



USAID
FROM THE AMERICAN PEOPLE

EGRA Administration and Scoring

Prepared for the USAID workshop
“EGRA Basics and Beyond”

November 2015

Recap of Where We Are

- Identification of Research and Sample Design Development/Adaptation of EGRA Instrument
- **Procedures for EGRA Administration and Scoring**
- Establishment of Electronic Data Capture System
- Assessor Evaluation and Selection
- Pilot and Full Data Collection
- Use and Dissemination of EGRA Results
- Planning and Managing EGRA Implementation

Session Objectives

- Be knowledgeable about best practices for EGRA administration.
- Learn how to administer and record responses for common EGRA subtasks.
- Understand how common EGRA subtask scores are generated.

Paper-Based EGRA Administration



Tablet-Based EGRA Administration



Materials and Setup

1. Assessor protocol
2. Pupil stimulus
3. Stopwatch*
4. Pencil and eraser*
5. Small item for pupil
(e.g., pencil)
6. Additional materials for overall data collection
(see handout)



Handout 6.1: EGRA Scavenger Hunt for Participants
Handout 6.2: EGRA instrument and Pupil Questionnaire
Handout 6.3: EGRA Pupil Stimulus

**needed only for paper-based administration*

Activity: Handout 6.1: EGRA Scavenger Hunt



- With a partner, review the EGRA assessor protocol.
- Use **Handout 6.2 and Handout 6.3: EGRA Instrument and Pupil Questionnaire and EGRA Pupil Stimulus** to search for particular items or features.

Handout 6.2: EGRA Instrument and Pupil Questionnaire

EXAMPLE FOR TRAINING PURPOSES ONLY – NOVEMBER 2015

General instructions

Establish a playful and relaxed rapport with the child through a short conversation (see example topics below). The child should perceive the assessment almost as a game to be enjoyed rather than a test. Use this time to identify in what language the child is most comfortable communicating. Read aloud slowly and clearly ONLY the sections in boxes.

Good morning. My name is _____ and I live in _____. I'd like to tell you a little bit about myself. [Number and ages of children; favorite sport, radio or television program, etc.] **1. What do you like to do when you are not in school?** [Wait for response; if student is reluctant, ask question 2, but if they seem comfortable continue to verbal consent]. **2. What games do you like to play?**

Verbal Assent: Read the text in the box clearly to the child.

- Let me tell you why I am here today. I work with the Ministry of Education and we are trying to understand how children learn to read. You were picked by chance.
- We would like your help in this. But you do not have to take part if you do not want to.
- We are going to play a reading game. I am going to ask you to read letters, words and a short story out loud.
- Using this stopwatch/device/gadget, I will see how long it takes you to read.
- This is NOT a test and it will not affect your grade at school.
- I will also ask you other questions about your family, like what language your family uses at home and some of the things your family has.
- I will NOT write down your name so no one will know these are your answers.
- Once again, you do not have to participate if you do not wish to. Once we begin, if you would rather not answer a question, that's all right.
- Do you have any questions? Are you ready to get started?

Check box if verbal assent is obtained: YES

(If verbal assent is not obtained, thank the child and move on to the next child, using this same form)

Handout 6.3 EGRA Pupil Stimulus

Examples:

ut	dif	mab		
_____	_____	_____	_____	_____
fut	lus	dit	leb	gak
_____	_____	_____	_____	_____
huz	jod	kib	lek	tob
_____	_____	_____	_____	_____
nom	rop	hig	reg	san
_____	_____	_____	_____	_____
tup	ral	wix	nep	nad
_____	_____	_____	_____	_____
lut	yod	sim	tat	sig
_____	_____	_____	_____	_____
en	mon	nup	sen	kad
_____	_____	_____	_____	_____
taw	lew	paf	sal	zuv
_____	_____	_____	_____	_____
ved	kag	vom	riz	gof
_____	_____	_____	_____	_____
maz	kol	ver	et	beb
_____	_____	_____	_____	_____
tib	lef	yag	lim	dov
_____	_____	_____	_____	_____

Binta and Ali clean their classroom every day. Ali cleans the blackboard and Binta sweeps the floor. One day, they could not find Binta's broom. They looked in every classroom. Then they saw a goat eating the broom! Binta and Ali told their teacher. Their teacher gave them a new broom.

