilitators who clearly do not meet the standards for proficiency set by the Ministry. When one factors in the facilitators scoring between 60-69%, we find that 24% of Adamawa facilitators, 43% of Bauchi facilitators and 57% of Gombe facilitators are marginally above standard. More positively, Figure 25 illustrates that Adamawa enjoys the largest proportion of proficient facilitators.

**Figure 24: Facilitators' Overall Performance on Various Criteria by State**



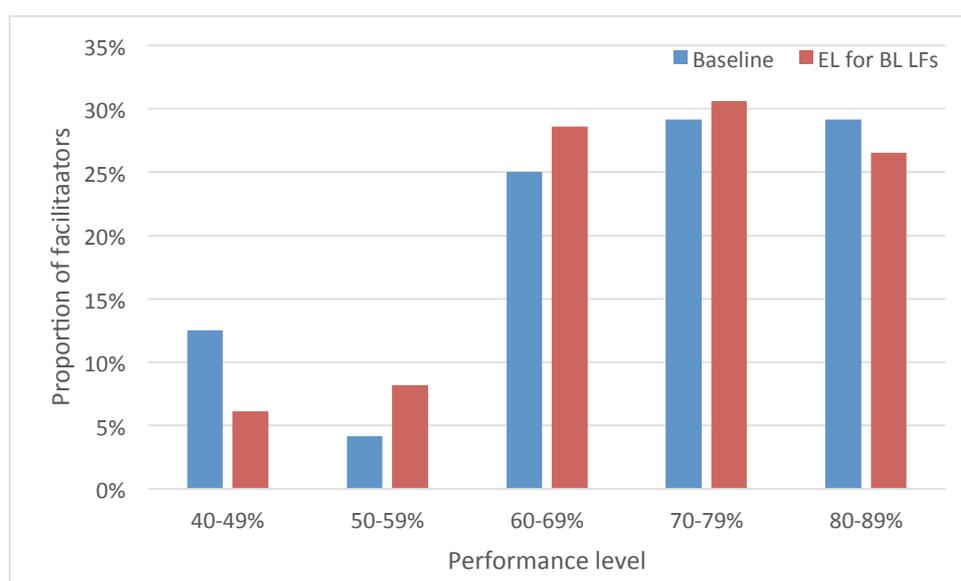
It is equally of interest to examine the progress of facilitators in improving instructional practice by comparing classroom observations taken at end line with those recorded at baseline. At baseline, 36 observation sheets were collected for the survey, while only 24 were collected at end line from these same centers. The scores of those who participated in both assessments are summarized in Table 11 below.

**Table 11: Summary of Facilitators' Performance (%) at Baseline and End Line**

Range	Baseline	EL for BL LFs
<b>40-49%</b>	13%	6%
<b>50-59%</b>	4%	8%
<b>60-69%</b>	25%	29%
<b>70-79%</b>	29%	31%
<b>80-89%</b>	29%	27%

Using the same methods, we find that the facilitators who clearly perform below minimum standard has fallen 3 percentage points from 17% at baseline to 14% at end line, although the proportion of “marginally-performant” facilitators falling within the 60-69% band has increased 4% from 25% at baseline to 29% at end line. The proportions shown in the table shows that the performance of the teachers is marginally better at the end line than before at baseline assessment. This modest but important gain, again, could be attributed to the quality of training, supervision and mentorship that the ECR project is providing for these teachers. It must be kept in mind that the period of intervention for Cohort 1 was very brief. The summary is further explicated visually in Figure 23 below.

**Figure 25: Learning Facilitators' Performance at Baseline and End Line**



**Specific Classroom Practices.** Further break down of the scores provided in Table 12 below shows that facilitator performance actually dropped by .13 on the mean score for Teaching Methods and 0.01 for *Assessment* and rose by a mere 0.07 under *Instructional Contents*. Interestingly, *Class Activities* picked up with an increase of 0.62 in the mean score over their baseline performance.

**Table 12: Facilitators' General Performance**

Criteria	Mean Score	Mean Score %	Baseline Mean	Difference
<b>Teaching Methods</b>				
Presents the objectives of the lesson	1.73	58	1.97	-0.24
Improvises/uses instructional materials	1.78	59	2.51	-0.73
Uses the relevant scripted lesson	1.53	51	1.91	-0.38
Manages the time well	1.78	59	1.80	-0.02
Demonstrates good class control	1.37	46	1.58	-0.21
Responds to student questions	1.71	57	2.06	-0.35
Provides explanation	1.49	50	1.89	-0.40
Gives classwork	1.80	60	1.78	+0.02
Concludes lesson with summary	2.08	69	2.19	-0.09
Praises or compliments students	1.90	63	1.33	+0.57
Criticizes, scolds, beats or punishes	1.78	59	2.67	-0.89
Read aloud to students	1.78	59	1.17	+0.71
Demonstrates reading or writing skills	1.86	62	1.56	+0.30
<b>Sub-Score</b>	<b>1.74</b>	<b>57.85%</b>	<b>1.87</b>	<b>-0.13</b>
<b>Instructional Content</b>				
Pronounce sounds of letters	1.69	56	1.31	+0.38
Write letters	1.67	56	1.53	+0.14
Associate words with letters	2.02	67	1.61	+0.41
Discuss meaning of vocabulary words	2.04	68	2.39	-0.35

Criteria	Mean Score	Mean Score %	Baseline Mean	Difference
<b>Blend letter-sounds</b>	1.92	64	1.75	+0.17
<b>Read printed material or book</b>	2.20	73	2.43	-0.23
<b>Answer questions or draw pictures</b>	2.31	77	2.26	+0.05
<b>Create or write own texts</b>	2.16	72	2.23	-0.07
<b>Sub-Score</b>	<b>2.00</b>	<b>66.63%</b>	<b>1.93</b>	<b>+0.07</b>
<b>Class Activities</b>				
<b>Listening to teacher read out loud</b>	2.24	75	1.17	+1.17
<b>Reading out loud together (choral)</b>	2.33	77	1.29	+1.03
<b>Reading out loud to another student (paired)</b>	2.51	84	2.54	-0.03
<b>Reading independently</b>	2.47	82	2.29	+0.18
<b>Asking questions from the teacher</b>	2.43	81	NA	NA
<b>Answering teacher's questions</b>	2.37	79	1.53	+0.84
<b>Writing on blackboard, paper,</b>	2.27	75	1.78	+0.49
<b>Sub-Score</b>	<b>2.37</b>	<b>79%</b>	<b>1.75</b>	<b>+0.62</b>
<b>Assessment</b>				
<b>Asking questions during the lesson</b>	2.08	69	1.42	+0.68
<b>Monitoring/observing student</b>	1.92	64	1.83	+0.09
<b>Listening to individual</b>	1.82	60	1.83	-0.01
<b>Using a reading assessment tool</b>	2.06	69	2.83	-0.76
<b>Sub-Score</b>	<b>1.97</b>	<b>65.5%</b>	<b>1.98</b>	<b>-0.01</b>

As both the tables and graphs conclude, ECR facilitators are still generally low on all the criteria for assessing classroom practice (65.5%), which falls below the minimum of 67%. Facilitator performance also falls below the 67% minimum threshold in *Teaching Methods*.

What may be concluded from this presentation is that program facilitators have introduced participatory classroom activities that emphasize reading skill development and positive behaviour (e.g. rise in use of praise (+0.57) and major decline in scolding and punishment (-0.89). Yet observers report relatively low use of scripted lessons (1.53), provision of explanation (and feedback) (1.49), and control (management) of class (1.37). This suggests that further teacher professional development is needed to bring more teachers above proficiency standards, raise time-on-task, improve the quality of reading instruction, and increase teacher feedback. Recent research again emphasizes the importance of explicit direct instruction in reading skill acquisition, and the strong impact of effective feedback and continuous assessment on learning outcomes generally.

**Facilitators' Performance on the Four Areas of Instructional Practice.** We now turn to a further disaggregation of facilitator instructional performance across practice areas, by state. Table 13 below provides the sub-score proficiency rates for facilitators evaluated in Adamawa, Bauchi and Gombe. The table indicates how facilitators stand in terms of the number of criteria in which they score "green" – above minimum standard – and the proportion of facilitators from each state who pass one or more of the minimum standards. A total of five "green" scores is possible, reflecting above-threshold scores in any of the four sub-areas of instructional practice, as well as a fifth "green" for surpassing thresholds in all areas.

**Table 13: Facilitators' Performance Level in all Assessment Criteria by State**

State	General Teaching Principles		Teachers' Activities		Learners' Activities		Assessments	
	Green	No Green	Green	No Green	Green	No Green	Green	No Green
<b>Adamawa</b>	83%	17%	83%	17%	92%	8%	83%	17%
<b>Bauchi</b>	71%	29%	90%	10%	95%	5%	90%	10%
<b>Gombe</b>	75%	25%	75%	25%	88%	13%	81%	19%
<b>Overall</b>	76%	24%	84%	16%	92%	8%	86%	14%

In this table, we find that 83% of Adamawa State facilitators performed above the minimum threshold in *Teaching Methods*, followed by Gombe State (75%) and Bauchi State (71%). Bauchi State tops the list on this criterion of *Teachers' Activities* with 19 (90%) facilitators meeting or surpassing the minimum threshold of performance. Adamawa State follows with 10 (83%) while Gombe has 12 (75%). Bauchi again has the best performance in *Learners' Activities* (95%), followed by Adamawa State (92%) and Gombe (88%). In the *Assessment* practice sub-category, 19 (90%) of Bauchi State's facilitators again met or surpassed the minimum threshold, followed by Adamawa State's 10 (83%) and Gombe State's 13 (81%).

