EdData II
Education Data for Decision Making

Administering EGRA and EGMA

Rules and tips for ensuring quality administration
and results

April 2012

Prepared by Jessica Mejia and Alison Pflepsen
RTI International, Research Triangle Park, North Carolina, USA

About the presentation

- This presentation was prepared for use in a one-day workshop titled "Understanding the Early Grade Reading and Math Assessments: From Development to Data Analysis," led by RTI International at the annual conference of the Comparative and International Education Society (CIES) in San Juan, Puerto Rico, April 22, 2012.

- The USAID EdData II project (Task 1, EHC-E-01-04-00004-00) sponsored the costs of workshop development and implementation. EdData II is led by RTI International.

2

General administration principles

- **Verbal consent** of students and teachers to participate in the study must be obtained.
- Participants' rights to the **anonymity** of their results must be protected.
- All participants in research, including children, are to be treated with **respect and dignity.**
- Before beginning the test, assessors should **build rapport and make the child feel comfortable.** We want them to be relaxed during the test so that they can do their best.

3

Assess – Do not teach!

4

2

Administration principles

- **Consistency in administration** is key, to offer every child the same opportunity to perform
- **Stick to the script** and administration rules!
- Make sure to retain **complete records**
- Missing data can mean wasted effort

Administrator materials

- Scoring sheet (to be marked by assessor)
- Student "stimuli sheet" (with items to be read)
- Stopwatch
- Clipboard
- Pencil
- Eraser

Consent

Verbal Consent

- 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, like in a raffle or lottery.
- 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, 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 consent is obtained: ☐ *YES*

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

Getting to know EGRA and EGMA

- Before you start:
    - Fill in demographic information
    - Introduce yourself and establish rapport
    - Obtain verbal consent
- For each subtask:
    - Read directions to child verbatim
    - Provide examples
    - Make sure you know if it's a timed or untimed test
    - Score test according to rules

Demographic information

A. Date of Assessment :	Day: _____ Month:_____
B. Enumerator's Name :	
C. School Name :	
D. District:	
E. Zone:	
F. School Shift :	1 = Full day 2 = Morning only 3 = Afternoon only
G. Multigrade Class ?	0 = No 1 = Yes
H. Order of Assessment	1 = First 2 = Second 3 = Third

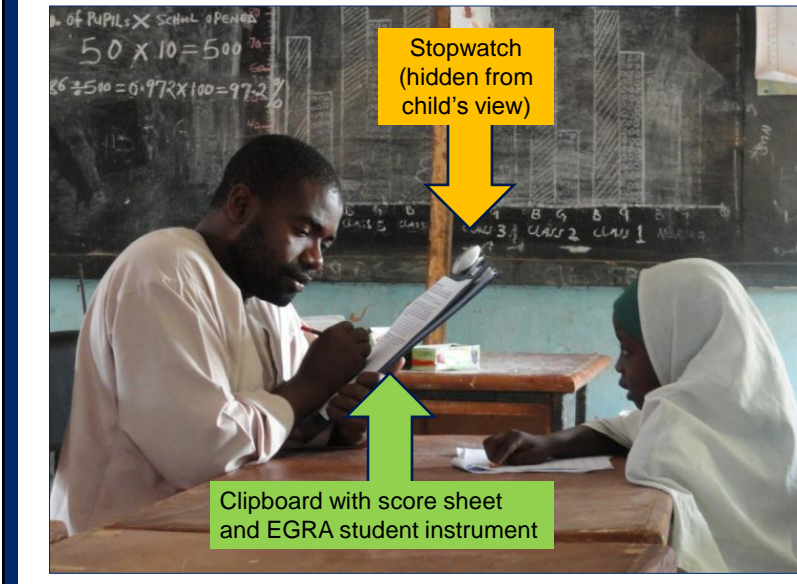| I. Class:	1 = Class One 2 = Class two
J. Stream Name:	
K. Pupil Unique Code:	
L. Student's Age :	
M. Student's Gender	1 = boy 2 = girl
N. Time Started: ___:____ AM / PM	

9

Holding your clipboard and stopwatch

1. Hold your clipboard, along with your stopwatch, in your non-dominant hand.
2. Place your pen or pencil in your dominant hand.
3. Slant your clipboard so it points toward the student's forehead.
4. Practice turning your stopwatch on and off while holding the clipboard, stopwatch, and pencil.

10

5

Holding your clipboard and stopwatch

Stopwatch (hidden from child's view)

Clipboard with score sheet and EGRA student instrument

11

Holding your clipboard and stopwatch

Handling these materials in this way is not as easy as it looks.

It takes some time and practice for assessors to become comfortable so that the materials do not distract them from the test administration.

12

Slide 13

Task 2. Nonword decoding	📖 Sheet M2	⏱ 60 seconds

🗣 Here are some made-up words. I would like you to read as many as you can. Do not spell the words, but read them. For example, this made-up word is: "**ut**".