Examples:

	T	m	S						
L	i	h	R	S	y	E	O	w	T
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
i	e	T	m	G	t	a	d	n	B
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
h	O	A	E	U	r	L	e	R	u
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
g	R	e	N	i	r	m	t	s	r
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
S	T	E	C	p	A	F	c	a	E
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
y	s	Q	A	O	C	O	h	t	P
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
e	A	e	s	M	F	n	u	R	t
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
A	q	H	N	S	i	g	m	i	L
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
b	i	L	O	i	o	E	p	r	X
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
N	v	c	D	e	d	J	z	O	n
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____

Principles of Test Administration

- **Ethics**
 - Pupils are always asked to provide **assent**
 - Names or other identifying information about pupils, schools, and/or teachers is **not** released
 - Assessor interacts with pupils in a friendly manner to put them at ease
- **Reliability and Consistency**
 - Assessment is administered the same way to all pupils
 - Directions are read **verbatim** and in a language that is familiar to the pupil (may be different from language tested)
 - Practice exercises ensure pupils know what to do
- **Objectivity**
 - Assessors are trained to evaluate responses (as correct or incorrect) the same way, based on specific rules and criteria
 - Assessors are trained **not** to coach pupils in any way

Assent and Rapport

Assessors should:

1. Introduce themselves and ask the child a few friendly questions.
2. Speak in a language familiar to the child.
3. Use friendly body language to try and put the child at ease.
4. Read the assent box verbatim and check if the child agrees to participate.



If a child does not agree to participate, or is unable to, the assessor should then select another child.

EGRA Instructions, Administration, and Scoring Rules

- Based on other reading assessment protocols (e.g., DIBELS)
- Have been updated based on experience since EGRA was first developed.

Instructions to pupils and administration rules and scoring rules are designed to:

- Be as clear as possible to avoid confusion.
- Minimize time needed for test administration.
- Provide opportunities for child to practice.
- Allow child to respond to maximum number of items.
- Maximize reliability of results (children's scores).

Handout 6.4: Scoring EGRA Subtasks

PHONEMIC AWARENESS

- Score calculated as the number correct out of 10 items
- Example: Child had 3 out of 10 items correct, or 30%.

LETTER SOUND/NAME RECOGNITION

- Score calculated as the number correct out of 100 items
- Known as “correct letter sounds per minute” (CLSPM) or “correct letters per minute (CLPM)
- Formula:
Correct letters per minute = letters correct * 60 / time elapsed
 - If the student did not finish before time ran out, the score is the number of correct responses provided (since time elapsed is 60 seconds, and therefore the correct letters are multiplied by 1).
 - If the student attempted all items before time ran out, then must use formula.
 - Example: CLSPM = 75 * 60/53, or 84.9 CLSPM

FAMILIAR WORD READING & NON-WORD DECODING

- Score calculated as the number correct out of 50 items
- Known as “correct words per minute” (CWPM) and “correct non-words per minute” (CNWPM)
- Formula similar to letters, except number
 - Correct non-words per minute = words correct * 60 / time elapsed
 - Example: CNWPM = 39 * 60/50, or 46.8 CNWPM