Table 14 below shows how facilitators stand in terms of the number of criteria in which they score "green". The evidence in the table below shows that overall, 67% of the learning facilitators have green in each of the five assessment criteria. Adamawa State performed best with 75% of facilitators meeting or surpassing the minimum threshold of performance in all the criteria, ahead of Bauchi (67%) and Gombe (63%). As indicated at the beginning of this section, meeting or surpassing the minimum threshold on ALL the four criteria is what counts as meeting the standard. As a result, Adamawa State performed best in learning facilitation, having produced the highest number of facilitators that met or surpassed the minimum threshold of performance in the four criteria.

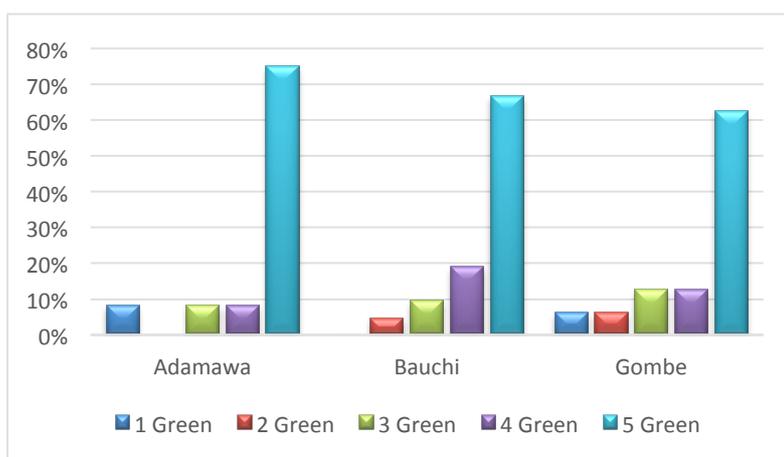
**Table 14: Facilitators' Meeting or Surpassing Minimum Standards by State**

Facilitators Meeting or Surpassing Minimum Standard on All Criteria									
Number of Greens	Adamawa		Bauchi		Gombe		Grand Total		
<b>1 Green</b>	1	8%	0	0%	1	6%	2	4%	
<b>2 Green</b>	0	0%	1	5%	1	6%	2	4%	
<b>3 Green</b>	1	8%	2	10%	2	13%	5	10%	
<b>4 Green</b>	1	8%	4	19%	2	13%	7	14%	
<b>5 Green</b>	9	75%	14	67%	10	63%	33	67%	
<b>Grand Total</b>	12	100%	21	100%	16	100%	49	100%	

These results are further illustrated in Figure 26 below.

**Figure 26: Facilitators' Meeting or Surpassing Minimum Standards by State**

In summary, teacher professional development can use additional strengthening to ensure fidelity of implementation of the ECR interventions. More attention will need to be paid to facilitators' ability to differentiate instruction and interventions that meet the needs of struggling students with lagging literacy, numeracy and social-emotional skills. And it is the latter set of skills towards which our report now turns.



It is expedient to show how this facilitators' performance relate to learners' levels in numeracy and reading. Table 15 below shows how the performance of learners in reading and in numeracy relates to the facilitators' performance levels.

**Table 15: Relating Facilitators' Performance Level with Learners Levels in Reading and Numeracy**

Attribute	Level	Adamawa	Bauchi	Gombe	Overall
Facilitators' Performance Level	1 Green	8%	0%	6%	4%
	2 Green	0%	5%	6%	4%
	3 Green	8%	10%	13%	10%
	4 Green	8%	19%	13%	14%
	5 Green	75%	67%	63%	67%
	<b>Grand Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
Learners' Performance Level in Reading	Zero	9%	12%	12%	11%
	Letter	28%	25%	28%	27%
	Word	35%	28%	27%	30%
	Paragraph	14%	10%	12%	12%
	Story	14%	26%	21%	20%
	<b>Grand Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
Learners' Performance Level in Numeracy	Zero	6%	9%	9%	8%
	No. Recognition (1-9)	31%	31%	27%	30%
	No. Recognition (10-99)	35%	31%	34%	33%
	Addition	18%	13%	14%	15%
	Subtraction	8%	14%	13%	12%
	Division	1%	3%	2%	2%
<b>Grand Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	

From the table above, while the learning facilitators in Adamawa appear to be the best, with three-quarters of them on five Green performance level, the performance of learners in the state does not seem to show similar trend. For example, only 14% and 1% of the learners in the state were at the highest levels of Reading and Numeracy performance. The disagreement might not be unconnected with the sample size. On the contrary, however, the learning facilitators' performance and those of learners between Bauchi and Gombe states show a trend that suggested when more facilitators are at the 5 Green level, more of their learners shall be seen to be performing at the highest performance levels for example 67% and 63% of the facilitators are at the five Green level in Bauchi and Gombe states respectively; and 26% and 21% of the learners are at the highest performance level in reading and 3% and 2% respectively in Numeracy in Bauchi state.

## RESULTS ON SOCIAL AND EMOTIONAL WELL-BEING

As in the baseline assessment, learners who participated in the end line assessment were measured on five sub scales of mental health and well-being using the Strengths and Difficulties Questionnaire (SDQ). Questionnaire items were translated into Hausa and were administered by trained enumerators who speak the language well. As stated earlier in this report, the SDQ is a 25-item questionnaire and was used to measure the social and emotional development of the IDP learners. The 25 items are in five sub-groups: Emotional problems, conduct problems, hyperactivity scale, peer problems, and pro-social problems, with each sub-group having five questions. Below is a brief description of the five subscales in the SDQ for measuring the respondents' socio-emotional well-being:

**Emotional Problems:** Under this sub-scale, questions ask respondents about their as having many worries, feeling unhappy, being nervous or clingy with others, holding many fears and having complaints of headaches, stomach aches and general illness.

**Conduct Problems:** Questions under this sub-scale touch on behavioral problems such as losing one's temper, being disobedient, fighting with other children, lying, cheating or stealing.

**Hyperactivity and Inattention:** Questions focus specifically on problems of hyperactivity and attention difficulties/deficits in the learners by asking about whether a child is restless or overactive, easily distracted and acting impulsively, constantly fidgeting and whether or not they have short attention spans.

**Peer Relationship Problems:** These questions have to do with the learners' interaction with peers and difficulties encountered in their relationships. The learners (and their parents/caregivers) were asked questions on whether a child plays alone, likes being in isolation, does not have friends, or whether he/she is liked, picked on or bullied by other children. It is also asked if the child gets along well with adults.

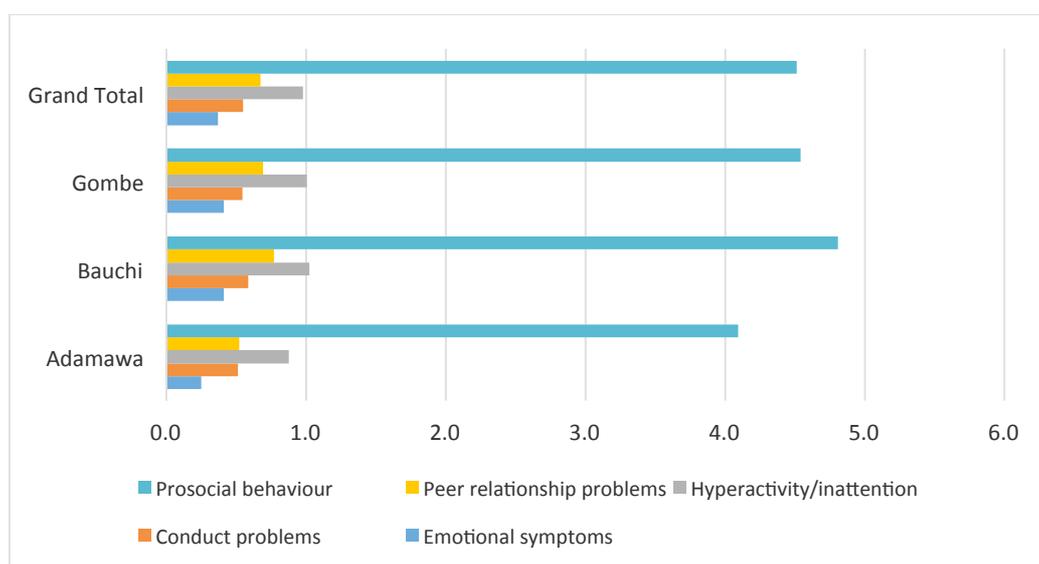
**Pro-Social Behavior:** Questions under this subscale probe the child's pro-social behavior, in seeking to know whether the child is considerate of others' feelings,

readily shares information, is helpful and kind to other younger children, and if the child readily volunteers to help when such help is needed.