Let's practise: Please read this word *[point to the next word:* **dif***].*
[If the student says "dif", say]: **"Very good: "dif"**
[If the student does not say "dif" correctly say]: **This made-up word is "dif."**

Now try another one: Please read this word *[point to the next word:* **mab***].*
[If the student says "mab", say]: **"Very good: "mab"**
[If the student does not say "mab" correctly say]: **This made-up word is "mab."**

When I say "begin," read the words as quickly and carefully as you can. Read the words across the page, starting at the first row below the line. I will keep quiet and listen to you, unless you need help. Do you understand what you are to do? Ready? Begin

- (/) Mark any incorrect nonsense words with a slash.
- ( ]) Mark the final nonsense word read with a bracket.

Example :   ut   dif   mab

1	2	3	4	5	
vob	tep	reb	fem	bis	(5)
zay	yut	gux	pef	het	(10)
raz	mak	mip	lep	sab	(15)

Right column notes:
- If the time on the stopwatch runs out (60 seconds).
- If a child stops on a word for 3 SECONDS.

If you have marked as incorrect all of the answers on the first line with no self-corrections, discontinue this exercise, check the box at the bottom, and go on to the next exercise.

Right-side annotations:
- **Instructions to be read to the student**
- **Instructions for the assessor on how to administer and score the test**
- **The section of the test where the assessor records the student's responses**

13

Slide 14

Timed vs. untimed EGRA subtasks

- **Timed subtasks:** Several of the EGRA subtasks have a ONE-MINUTE limit, in order to measure the child's FLUENCY. These instruments require the use of a stopwatch (examples: letter identification, word reading, oral reading fluency)

- **Untimed subtasks:** Child is not timed, so a stopwatch is not required (examples: phonemic awareness, listening and reading comprehension)

14

7

EGRA – Administering a timed subtask

| | (/) Mark any incorrect letters with a slash |
| | ( ]) Mark the final letter read with a bracket |

Example : A ∨ L

	1	2	3	4	5	6	7	8	9	10	
	e	f	d	R	m	i	w	r	i	H	(10)
	o	n	F	a	e	A	t	T	e	y	(20)
	n	G	W	o	C	t	i	H	e	o	(30)
	r	E	s	Y	n	U	S	t	s	e	(40)
	D	t	I	o	t	p	I	i	s	g	(50)
	L	N	I	E	I	x	k	r	z	A	(60)
	n	w	a	O	H	e	P	d	t	s	(70)
	s	o	E	h	e	m	a	M	b	E	(80)
	J	r	c	s	v	h	R	u	B	a	(90)
	u	E	Q	N	a	T	I	h	A	O	(100

Time remaining on stopwatch at completion (number of SECONDS):

Check this box if the exercise was discontinued because the child had no correct answers in the first line.

EGRA – Administering an untimed subtask

Section 2. Initial Sound Identification

*This is NOT a timed exercise and **THERE IS NO STUDENT SHEET**. Read aloud each word twice, and have the student say the initial sound. Remember to model the "pure" sounds: /p/, not "puh" or "pay." Say:*

This is a listening exercise. I want you to tell me the beginning sound of each word. For example, in the word "pot", the first sound is "/p/". In this exercise, I would like you to tell me the first sound you hear in each word. I will say each word two times. Listen to the word, then tell me the very first sound in that word.

Let's practice. What is the first sound in "mouse"? "Mouse."
> *[If the child responds correctly, say]:* Very good, the first sound in "mouse" is /mmmmm/.
> *[If the child does not respond correctly, say]:* Listen again: "mmmouse". The first sound in "mouse" is /mmmmm/."

Now let's try another one: What is the first sound in "day"? "Day".
> *[If the child responds correctly, say]:* Very good, the first sound in "day" is / d /".
> *[If the child does not respond correctly, say]:* Listen again: "day". The first sound in "day" is / d /".

Do you understand what you are to do?
> *[If the child says no, say]:* Just try your best.

What is the first sound in "_____"? "_____"? [Repeat the word twice]								
Map	/mmmm/	○ Correct	○ Incorrect	○ Don't know	○ No Response			
Say	/sssss/	○ Correct	○ Incorrect	○ Don't know	○ No Response			
Up	/uh/	○ Correct	○ Incorrect	○ Don't know	○ No Response			
Go	/g'/	○ Correct	○ Incorrect	○ Don't know	○ No Response			
Now	/nnnn/	○ Correct	○ Incorrect	○ Don't know	○ No Response			
Can	/k'/	○ Correct	○ Incorrect	○ Don't know	○ No Response			
Fish	/ffffff/	○ Correct	○ Incorrect	○ Don't know	○ No Response			
Pig	/p'/	○ Correct	○ Incorrect	○ Don't know	○ No Response			
Run	/rrrrr/	○ Correct	○ Incorrect	○ Don't know	○ No Response			
Look	/llllll/	○ Correct	○ Incorrect	○ Don't know	○ No Response			

Check this box if the exercise was discontinued because the child had no correct answers in the first five words :

Administration icons

- Indicates if subtask uses stimulus sheets

- Indicates whether subtask has time limit

- Indicates auto-stop

- Indicates when child should be prompted to next item

- Indicates to read directions verbatim

18

9

Administration icons

- Indicates how to record student responses

  - (/) Incorrect or no response
    ( ]) After the last number read

  - (✓) 1 = Correct.
    (✗) 0 = Incorrect or no response.