ORAL READING FLUENCY

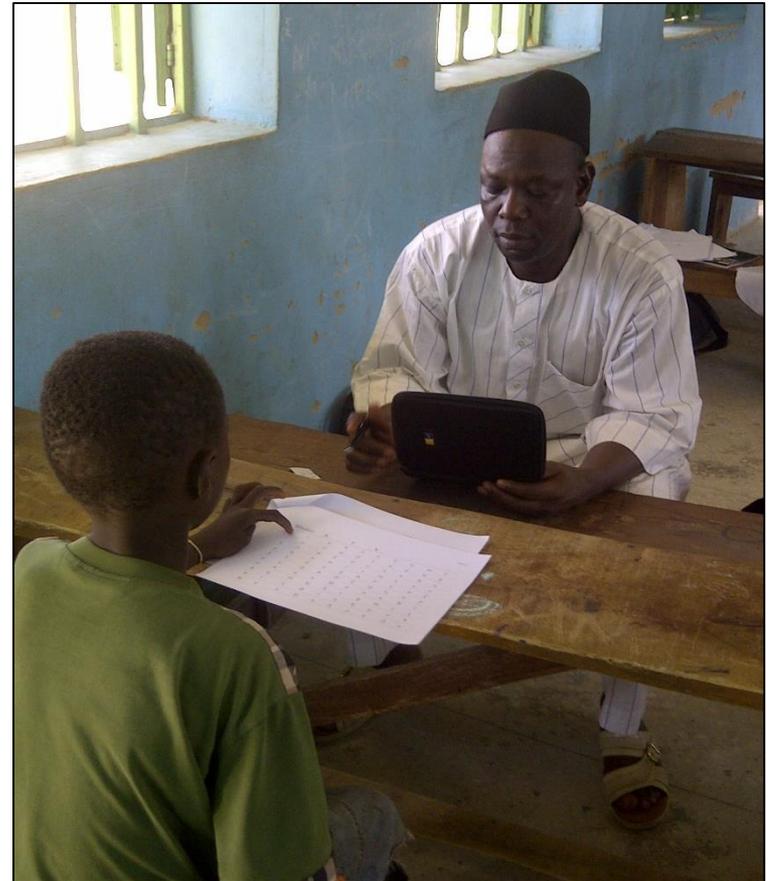
- Score calculated as the number correct out of total number of words in the passage
- Known as Oral Reading Fluency (ORF), and also sometimes referred to as connected text words per minute (CWPM)
- Formula similar to non-words and familiar word reading tasks:
 - Oral reading fluency (ORF) = words correct * 60 / time elapsed
- Example: ORF = 30 * 60/50, or 36 CWPM

READING COMPREHENSION

- Number of correct responses out of number possible (5)
- Example: Child was asked 3 questions out of 5 but got only 2 correct. Score is therefore 2 out of 5, or 40%.
- Number of correct responses out of number attempted is also sometimes reported

Common EGRA Subtasks We Will Learn How to Administer Today:

1. Identification of initial sounds in words
2. Letter sound identification
3. Oral reading fluency with comprehension



Instrument Organization

Directions to
assessor

- ⊘ (/) Mark any incorrect letters with a slash
- ⊘ (∅) Circle self-corrections if you already marked the letter incorrect
- ⊘ (]) Mark the final letter read with a bracket

Directions to
read to pupil

Task 1. LETTER SOUND IDENTIFICATION – HAUSA Page 1

☛ Ga shafi cike da bakafɛ na Hausa. Sai ki/ka fada mini SAUTIN bakafen da duk kike/kake iya ganewa – ba wai sunansu ba, a'a, yadda ake fadinsu dai.

Misali, sautin wannan baki [nuna M] shi ne /m/.

To, bisimilla: fada mini sautin wannan baki [nuna D]:
Idan yarinya ta/yaro ya gano amsar, sai ki/ka ce: Da kyau, sautin wannan baki /d/.
Idan yarinya ba ta/yaro bai gano amsar ba, sai ki/ka ce: sautin wannan baki /d/.

To, bari mu gwada wani bakin: fada mini sautin wannan baki [nuna a]:
Idan yarinya ta/yaro ya gano amsar, sai ki/ka ce: Da kyau, sautin wannan baki /a/.
Idan yarinya/yaro bai gano amsar ba, sai ki/ka ce: sautin wannan baki /a/.

Kin/ka gane abin da ake son ki/ka yi?