To analyze and interpret the SDQ sub scales, ECR followed exactly the same procedure as employed at baseline. Scoring in particular remains consistent across baseline and end line. The pro-social subscale is treated as a “strength”-based measure, and its items have reverse scoring. Within other subscales, there is also reverse scoring and this is incorporated into the guide on how to score each subscale (see the methodology section). This pro-social strength is omitted from our reporting on the “total difficulties score,” which served as one of the main composite scores for each child at baseline. In order to arrive at a total difficulties score for each child, we add the four ‘difficulties’ sub-scores. The total difficulty score of the SDQ (range 0-40) is a fully dimensional measure, with each one-point increase in the total difficulty score corresponding to an increase in the risk of an identifiable disorder. The chart below shows average scores for each subscale with the lowest being 0 and highest being 5 for each.

**General Well-Being.** Figure 27 below indicates that learners in northern Nigeria self-report relatively high pro-social behaviors. On the 0-5 scale, learners in each state record mean averages above 4.0, suggesting that they share, demonstrate consideration for others, and volunteer when others need assistance. The graphs also suggest the presence of difficulties in the four problem areas described above. These will be discussed in more detail below.

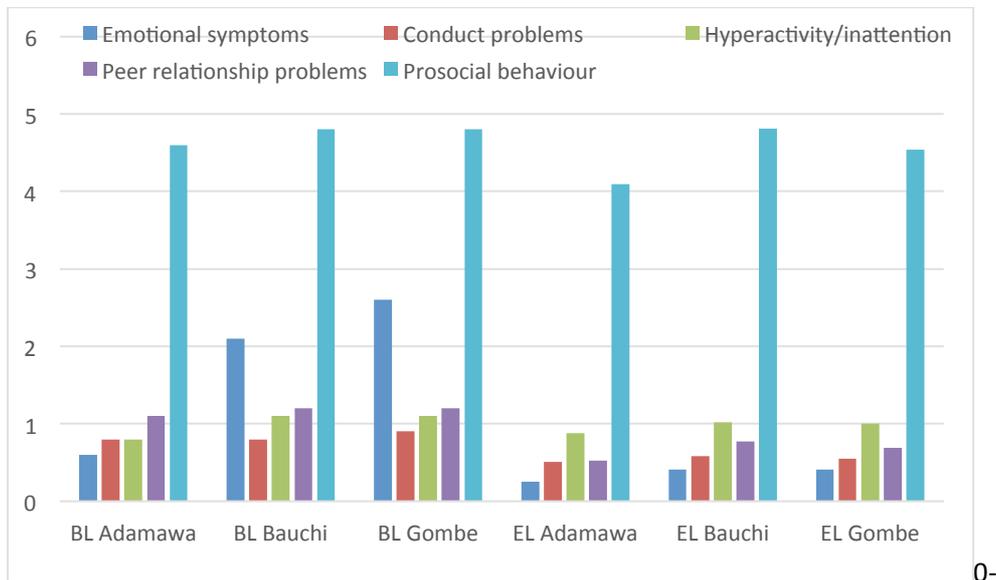
**Figure 27: Socio-Emotional Well-Being by State**



With respect to baseline and end line comparisons, a general overview provided in Figure 28 shows that a marginal improvement was recorded in terms of the difficulties, with Adamawa state recording the greatest improvement out of the three states. Important to note is the significant decline in the average mean scores for Emotional Problems across the three states, particularly in Bauchi and Gombe, but also in Adamawa. Hyperactivity problem means equally fall between baseline and end line from above 1.0 in Bauchi and Gombe, to

below or at 1.0, with similar movement in reductions of peer-relationship means across the three states.

**Figure 28: Baseline-End line Comparison of SDQ Scales by State**

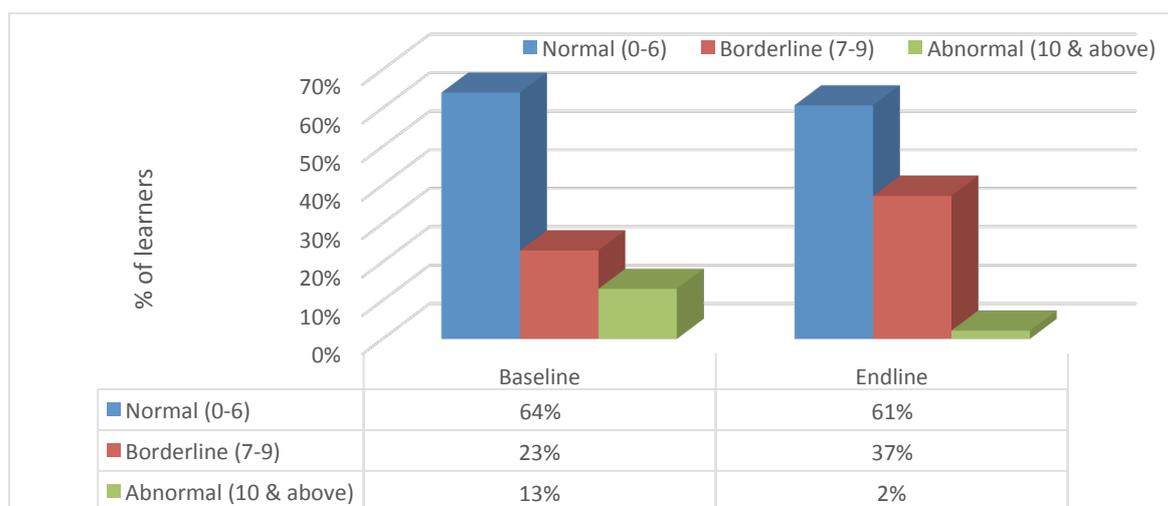


### Total Difficulties

The SDQ enables total difficulties scores to be calculated from the twenty items covering emotional distress, behavior, hyperactivity and attention, and peer interaction difficulties. Scores on the SDQ range between 0 and 40, with higher scores indicating higher potential of social and emotional disorders. When the three-banded categorization is adopted, a total point score within 0-11 range is regarded as “Normal,” 12-15 range is considered to be “Borderline,” while 16-40 is regarded as “Abnormal.” The results of the students’ scores from the instrument are presented below: However, as was the case at the baseline assessment, we consider learners who signal 0-6 difficulties as falling in a “normal” range, while those facing 7-9 difficulties are considered “borderline” and others facing 10 or more problems as falling into an “abnormal” condition of social-emotional well-being.

Figure 29 presents the baseline and end line comparison in Total Difficulties Scores for learners participating in the assessments. In comparison with the baseline measures, at the baseline, 64% of the overall sample fell between 0 and 6 difficulties i.e. the normal range. Another 23% (70 respondents) faced borderline ranges of difficulty (7-9), while 13% (38 learners) faced abnormal social-emotional challenges.

**Figure 29: Difficulties Scores of Learners at Baseline and End Line**



Tables 16 and 17 provide Total Difficulties Scores for end line disaggregated by state and presented in terms of both frequencies and percentages.

**Table 15: Total Difficulties Scores by State**

Difficulty Score	Adamawa			Bauchi			Gombe			Total		
	F	M	Total	F	M	Total	F	M	Total	F	M	Total
<b>0 to 6</b>	30	26	56	15	19	34	35	17	52	80	62	142 (61%)
<b>7 to 9</b>	4	0	4	18	20	38	24	21	45	46	41	87 (37%)
<b>10 and above</b>	0	0	0	1	3	4	1	0	1	2	3	5 (2%)
<b>Total</b>	34	26	60	34	42	76	60	38	98	128	106	234

**Table 16: Total Difficulties Scores By State (in Percentages)**

Difficulty Score	Adamawa			Bauchi			Gombe			Total		
	F	M	Total	F	M	Total	F	M	Total	F	M	Total
<b>0 to 6</b>	88%	100%	93%	44%	45%	45%	58%	45%	53%	63%	58%	61%
<b>7 to 9</b>	12%	0%	7%	53%	48%	50%	40%	55%	46%	36%	39%	37%
<b>10 &amp; above</b>	0%	0%	0%	3%	7%	5%	2%	0%	1%	2%	3%	2%
<b>Total</b>	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

What we find in the analysis of the two tables, is that those populations at highest risk (2%) are concentrated in Bauchi and Gombe states, and do not appear to be present in Adamawa. As for borderline risk learners who self-reported from 7 to 9 problems, they also appear to be concentrated in Bauchi (50%) and in Gombe (46%) in higher proportions than in Adamawa (7%).

**Commentary on Total Difficulties by State.** As was observed and reported in baseline, each state has continued to experience varying levels of violence. Consequent upon this, IDP children and learners may have been exposed to different forms of violence and in also

varying degrees depending on the state they settled in. An overview of the strengths (pro-social attributes) and difficulties categorized by emotional and behavioral difficulties reported shows emotional difficulties to be the highest among all three states. In addition, there are strong pro-social attributes for each child in the sample, across all states. Adamawa children reported generally fewer overall difficulties as compared with Gombe and Bauchi states. The learning assessment is not going to compare learners at sub-scale level, rather, this is meant to provide a general view of how each state's profile of well-being looks. The table below shows the total difficulty scores among the learners from the three states.

In specific terms, Adamawa learners reported fewer overall difficulties than the other two states with only two out of the sixty (60) respondents being within the 'Borderline' range and none in the 'Abnormal' range. At the other extreme was Bauchi State with 4 (5%) of learners within the borderline range and 34 (45%) within the abnormal range.