In na ce “Fara”, fara daga nan [nuna baki na farko] ki/ka ci gaba a hakan [nuna]. Nuna mini ko wane baki ki/ka kuma gaya mini sautin bakin ki/ka kuma buɗa murya. Fadi sautin bakafen da hanzari, da hankali, ki/ka kuma daga murya. Idan kin/ka zo a kan bakin da ba ki/ka sani ba, sai ki/ka je a kan baki na gaba. Aza yatsa a kan bakin farko. Kin/ka shirya? To bisimilla, fara.

Items to
score

1	2	3	4	5	6	7	8	9	10	
Y	t	A	S	b	N	k	u	i	W	(10)
n	o	ts	y	A	D	N	G	s	6	(20)
m	kw	T	i	w	m	Z	K	u	sh	(30)
A	e	S	N	k	E	gy	d	k	a	(40)
M	c	A	K	E	a	C	l	kw	e	(50)
u	A	R	I	gy	U	s	U	a	D	(60)
A	r	g	ky	M	i	d	L	n	A	(70)
N	f	y	r	K	t	n	i	I	'y	(80)
j	N	Y	W	A	K	U	H	Y	s	(90)
F	B	h	I	R	n	T	i	O	i	(100)

⌚ 60 seconds

Start the timer when the child reads the first letter.

⌚ If a child hesitates or stops on a letter for 3 SECONDS, say “ci gaba”

⌚ When the timer reaches 0, say “stop.”

⌚ If the child does not provide a single correct response on the first line (10 items), say “Thank you!”, discontinue this subtask, check the box at the bottom, and go on to the next subtask.

Instruction Symbols (Icons) on Assessor Protocol (Paper)



- Indicates you should use the pupil stimuli.



- Indicates if the subtask is timed.



- Indicates if there is an “auto-stop” rule that applies to the subtask.



- Indicates that the pupil should be prompted to go to the next item after “X” seconds if s/he does not respond in any way (“nudging rule”).

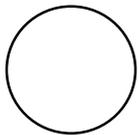
Marking Rules and Symbols



- Indicates how to mark the pupil's responses.



- Draw a slash mark over each item for which the pupil provides an incorrect response.



- Circle the slashed item if the pupil self-corrects (and the item was already slashed).
- If the pupil skips an entire line, draw a line through all of the items.

~~A e j r t s z n p y t~~



- Draw a bracket after the item attempted when the timer reaches 0 (or the child is at the end of the subtask).

Phonemic Awareness: Initial Word Sound– Administration Protocol

- ✓ NO pupil stimulus
- ✓ NOT timed
- ✓ Read instructions and present examples
- ✓ Mark responses as *correct*, *incorrect*, or *no response*
- ✓ Observe auto-stop rule

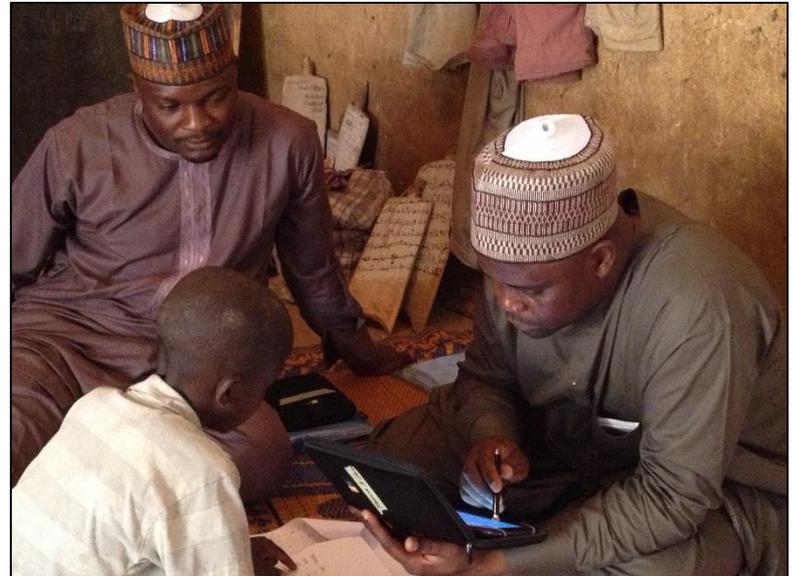
Activity: Practice Initial Sounds Subtask

1) In groups of 3, rotate playing the roles of:

- Assessor
- Child
- Observer

2) Discuss the experience of administering the subtask.

- What did you find most difficult? Least difficult?
- Share your observations on training strategies.



Letter Sounds – Administration Protocol

- ✓ Place pupil stimuli in front of child. Read the instructions and conduct the examples.
- ✓ When the child says the first letter, start the timer (cued to 1 minute if using stopwatch)
- ✓ If the child does not say the first letter after 3 seconds, tell the child to go to the next item (3-second “nudging rule”).
- ✓ While the child reads, record responses. Observe auto-stop rule (first 10 items).
- ✓ When the timer rings/stops (after 1 minute is up)....
 - Draw a bracket after the last item attempted.
 - Write the number of seconds remaining at the bottom of the page. If 0 seconds remain, write 0.
- ✓ If the child reads all the letters BEFORE the timer stops....
 - Draw a bracket after the last letter in the subtask.
 - At the same time, hit “stop” on the stopwatch and record the time remaining.

Video 6.1: Letter Sound Identification

Letter Sounds – Scoring on Paper

Y	t	A	S	b	N	k	u	i	W
n	o	ts	y	A	D	N	G	s	6
m	kw	T	i	w	m	Z	K	u	sh
A	e	S	N	k	E	gy	d	k	a
M	c	A	K	E	a	C	l	kw	e
u	A	R	I	gy	U	s	U	a	D
A	r	g	ky	M	i	d	L	n	A
N	f	y	r	K	t	n	i	I	'y
j	N	Y	W	A	K	U	H	Y	s
F	B	h	I	R	n	T	i	O	i

 Time remaining on stopwatch at completion (number of SECONDS)	30
 Exercise discontinued because the child had no correct answers in the first line	✓

Letter Sounds – Scoring on Paper

Y	t	A	S	b	N	k	u	i	W
n	o	ts	y	A	D	N	G	s	6
m	kw	T	i	w	m	Z	K	u	sh
A	e	S	N	k	E	gy	d	k	a
M	c	A	K	E	a	C	l	kw	e
u	A	R	I	gy	U	s	U	a	D
A	r	g	ky	M	i	d	L	n	A
N	f	y	r	K	t	n	i	I	'y
j	N	Y	W	A	K	U	H	Y	s
F	B	h	I	R	n	T	i	O	i

 Time remaining on stopwatch at completion (number of SECONDS)

0

 Exercise discontinued because the child had no correct answers in the first line

Letter Sounds – Scoring on Paper

Y	t	A	S	b	N	k	u	i	W
n	o	ts	y	A	D	N	G	s	6
m	kw	T	j	w	m	Z	K	u	sh
A	e	S	N	k	E	gy	d	k	a
M	c	A	K	E	a	C	l	kw	e
u	A	R	I	gy	U	s	U	a	D
A	r	g	ky	M	i	d	L	n	A
N	f	y	r	K	t	n	i	I	'y
j	N	Y	W	A	K	U	H	Y	s
F	B	h	I	R	n	T	i	O	i

 Time remaining on stopwatch at completion (number of SECONDS)	5
 Exercise discontinued because the child had no correct answers in the first line	

Letter Sounds – Scoring Guidelines

- A letter must be pronounced correctly to be marked as correct.
- Letter sounds should be “pure” sounds.
 - Example: the letter “b” should be pronounced *without* a significant vowel sound at the end – /b/ and not “buh”
- Trainers and assessors need to agree on what is acceptable pronunciation based on official correct pronunciation and contextual factors, such as second-language issues that may affect pronunciation.
 - While the “Queen’s English” (or equivalent) may not be required for correctness, certain standards are necessary.