This pattern reflected what was reported in the baseline assessment where Adamawa State was said to have had fewer overall difficulties than the other states, although the specific spread of performance on total difficulties scores of the three states was not reported then. As the baseline table shows (see Annex 15), 161 learners (69%) among those who participated in the exercise fall within the 'normal' range across the three states. This shows an increase from the 64.5% of learners in the same range in the baseline assessment. There are 51 (22%) of the learners within the 'borderline' range. This shows a drop from the 23.3% of learners in the same range in the baseline assessment. Finally, the current exercise recorded 22 (9%) learners falling within the 'abnormal' range. There is an improvement here as well when compared with the baseline report in which 36 learners (12.2%) fall within the 'abnormal' range.

Taken together, there has been some positive shift in the learners' levels of difficulties and it is hoped that a more significant improvement will be recorded as the intervention moves into its second year.

**Gender.** Tables 16 and 17 provide a couple of complementary analysis of the differences and similarities in proportions of difficulties faced by girls and young women, as compared to boys and young men. As was the case with the baseline results, girls and boys are still experiencing similar patterns of social and emotional difficulties (see Table 18 below).

**Table 17: Total Difficulties Scores by Cut-Points at Baseline and End Line**

Difficulty Score	Baseline			End Line		
	F	M	Total	F	M	Total
<b>Normal (0 to 6 difficulties)</b>	59%	69%	64%	63%	58%	61%
<b>Borderline (7 to 9 difficulties)</b>	26%	21%	23%	36%	39%	37%
<b>Abnormal (10 difficulties &amp; above)</b>	15%	10%	13%	2%	3%	2%
<b>Total</b>	100%	100%	100%	100%	100%	100%

However, the difference between the proportion of boys and girls in the normal category reduced to 5% i.e. 58% of boys and 63% of girls as opposed to 69% of boys surveyed and 59% of girls in the baseline – a difference of 10%. The difference this time around is in favor of the girls. This means that the girls has improved significantly, while the boys could be said

to have dropped a little in terms of their total difficulties. Similarly, the girls improved from 15% with 10 and above difficulties at the base line to 2%. This means that many more girls moved from 10 and above difficulties to borderline (7 to 9) difficulties between baseline and end line assessments. Similarly, the boys also improved, reducing in percentage terms, those who had 10 and above difficulties at baseline (10%) to 3% at end line.

The drop in the proportion of boys having normal behavior and abnormal behavior means that many from those who had abnormal behavior at the base line now have borderline behaviors. While this sounds good as it shows that the intervention put in place to deal with emotional well-being of the learners by ECR is working. However, the drop in the proportion of boys who are in the normal behaviors stratum between baseline and end line is worrisome and constitutes a course for concern. Girls have lower well-being status than boys in this sample.

**Age.** Further analysis revealed that majority of the participants – ages 6-7 and ages 14-17 (including all 17-year old participants) were in the normal range. On the other hand, those within 8 and 13 years were having most difficulty. As already noted in the baseline report, the three states have an on-going socio-religious crisis with the attendant varying degrees of violence and displacement to which the IDP learners have been exposed. The healing and adjustment process is gradual and may take some time before the desired positive changes become significant enough to notice.

**Table 18: Baseline and End Line Socio-Emotional Well-Being by State with Thresholds**

Sub Scale	Baseline			End Line			Range Interpretation		
	Adamawa	Bauchi	Gombe	Adamawa	Bauchi	Gombe	*Normal	*Borderline	*Abnormal
Pro-social behavior	4.6	4.8	4.8	4.1	4.8	4.5	6 to 10	5	0 to 4
Peer relationship problems	1.1	1.2	1.2	0.5	0.8	0.7	0 to 2	3	4 to 10
Hyperactivity/ Inattention	0.8	1.1	1.1	0.9	1.0	1.0	0 to 5	6	7 to 10
Conduct problems	0.8	0.8	0.9	0.5	0.6	0.5	0 to 2	3	4 to 10
Emotional symptoms	0.6	2.1	2.6	0.3	0.4	0.4	0 to 3	4	5 to 10

**Conclusion.** As the graphs and the tables in this section shown, all the learners from the three states still have socio-emotional well-being challenges, with Bauchi State learners being worst affected. On the **Pro-social** behavior sub-scale, all three states’ average SDQ scores were near the ‘Abnormal’ range, only crossing into the borderline range by mere 0.1 (Adamawa), 0.8 (Bauchi) and 0.5 (Gombe) respectively. All the learners were also within the borderline range in **Peer Relationship** and **Conduct** Problems (with Bauchi being the farthest from and Adamawa the closest to the Normal Range in both instances). However, all the learners across the states were within the ‘Normal Range’ on the **Emotional Symptoms** and **Hyperactivity / Inattention** sub-scales, except again for Bauchi State which crossed into the ‘Borderline’ by 0.1 in the latter. Overall therefore, Adamawa learners reported least

challenges in their socio-emotional well-being, followed by Gombe State, with Bauchi State reporting most challenges.

The observed performance of the learners in Reading and numeracy as well as in SEL, and particularly the improvements noticed between the baseline and end line assessment is linkable to the methodology adopted by ECR in ensuring that our activities are achieved as in the work plan. The methodology which included ensuring that learners attend the centers regularly through the involvement of CC in school training gave us 100% fidelity for the 5-day training on non-formal education program delivered across all three project states, with no variation in program design or dosage, and data from all learning centers.

## LIMITATIONS AND CHALLENGES

This study has a number of limitations. One of these, as already noted in the baseline is the reliance on the learners' self-reports. Such reports have the obvious advantages of spontaneity, directness and being personal, among others. In spite of these, however, the approach can also be unreliable as a result of the biases and other human and circumstantial factors that can distort responses. As such, in spite of the best of efforts, data gather through self-reports usually have reliability challenges.

Other challenges of sample size, language barrier, time constraints, competence of enumerators also combine with other psycho-social factors to make a study like this a challenging enterprise.

The awareness of these limitations and challenges were factored in during the review of the instruments used for this end line assessment, resulting in more explicit rubrics, extensive simulation and review session after the pilot testing.

## RECOMMENDATIONS

On the basis of these findings, ECR recommends that:

- Although minimum standards of teaching are being surpassed, individual practices, such as teaching scripted lessons are not widely evident in classrooms, and that further teacher professional development is necessary to ensure better quality instruction (fidelity of implementation of the ECR intervention);
- There is a need to look carefully at program non-completion in follow-up analyses, as well as correlations between classroom practice and social-emotional competence (program quality) on the one hand, and both reading and numeracy gains on the other;
- As the implementation period was curtailed for Cohort 1, program managers may wish to vary not only the quality the dosage and length of the intervention in order

to move a greater proportion of learners into the range of fluency (and comprehension) at Grade 2, and into subtraction and division with respect to numeracy. Moreover, for learners at risk, it may make sense to either tier or further differentiate instruction for those students with “zero” levels at baseline such as to ensure that the performance lags/gaps in skill development are closed during the ECR intervention period (dosage). The ASER and SDQ could be used by teachers as universal screening tools in order to facilitate the assignment of students to differentiated interventions serving students at different skill levels.

## ANNEXES

### Education Crisis Response (ECR) 2015 End Line Assessment

#### I. Tambayoyin Gwada [abi'u da Juriya – Na Iyaye/Malamai (Strengths and Difficulties Questionnaire-Parents/Teachers)

A kowane batu, ka/ki yi maki a cikin akwati da ya dace, ko ka gaya min wanda ya dace. Wato **ba haka ba, kusan haka, tabbas haka**. Zai taimaka mana idan ka amsa mana dukkan tambayoyi da ke biye daidai. Ana bu}atar ka ba da amsar ka game da }abi'un yaronka, a }alla daga wata shida da suka shu]e.

Sunan ka/ki: \_\_\_\_\_

Jinsi: M  F

Shekarun ka/ki: \_\_\_\_\_ years

SN	Statement	Magana	Ba haka ba	Kusan haka	Tabbas haka
1.	Considerate of other people's feelings	Shin ya kan yi la'akari da yanayin wasu mutane?			
2.	Restless, overactive, cannot stay still for long	Ya kan rasa natsuwa har yayi }iriniya?			
3.	Often complains of headaches, stomach-aches or sickness	Yakan yi yawan fama da ciwon kai,ciwon ciki, ko rashin lafiya?			
4.	Shares readily with other children (treats, toys, pencils etc.)	Yakan yin wasa, ko chanza alkalaminsi da abokan sa.			
5.	Often has temper tantrums or hot tempers	Wani lokaci yakan yi fushi har yayi fa]a?			
6.	Rather solitary, tends to play alone	Mafi yawan lokaci yakan yi wasa shi ka]ai?			
7.	Generally obedient, usually does what adults request	Mafi yawan lokaci ya kanyi biyayya ga manya?			
8.	Many worries, often seems worried	Yakan shiga damuwa sosai yawanchin lokuta			
9.	Helpful if someone is hurt, upset or feeling ill	Yakan taimakawa wanda ya shiga damuwa ko bai da lafiya			
10.	Constantly fidgeting or squirming	Kowane lokaci yakan kasance cikin damuwa			
11.	Has at least one good friend	A }alla Yana da babban aboki guda ]aya.			
12.	Often fights with other children or bullies them	Yana yawan fa]a da yara ko cin zalun su.			
13.	Often unhappy, down-hearted or tearful	Wani lokaci yakanyi ba}in ciki har da hawaye			
14.	Generally liked by other children	Sa'o'insa suna sonsa			
15.	Easily distracted, concentration wanders	Abu }an}ani ke ]auke mishi hankali har ya sanya shi rashin ganewa.			