Handout 6.5: English Letter Sounds Reference Sheet

Letter	Example words with correct sound
A	cat, sat, mat, apple
B	big, bottle, bag, bee
C	cat, car (the "S" sound for "C" is not allowed as a correct response)
D	dog, day, deep
E	set, met, neck, pet (short vowel sound only)
F	farm, fit, feed, frog
G	go, get, gap, glow
H	how, hand, hen, hut
I	sit, pit, lit, hit (short vowel sound only)
J	jolly, jump, jam, jet
K	kit, kettle, kilometre
L	lamp, lesson, lot, leg
M	mat, met, more, men
N	not, nap, net, nut
O	pot, hot, mop, dog (short vowel sound only)
P	pat, pit, nap, pot
Q	quick, quit, liquid
R	rat, rest, ran, rot
S	sat, set, sit, stop
T	time, turtle, tin, tap
U	up, cut, sun, cup, mud, hut (short vowel sound only)
V	van, vest, love, vowel
W	water, web, wind, wild
X	box, six, next
Y	yes, yam, yellow
Z	zoo, buzz, zap

Using the Stopwatch



- For fluency tasks, the timer is set to count DOWN from 1 minute.
- To set the timer to 1 minute, push the button with the “M” on it.
- Next, push the “Start/Stop” button.
- To clear the time remaining, press the “M” and the “S” buttons simultaneously.