<i>SN</i>	<i>Statement</i>	<i>Magana</i>	<i>Ba haka ba</i>	<i>Kusan haka</i>	<i>Tabbas haka</i>
16.	Nervous or clingy in new situations, easily loses confidence	Sabon yanayi yakan tsoratar dashi har ya rasa }arfin guiwa.			
17.	Kind to younger children	Yakan kyautata wa kananan yara			
18.	Often lies or cheats	Ya kan yi }arya ko cuta			
19.	Picked on or bullied by other children	Wasu yara sukan ci zalinsa			
20.	Often volunteers to help others (parents, teachers, other children)	Ya kan taimaka wa wasu, iyaye, malamai da yara.			
21.	Thinks things out before acting	Ya kanyi tunani kafin ya aikata wani abu.			
22.	Steals from home, school or elsewhere	Ya kanyi }auke-}auke a gida, makaranta ko a wani waje			
23.	Gets on better with adults than with other children	Yakan fi sakewa da manya fiye da sauran yara			
24.	Many fears, easily scared	Yana yawan tsorata da fargaba			
25.	Sees tasks through to the end, good attention span	Yakan kammala aikinsa saboda yana maida hankalinsa akai.			

**Parent/Teacher's Signature and Date):**

**Mun gode }warai**

## Education Crisis Response (ECR) 2015 Baseline Assessment

### II. Tambayoyin Gwada [abi'u da Juriya - Na Yara (Strengths and Difficulties Questionnaire-Learners)

A kowane batu, ka/ki yi maki a cikin akwatin da ya dace, ko ka gaya min wanda ya dace. Wato **ba haka ba, kusan haka, tabbas haka**. Zai taimaka mana idan ka amsa mana dukkan tambayoyi da ke biye daidai. Ana bu}atar ka ba da amsa game da kanka a }alla wata shida da suka wuce.

Sunanka/ki: \_\_\_\_\_

Jinsi: M  F

Shekarunka/ki:  years

SN	Statement	Magana	Ba haka ba	Kusan haka	Tabbas haka
1.	I try to be nice to other people. I care about their feelings	Na kan yi }o}ari na faranta wa mutane, na damu da su.			
2.	I am restless, I cannot stay still for long	Ina da }iriniya			
3.	I get a lot of headaches, stomach-aches or sickness	Ciwon kai da ciwon ciki da sauran sassan jiki na yawan damuna			
4.	I usually share with others (food, games, pens etc.)	Na kan taimaka wa sauran yara da abinci, biro da kayan wasanni			
5.	I get very angry and often lose my temper	Wasu lokuta raina yakan ~aci har nayi fushi			
6.	I am usually on my own. I generally play alone or keep to myself	Na kan yi abin da naga dama, na kan yi wasa ko na zauna ni ka]ai			
7.	I usually do as I am told	Na kan yi kamar yadda aka umurce ni			
8.	I worry a lot	Na kan damu sosai			
9.	I am helpful if someone is hurt, upset or feeling ill	Na kan taimaka wa wanda ke cikin damuwa			
10.	I am constantly fidgeting or squirming	Kowane lokaci nakan kasance cikin damuwa			
11.	I have one good friend or more	Ina da babban aboki ]aya ko fiye			
12.	I fight a lot. I can make other people do what I want	Ni mai yawan fa]a ne, dole ne mutane su bi ra'ayina			
13.	I am often unhappy, down-hearted or tearful	Na kan kasance a cikin bakin-ciki da bacin rai har ma da hawaye			
14.	Other people my age generally like me	Sa'o'ina suna sona			
15.	I am easily distracted, I find it	Na kan rikice a wasu lokuta, har			

	difficult to concentrate	na kasa komai			
16.	I am nervous in new situations. I easily lose confidence	Wasu lokuta na kan gigice, har na rasa kaina			
17.	I am kind to younger children	Ina kyautata wa yara			
18.	I am often accused of lying or cheating	A wasu lokuta a kan zarge ni da }arya ko cuta			
19.	Other children or young people pick on me or bully me	Yara da matasa kan buge ni a wasu lokuta			
20.	I often volunteer to help others (parents, teachers, children)	A mafi yawan lokuta na kan taimaka wa jama'a (iyaye, malamai, yara)			
21.	I think before I do things	Na kan yi tunani kafin na aikata abu			
22.	I take things that are not mine from home, school or elsewhere	Na kan }auki abinda ba nawa ba, a gida ko makaranta ko a wani wuri daban			
23.	I get on better with adults than with people my own age	Na fi jin da}in zama da manya fiye da sa'o'ina			
24.	I have many fears, I am easily scared	Ina da yawan tsoro da fargaba			
25.	I finish the work I'm doing. My attention is good	Hankalina yakan kwanta, inda na gama aikina,			

Kwanan Wata .....Sa hannu

.....  
Mun gode }warai

## Education Crisis Response (ECR) 2015 End Line Assessment

### III. Tambayoyin Gwada [abi'u da Juriya - Na Yara (Strengths and Difficulties Questionnaire-Learners)

A kowane batu, ka/ki yi maki a cikin akwatin da ya dace, ko ka gaya min wanda ya dace. Wato **ba haka ba, kusan haka, tabbas haka**. Zai taimaka mana idan ka amsa mana dukkan tambayoyi da ke biye daidai. Ana buɗatar ka ba da amsa game da kanka a }alla wata shida da suka wuce.

Sunanka/ki: \_\_\_\_\_

Jinsi: M  F

Shekarunka/ki:  years

<i>Magana</i>	<i>Ba haka ba</i>	<i>Kusan haka</i>	<i>Tabbas haka</i>
1. Na kan yi }o}ari na faranta wa mutane, na damu da su.			
2. Ina da }iriniya			
3. Ciwon kai da ciwon ciki da sauran sassan jiki na yawan damuna			
4. Na kan taimaka wa sauran yara da abinci, biro da kayan wasanni			
5. Wasu lokuta raina yakan ~aci har nayi fushi			
6. Na kan yi abin da naga dama, na kan yi wasa ko na zauna ni ka}ai			
7. Na kan yi kamar yadda aka umurce ni			
8. Na kan damu sosai			
9. Na kan taimaka wa wanda ke cikin damuwa			
10. Kowane lokaci nakan kasance cikin damuwa			
11. Ina da babban aboki }aya ko fiye			
12. Ni mai yawan fa}a ne, dole ne mutane su bi ra'ayina			
13. Na kan kasance a cikin bakin-ciki da bacin rai har ma da hawaye			
14. Sa'o'ina suna sona			
15. Na kan rikice a wasu lokuta, har na kasa komai			
16. Wasu lokuta na kan gigice, har na rasa kaina			
17. Ina kyautata wa yara			
18. A wasu lokuta a kan zarge ni da }arya ko cuta			
19. Yara da matasa kan buge ni a wasu lokuta			
20. A mafi yawan lokuta na kan taimaka wa jama'a (iyaye, malamai, yara)			
21. Na kan yi tunani kafin na aikata abu			
22. Na kan }auki abinda ba nawa ba, a gida ko makaranta ko a wani wuri daban			
23. Na fi jin da}in zama da manya fiye da sa'o'ina			
24. Ina da yawan tsoro da fargaba			
25. Hankalina yakan kwanta, inda na gama aikina.			

**Enumerator's Name Sign. & Date:**

\_\_\_\_\_

## Education Crisis Response (ECR)

### IV. 2015 End Line Assessment – ASER Reading (Enumerator's Copy)

#### Gwajin Karatu – Na 1 (Reading Test – Type 1)

##### Labari (Story)

Abdul da Balki sun tafi kasuwa. Abdul ya ga mai sayar da mangwaro. Abdul yana da kuji a aljihunsa. Ya sayi mangwaro ya ba Balki guda ]aya. Sai ya soma shan mangwaron bai wanke ba. Abdul ya kamu da rashin lafiya, cikinsa na ciwo. Mamarsa ta kai shi wajen likita. Abdul ya samu lafiya.

##### Tambayoyi (Questions)

1. Wanne wuri Abdul da Balki suka tafi?

##### Jumloli (Paragraph)

Abokaina sun je kallon wasan }wallo ranar juma'a. Kan hanyar dawowa sun ga mahaya dawaki suna wasa. Dawakin sun sha ado sosai.

##### Jumloli (Paragraph)

Musa yana aiki a Gombe. Gombe gari ne mai cike da harkoki. Mutanen cikinsa nagari ne. Suna da kirki }warai.

##### Haruffa (Letters)

k	z	}	g	s
t	b	n	w	r

##### Kalmomi (Words)

ido	doya	wasa	zuma	kifi
]aki	giwa	ruwa	keke	gona

## Education Crisis Response (ECR)

V. 2015 End Line Assessment – ASER Reading (Type I)

Name: \_\_\_\_\_ Sex (M/F): \_\_\_\_\_ Age: \_\_\_\_\_ yrs.  
(Surname first)

### Gwajin Karatu – Na 1 (Reading Test – Type 1)

#### Labari (Story)

Abdul da Balki sun tafi kasuwa. Abdul ya ga mai sayar da mangwaro. Abdul yana da kuji a aljihunsa. Ya sayi mangwaro ya ba Balki guda ]aya. Sai ya soma shan mangwaron bai wanke ba. Abdul ya kamu da rashin lafiya, cikinsa na ciwo. Mamarsa ta kai shi wajen likita. Abdul ya samu lafiya.

#### Jumloli (Paragraph)

Abokaina sun je kallon wasan }wallo ranar juma'a. Kan hanyar dawowa sun ga mahaya dawaki suna wasa. Dawakin sun sha ado sosai.

#### Jumloli (Paragraph)

Musa yana aiki a Gombe. Gombe gari ne mai cike da harkoki. Mutanen cikinsa nagari ne. Suna da kirki }warai.

#### Haruffa (Letters)

k	z	}	g	s
t	b	n	w	r

#### Kalmomi (Words)

ido	doya	wasa	zuma	kifi
]aki	giwa	ruwa	keke	gona

Learner's Level: \_\_\_\_\_ Assessor's Name: \_\_\_\_\_

## Education Crisis Response (ECR)

VI. 2015 End Line Assessment – ASER Reading (Type 2)

Name: \_\_\_\_\_ Sex (M/F): \_\_\_\_\_ Age: \_\_\_\_\_ yrs.  
(Surname first)

### Gwajin Karatu – Na 2 (Reading Test – Type 2)

#### Labari (Story)

Bara an samu }arancin ruwan sama. Ba ruwa a koguna, tsirrai sun bushe. An sami }arancin abinci. Dabbobi ba su da isasshen ruwa. Bala yana noma a }auyen su. Yakan shuka kayan lambu, kamar masara da wake da dankali. Yana kuma dasa itatuwa. Itatuwa na ba da inuwa

#### Jumloli (Paragraph)

Ali da Hassan abokai ne. Suna wasa tare kullum. Ali gwanin gudu ne. Yana cikin babban }ungiyar wasanni ta makaranta.

#### Jumloli (Paragraph)

Amina fara ce. Tana aji uku a makarantar su. Amina na son karatu da kiwo. Tana da }o}ari }warai da gaske.

#### Haruffa (Letters)

e s d f ]  
k h b j a

#### Kalmomi (Words)

aji }ofa jaka wake tuwo  
lemo wasa hula yaro zaki

Learner's Level: \_\_\_\_\_ Assessor's Name: \_\_\_\_\_

## Education Crisis Response (ECR)

VII. 2015 End Line Assessment – ASER Reading (Type 3)

Name: \_\_\_\_\_ Sex (M/F): \_\_\_\_\_ Age: \_\_\_\_\_ yrs.  
(Surname first)

### Gwajin Karatu – Na 3 (Reading Test – Type 3)

#### Labari (Story)

Musa da babansa sun tafi gona suna noma, sai Musa ya yanke da fartanya a }afarsa. Babansa ya }auke shi zuwa asibiti don samun magani. Likita ya ba shi magani har da sa ma shi bandeji. Suka dawo gida. Mamarsa ta kawo musu abinci. Mamarsa ta tausaya masa saboda ciwon da va ii

#### Jumloli (Paragraph)

Muna da babban shago a }auyen mu. Yana kusa da hanya. Umar ne mai shagon. Yana sayar da sukari da madara.

#### Jumloli (Paragraph)

Shugaban kasa ya ziyarci makarantar mu ranar hutu. Mun yi masa wa}a mai dadi. Ya gaisa da }alibai, ya kuma gaisa da malamai.

#### Haruffa (Letters)

m s r u k  
w f y ~ g

#### Kalmomi (Words)

uku gida yaro kare nama  
noma baba rago mota kaji

Learner's Level: \_\_\_\_\_ Assessor's Name: \_\_\_\_\_

## Education Crisis Response (ECR)

### VIII. 2015 End Line Assessment – ASER Numeracy (Enumerator’s Copy)

Number Recognition (1–9)	Number Recognition (10–)	Addition (With Carrying)	Subtraction (With	Division (With Remainder)
<div style="display: flex; flex-direction: column; gap: 20px;"> <div style="display: flex; justify-content: space-around;"><span style="border: 1px solid black; border-radius: 10px; padding: 10px 20px; font-size: 24px;">5</span><span style="border: 1px solid black; border-radius: 10px; padding: 10px 20px; font-size: 24px;">1</span></div> <div style="display: flex; justify-content: space-around;"><span style="border: 1px solid black; border-radius: 10px; padding: 10px 20px; font-size: 24px;">2</span><span style="border: 1px solid black; border-radius: 10px; padding: 10px 20px; font-size: 24px;">8</span></div> <div style="display: flex; justify-content: space-around;"><span style="border: 1px solid black; border-radius: 10px; padding: 10px 20px; font-size: 24px;">4</span><span style="border: 1px solid black; border-radius: 10px; padding: 10px 20px; font-size: 24px;">7</span></div> <div style="display: flex; justify-content: space-around;"><span style="border: 1px solid black; border-radius: 10px; padding: 10px 20px; font-size: 24px;">3</span><span style="border: 1px solid black; border-radius: 10px; padding: 10px 20px; font-size: 24px;">9</span></div> </div>	<div style="display: flex; flex-direction: column; gap: 20px;"> <div style="display: flex; justify-content: space-around;"><span style="border: 1px solid black; border-radius: 10px; padding: 10px 20px; font-size: 24px;">12</span><span style="border: 1px solid black; border-radius: 10px; padding: 10px 20px; font-size: 24px;">25</span></div> <div style="display: flex; justify-content: space-around;"><span style="border: 1px solid black; border-radius: 10px; padding: 10px 20px; font-size: 24px;">33</span><span style="border: 1px solid black; border-radius: 10px; padding: 10px 20px; font-size: 24px;">91</span></div> <div style="display: flex; justify-content: space-around;"><span style="border: 1px solid black; border-radius: 10px; padding: 10px 20px; font-size: 24px;">74</span><span style="border: 1px solid black; border-radius: 10px; padding: 10px 20px; font-size: 24px;">27</span></div> <div style="display: flex; justify-content: space-around;"><span style="border: 1px solid black; border-radius: 10px; padding: 10px 20px; font-size: 24px;">65</span><span style="border: 1px solid black; border-radius: 10px; padding: 10px 20px; font-size: 24px;">58</span></div> <div style="display: flex; justify-content: space-around;"><span style="border: 1px solid black; border-radius: 10px; padding: 10px 20px; font-size: 24px;">43</span><span style="border: 1px solid black; border-radius: 10px; padding: 10px 20px; font-size: 24px;">82</span></div> </div>	$\begin{array}{r} 27 \\ + 35 \\ \hline \end{array}$ $\begin{array}{r} 58 \\ + 35 \\ \hline \end{array}$ $\begin{array}{r} 16 \\ + 49 \\ \hline \end{array}$ $\begin{array}{r} 25 \\ + 48 \\ \hline \end{array}$ $\begin{array}{r} 64 \\ + 27 \\ \hline \end{array}$	$\begin{array}{r} 61 \\ - 25 \\ \hline \end{array}$ $\begin{array}{r} 87 \\ - 39 \\ \hline \end{array}$ $\begin{array}{r} 66 \\ - 37 \\ \hline \end{array}$ $\begin{array}{r} 54 \\ - 18 \\ \hline \end{array}$ $\begin{array}{r} 51 \\ - 35 \\ \hline \end{array}$	$4 \overline{)517}$ $5 \overline{)673}$ $6 \overline{)767}$ $3 \overline{)857}$
<p style="text-align: center; margin: 0;">Ask the child to recognize any five numbers. AT LEAST 4 MUST be correct</p>	<p style="text-align: center; margin: 0;">Ask the child to recognize any five numbers. AT LEAST 4 MUST be correct</p>	<p style="text-align: center; margin: 0;">Ask the child to do any two addition problems. BOTH MUST be correct</p>	<p style="text-align: center; margin: 0;">Ask the child to do any two subtraction problems. BOTH MUST be correct</p>	<p style="text-align: center; margin: 0;">Ask the child to do any ONE division problem. IT MUST be correct</p>

# Education Crisis Response (ECR)

IX. 2015 End Line Assessment – ASER Numeracy (Type I)

Name: \_\_\_\_\_ Sex (M/F): \_\_\_\_\_ Age: \_\_\_\_\_ yrs.