Activity: Practice Letter Sounds Subtask

1. In groups of 3, rotate playing the role of:

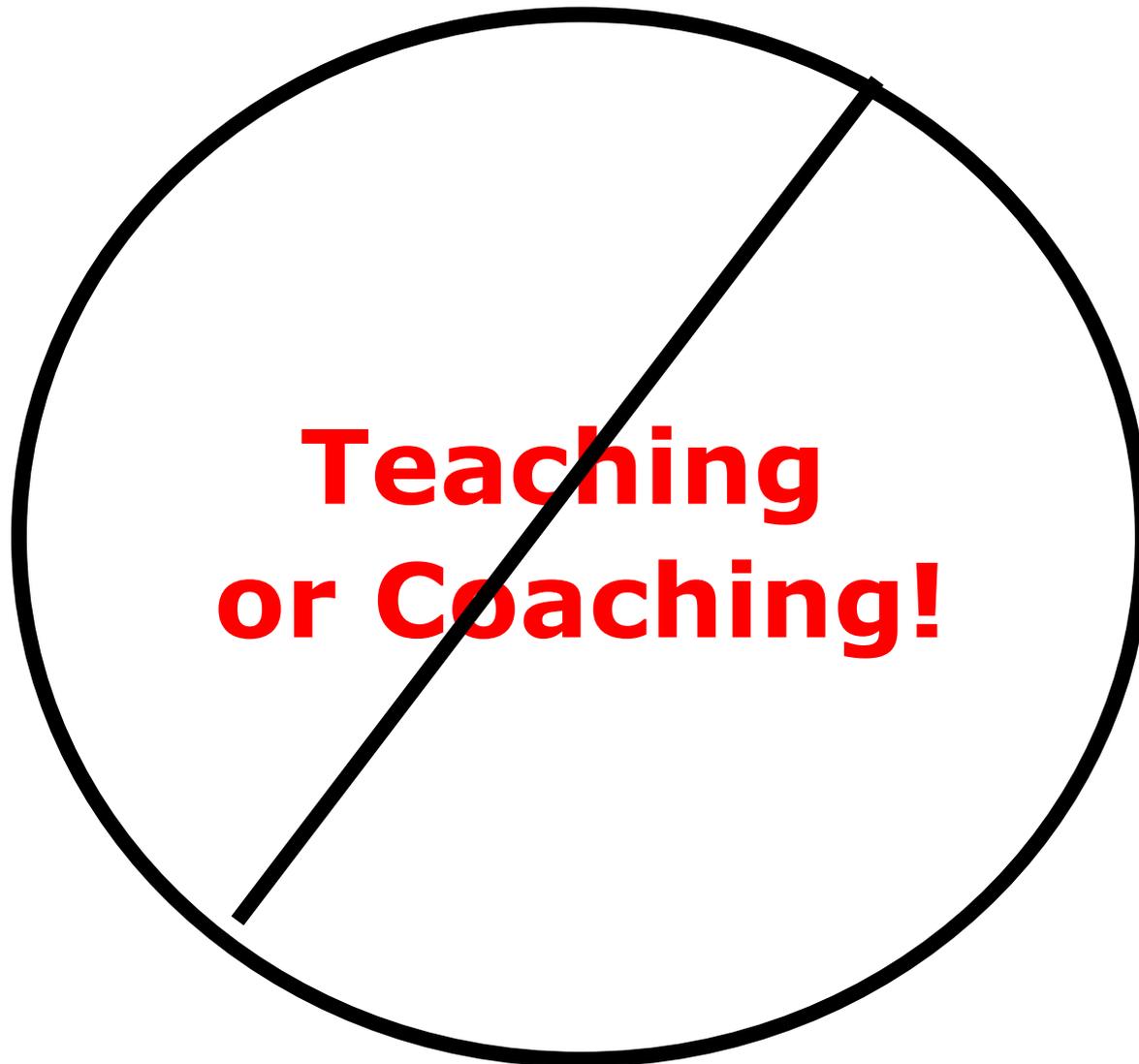
- Assessor
- Child
- Observer

2. Discuss the experience of administering the subtask.

- What did you find most difficult? Least difficult?
- Share your observations on training strategies.



Remember!



Oral Reading Fluency – Administration Rules

- ✓ Similar to letter sounds and nonwords in terms of pupil stimuli, instructions, examples, timer/stopwatch, and item marking
- ✓ 3-second “nudging rule” applies
- ✓ Auto-stop rule applies, but number of items varies depending on story construction
- ✓ A word must be pronounced correctly to be marked as correct