## Gwajin Lissafi – Na 1 (Numeracy Test – Type 1)

Number Recognition (1–9)	Number Recognition (10–)	Addition (With Carrying)	Subtraction (With)	Division (With Remainder)
<div style="border: 1px solid black; border-radius: 10px; padding: 5px; width: 40px; margin: 5px; display: inline-block;">5</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; width: 40px; margin: 5px; display: inline-block; margin-left: 20px;">1</div>	<div style="border: 1px solid black; border-radius: 10px; padding: 5px; width: 40px; margin: 5px; display: inline-block;">12</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; width: 40px; margin: 5px; display: inline-block; margin-left: 20px;">25</div>	$\begin{array}{r} 27 \\ + 35 \\ \hline \end{array}$	$\begin{array}{r} 61 \\ - 25 \\ \hline \end{array}$	$4 \overline{)517}$
<div style="border: 1px solid black; border-radius: 10px; padding: 5px; width: 40px; margin: 5px; display: inline-block;">2</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; width: 40px; margin: 5px; display: inline-block; margin-left: 20px;">8</div>	<div style="border: 1px solid black; border-radius: 10px; padding: 5px; width: 40px; margin: 5px; display: inline-block;">33</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; width: 40px; margin: 5px; display: inline-block; margin-left: 20px;">91</div>	$\begin{array}{r} 58 \\ + 35 \\ \hline \end{array}$	$\begin{array}{r} 87 \\ - 39 \\ \hline \end{array}$	$5 \overline{)673}$
<div style="border: 1px solid black; border-radius: 10px; padding: 5px; width: 40px; margin: 5px; display: inline-block;">4</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; width: 40px; margin: 5px; display: inline-block; margin-left: 20px;">7</div>	<div style="border: 1px solid black; border-radius: 10px; padding: 5px; width: 40px; margin: 5px; display: inline-block;">74</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; width: 40px; margin: 5px; display: inline-block; margin-left: 20px;">27</div>	$\begin{array}{r} 16 \\ + 49 \\ \hline \end{array}$	$\begin{array}{r} 66 \\ - 37 \\ \hline \end{array}$	$6 \overline{)767}$
<div style="border: 1px solid black; border-radius: 10px; padding: 5px; width: 40px; margin: 5px; display: inline-block;">4</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; width: 40px; margin: 5px; display: inline-block; margin-left: 20px;">7</div>	<div style="border: 1px solid black; border-radius: 10px; padding: 5px; width: 40px; margin: 5px; display: inline-block;">65</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; width: 40px; margin: 5px; display: inline-block; margin-left: 20px;">58</div>	$\begin{array}{r} 25 \\ + 48 \\ \hline \end{array}$	$\begin{array}{r} 54 \\ - 18 \\ \hline \end{array}$	$3 \overline{)857}$
<div style="border: 1px solid black; border-radius: 10px; padding: 5px; width: 40px; margin: 5px; display: inline-block;">3</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; width: 40px; margin: 5px; display: inline-block; margin-left: 20px;">9</div>	<div style="border: 1px solid black; border-radius: 10px; padding: 5px; width: 40px; margin: 5px; display: inline-block;">43</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; width: 40px; margin: 5px; display: inline-block; margin-left: 20px;">82</div>	$\begin{array}{r} 64 \\ + 27 \\ \hline \end{array}$	$\begin{array}{r} 51 \\ - 35 \\ \hline \end{array}$	

Learner's Level: \_\_\_\_\_ Assessor's Name: \_\_\_\_\_

# Education Crisis Response (ECR)

X. 2015 End Line Assessment – ASER Numeracy (Type 2)

Name: \_\_\_\_\_ Sex (M/F): \_\_\_\_\_ Age: \_\_\_\_\_ yrs.

## Gwajin Lissafi – Na 2 (Numeracy Test – Type 2)

Number Recognition (1–9)		Number Recognition (10–)		Addition (With Carrying)		Subtraction (With)		Division (With Remainder)	
<b>1</b>	<b>8</b>	<b>56</b>	<b>83</b>	$\begin{array}{r} 32 \\ + 19 \\ \hline \end{array}$	$\begin{array}{r} 84 \\ - 49 \\ \hline \end{array}$	$3 \overline{) 526}$			
<b>5</b>	<b>2</b>	<b>47</b>	<b>32</b>	$\begin{array}{r} 48 \\ + 27 \\ \hline \end{array}$	$\begin{array}{r} 56 \\ - 37 \\ \hline \end{array}$	$7 \overline{) 978}$			
<b>9</b>	<b>3</b>	<b>95</b>	<b>21</b>	$\begin{array}{r} 56 \\ + 37 \\ \hline \end{array}$	$\begin{array}{r} 45 \\ - 18 \\ \hline \end{array}$	$6 \overline{) 877}$			
<b>7</b>	<b>4</b>	<b>62</b>	<b>11</b>	$\begin{array}{r} 63 \\ + 18 \\ \hline \end{array}$	$\begin{array}{r} 85 \\ - 27 \\ \hline \end{array}$	$4 \overline{) 765}$			
<b>7</b>	<b>4</b>	<b>79</b>	<b>38</b>	$\begin{array}{r} 39 \\ + 56 \\ \hline \end{array}$	$\begin{array}{r} 68 \\ - 29 \\ \hline \end{array}$				

Learner's Level: \_\_\_\_\_ Assessor's Name: \_\_\_\_\_

## Education Crisis Response (ECR)

XI. 22015 End Line Assessment – ASER Numeracy (Type 3)

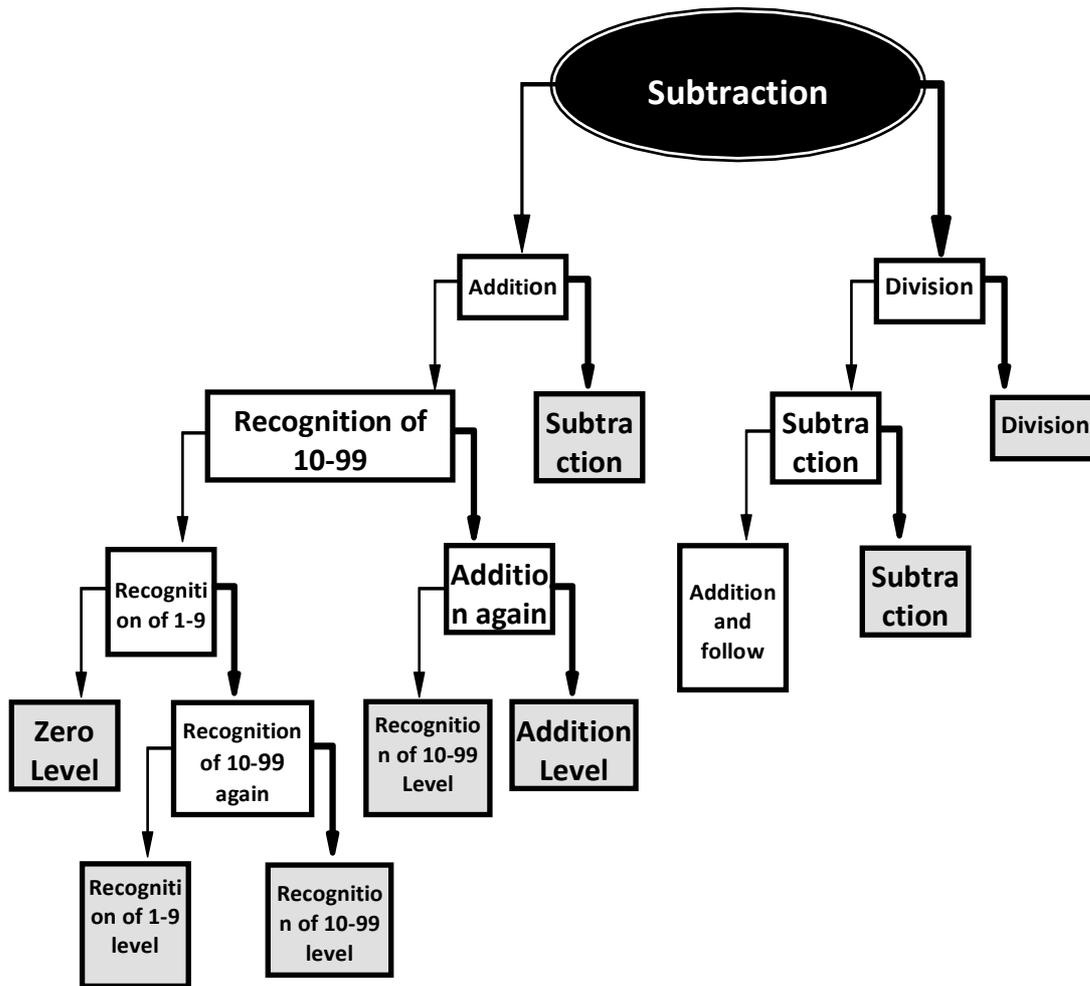
Name: \_\_\_\_\_ Sex (M/F): \_\_\_\_\_ Age: \_\_\_\_\_ yrs.

### Gwajin Lissafi – Na 3 (Numeracy Test – Type 3)

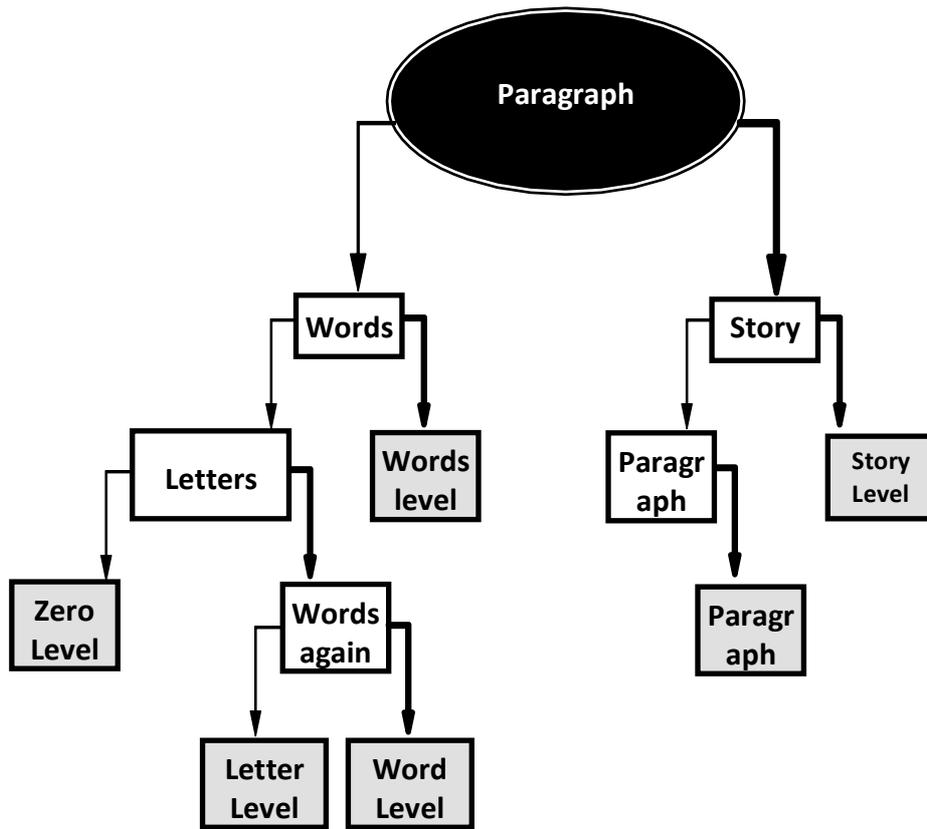
Number Recognition (1–9)	Number Recognition (10–)	Addition (With Carrying)	Subtraction (With)	Division (With Remainder)
<div style="border: 1px solid black; border-radius: 10px; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 5px;">6</div> <div style="border: 1px solid black; border-radius: 10px; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 5px;">9</div>	<div style="border: 1px solid black; border-radius: 10px; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 5px;">76</div> <div style="border: 1px solid black; border-radius: 10px; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 5px;">52</div>	$\begin{array}{r} 56 \\ + 25 \\ \hline \end{array}$	$\begin{array}{r} 64 \\ - 18 \\ \hline \end{array}$	$5 \overline{)826}$
<div style="border: 1px solid black; border-radius: 10px; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 5px;">4</div> <div style="border: 1px solid black; border-radius: 10px; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 5px;">1</div>	<div style="border: 1px solid black; border-radius: 10px; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 5px;">94</div> <div style="border: 1px solid black; border-radius: 10px; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 5px;">43</div>	$\begin{array}{r} 76 \\ + 15 \\ \hline \end{array}$	$\begin{array}{r} 90 \\ - 67 \\ \hline \end{array}$	$6 \overline{)767}$
<div style="border: 1px solid black; border-radius: 10px; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 5px;">7</div> <div style="border: 1px solid black; border-radius: 10px; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 5px;">3</div>	<div style="border: 1px solid black; border-radius: 10px; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 5px;">72</div> <div style="border: 1px solid black; border-radius: 10px; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 5px;">68</div>	$\begin{array}{r} 47 \\ + 34 \\ \hline \end{array}$	$\begin{array}{r} 45 \\ - 26 \\ \hline \end{array}$	$3 \overline{)467}$
<div style="border: 1px solid black; border-radius: 10px; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 5px;">2</div> <div style="border: 1px solid black; border-radius: 10px; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 5px;">8</div>	<div style="border: 1px solid black; border-radius: 10px; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 5px;">35</div> <div style="border: 1px solid black; border-radius: 10px; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 5px;">16</div>	$\begin{array}{r} 38 \\ + 55 \\ \hline \end{array}$	$\begin{array}{r} 63 \\ - 24 \\ \hline \end{array}$	$7 \overline{)871}$
<div style="border: 1px solid black; border-radius: 10px; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 5px;">2</div> <div style="border: 1px solid black; border-radius: 10px; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 5px;">8</div>	<div style="border: 1px solid black; border-radius: 10px; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 5px;">83</div> <div style="border: 1px solid black; border-radius: 10px; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 5px;">27</div>	$\begin{array}{r} 29 \\ + 43 \\ \hline \end{array}$	$\begin{array}{r} 52 \\ - 27 \\ \hline \end{array}$	

Learner's Level: \_\_\_\_\_ Assessor's Name: \_\_\_\_\_

## XII. Administering the ASER Numeracy Test



### XIII. Administering the ASER Reading Test



**Education Crisis Response ECR  
2015 End Line Assessment**

**XIV. Classroom Observation Tool – Reading Lesson**

**Instruction to Observer:** Please study the statements below and put a tick in the appropriate box to indicate whether each activity is observed in the class Most of the Time, Some of the Time or Never

Teacher or Learner Activity	Most of the time	Some of the time	Never
<b>Teaching Methods: <i>Teacher...</i></b>			
Presents the objectives of the lesson to learners at the beginning			
Improvises/uses instructional materials			
Uses the relevant scripted lesson			
Manages the time well			
Demonstrates good class control			
Responds to student questions			
Provides explanation if student(s) don't understand			
Gives classwork for students to practice			
Concludes lesson with summary of what was learned			
Praises or compliments students			
Criticizes, scolds, beats or punishes students			
Reads aloud to students			
Demonstrates reading or writing skills			
<b>Instructional Content: <i>Teacher guides students to....</i></b>			
Pronounce sounds of letters			
Write letters			
Associate words with letters			
Discuss meaning of vocabulary words			
Blend letter-sounds to form syllables and words			
Read printed material or book			
Answer questions or draw picture about meaning of text			
Create or write own texts (sentence or story)			
<b>Class Activities: <i>Students are....</i></b>			
Listening to teacher read out loud			
Reading out loud together (choral reading)			
Reading out loud to another student (paired reading)			
Reading independently (by him/herself)			
Asking questions from the teacher			
Answering teacher's questions			
Writing on blackboard, paper, in exercise book or slate			
<b>Assessment: <i>Teacher assesses student learning by....</i></b>			
Asking questions during the lesson			
Monitoring/observing student activities as they work			
Listening to individual students read aloud			
Using a reading assessment tool			

XV. 15. Total Difficulty by Age

Thresholds	Difficulty Scale	AGE RANGE												Total No of Students
		6	7	8	9	10	11	12	13	14	15	16	17	
<b>NORMAL</b>	3												1	1
	3.5							1						1
	3.75							1						1
	4							1			1			2
	4.25								1		1			2
	4.5					1			1		1			3
	4.75					1		1	1				1	4
	5			2	1	1	1	1	5	1	3		1	16
	5.25			1	1	1	2		3		1		1	10
	5.5	1			2	3		1		2		3	2	14
	5.8				2	1	1	3			4	2		13
	6		3	3	4	4	1	5	6	3	1	3	3	36
	6.3	1	3	2		9	1	7	8	1	2	2	3	39
	6.5		2	2		3		5	3	1	1			19
	Subtotal	2	8	10	10	24	6	26	28	8	15	10	12	161
<b>BORDERLINE</b>	6.8					3		1						4
	7	2			2	1		1	3			1		10
	7.3				1	1	3	2	2		1	1		11
	7.5			3		2	2	1	1					9
	7.8	2		2		1		2	1	1		2		11
	8			1	1	1	1			2				6
	Subtotal	4	0	6	4	9	6	7	7	3	1	4	0	51
<b>ABNORMAL</b>	8.3					1			1		1			3
	8.5								5	1		1		7
	8.8		1					1	1		1			4
	9				1		1				1			3
	10							1	1					2
	11			1		1								2
	12								1					1
	Subtotal	0	1	1	1	2	1	2	9	1	3	1	0	22
	<b>Grand Total</b>	<b>6</b>	<b>9</b>	<b>17</b>	<b>15</b>	<b>35</b>	<b>13</b>	<b>35</b>	<b>44</b>	<b>12</b>	<b>19</b>	<b>15</b>	<b>12</b>	<b>234</b>

XVI. 16. Total Difficulty Scores by State

Threshold Range	Difficulty Scale	Adamawa	Bauchi	Gombe	Grand Total
<b>NORMAL</b>	3	1			1
	3.5	1			1
	3.75	1			1
	4	2			2
	4.25	2			2
	4.5	3			3
	4.75	3	1		4
	5	10	5	1	16
	5.25	5	2	3	10
	5.5	3	5	6	14
	5.75	5	4	4	13
	6	13	8	15	36

	6.25	7	9	23	39
Number and % of Learners		56 (93%)	34 (45%)	52 (53%)	142 (61%)
<b>BORDERLINE</b>	6.5	2	4	13	19
	6.75	1	1	2	4
	7	1	3	6	10
	7.25		3	8	11
	7.5		6	3	9
	7.75		7	4	11
	8		4	2	6
	8.25		1	2	3
	8.5		4	3	7
	8.75		3	1	4
9		2	1	3	
Number and % of Learners		4 (7%)	38 (50%)	45 (46%)	87 (37%)
<b>ABNORMAL</b>	10		2		2
	10.75		2		2
	12			1	1
Number and % of Learners		0 (0%)	4 (5%)	1 (1%)	5 (2%)
Grand Total		60 (25.64%)	76 (32.48%)	98 (41.88%)	234 (100%)