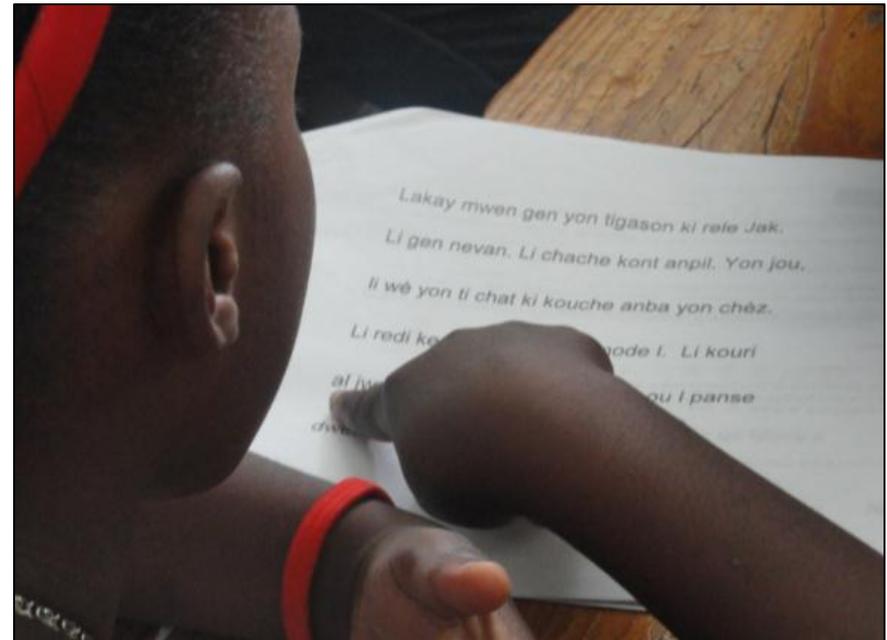
Oral Reading Fluency – Scoring

Adamu da abokinsa Bala sukan tafi gona <u>kuɓɓum</u> .	8
Wata rana sai Adamu ya ga mangwaro] ja a kan <u>bishiya</u> .	19
Adamu ya dauki doguwar sanda domin ya kado mangwaro. Tsawon sandar bai isa <u>ba</u> .	33
Ya ce wa abokinsa ya daga shi sama ya kado <u>mangwaro</u> .	44
Ya kado mangwaro. Adamu da Bala suka raba mangwaro suka <u>sha</u> .	55

Record the time remaining.

Reading Comprehension – Scoring Rules

- **Not** timed
- **No** pupil stimulus
- Read instructions
- Mark responses appropriately
- Ask **only** the questions pertaining to the amount of text read



Reading Comprehension – Scoring

Questions [Answers]	Correct	Incorrect	No Response
1. Ina Adamu da abokinsa sukan tafi kullum? [sukan tafi gona kullum]		✓	
2. Me Adamu ya gani akan bishiya? [Ya ga mangoro; mangwaro ja; nunannen mangwaro]			
3. Me ya hana Adamu kado mangwaro? [sabo da tsawon sandar bai isa ba]			
4. Yaya Adamu ya sami mangwaron? [abokinsa ya daga shi sama don ya kai gare shi]			
5. Yaya Adamu da abokinsa, suka ji a karshen la barin? [sun ji da din shan mangwaro]			

In this example, questions 2–5 should not be asked because the child did not read enough of the ORF passage.

Oral Reading Fluency with Comprehension

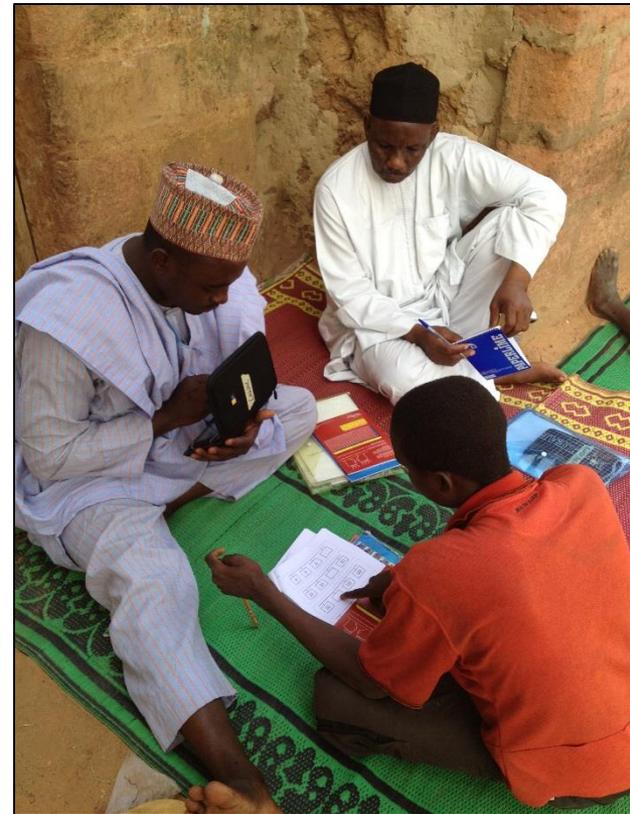
Scoring Guidelines:

- A word must be pronounced correctly to be marked as correct.
- A word must be read completely when the time is up to be marked as correct.
- Responses to comprehension questions must match agreed-upon correct responses.

Activity Practice Subtasks: Oral Reading Fluency with Comprehension

- 1) In *pairs*, practice administering the subtasks.

- 2) Discuss the experience of administering the subtask.
 - What did you find most difficult? Least difficult?
 - Share your observations on training strategies.



What Do Low- and High-Performing Learners Sound Like?



Video 6.2: Low and High Performers on EGRA in Ghana