- ❖ ▪ Indicates special materials needed

Basic EGRA administration rules

- **3-second rule:** If a child hesitates to answer for more than three seconds on a given EGRA item, mark the item incorrect and ask the child to go on.
- **Early stop rule:** If a child is unable to provide a correct answer on any item in the first row or section of a subtask, thank the child, mark the box at the bottom of the scoring page, discontinue the subtask and move on to the next subtask.

Basic EGRA scoring rules

Incorrect answers and omissions: Put a slash through incorrect answers and non-responses (**/**)

Skipped letters, words or lines: Draw a line through any row of words or letters skipped

~~A   t   p   R   x   B   w   o   m   e~~

Self corrections: If student self-corrects within 3 seconds, circle the item already slashed through and score as correct *(time is used)*

Ⓒ

Basic EGRA scoring rules

Dialectical differences – score as correct

Articulation differences – score as correct

Bracketing: When the child stops reading (or you tell him/her to stop because 60 seconds is up), write a bracket behind the last word read. ⌐

Basic EGRA scoring rules

Repeating questions: If a child asks you to repeat a question or does not understand, you can repeat it only ONCE.

Comprehension questions: Only ask questions that pertain to the lines of text that the student has read. Do NOT ask questions for text that the student has not read.

23

Example of scoring for familiar word reading


Example :	cat	sick		made		
	1	2	3	4	5	
	go	sad	up	find	come	(5)
	help	two	run	see	down	(10)
	red	and	play	at	you	(15)
	chair	man	when	now	under	(20)
	please	soon	like	they	good	(25)
	thank	going	are	know	him	(30)
	jump	once	ask	fly	want	(35)
	must	green	sing	those	always	(40)
	many	which	upon	sit	clean	(45)
	stop	big	me	house	girl	(50)

Time remaining on stopwatch at completion (number of SECONDS) : 11

Check this box if the exercise was discontinued because the child had no correct answers in the first line.

24

12
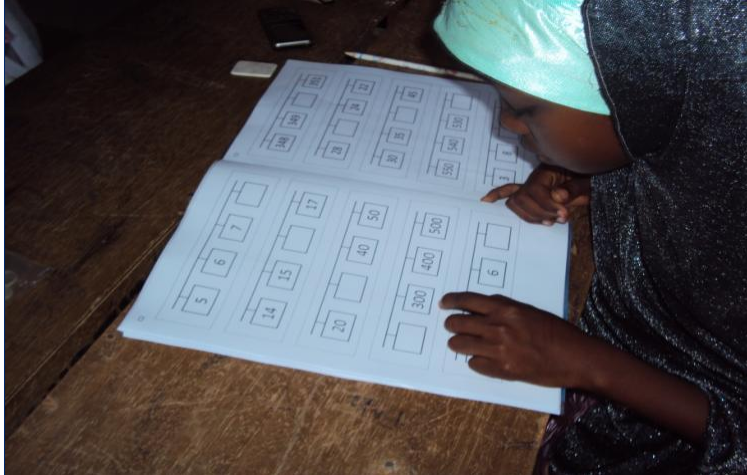
EGMA administration

EGMA administration – Timed subtasks

Sheet A needed

60 sec limit

What the assessor says

| Task 1: Number Identification | | | 📖 A | ⏱ 60 seconds |

Here are some numbers. I want you to point to each number and tell me what the number is. I am going to time you and will tell you when to begin and when to stop.
- [point to first number] Start here. [glide hand from left to right]. Are you ready? . . . Start.
- What number is this ?

(/) Incorrect or no response
( ]) After the last number read

Stopping & moving conditions

- If the time on the stopwatch runs out (60 seconds).

- If a child stops on a number for 5 SECONDS.

2	9	0	12	30
22	45	39	23	48
91	33	74	87	65
108	345	587	731	989

Record here

Record time left here

What to record

Time left (seconds):

What to record

EGMA administration – Examples

Task 2: Number	📖 B1	⏱ ✕

What the assessor says

🖑 ✕

P1:
🔊 Look at these numbers. **Tell me** which number is bigger.

8   4

✓🔊 That's correct, 8 is bigger. Let's do another one.

✕🔊 The bigger number is 8. *[Point to 8]* This is 8.   *[Point to 4]* This is 4. 8 is bigger than 4. Let's do another one.

Response if the answer is correct.

P2:
🔊 Look at these numbers. **Tell me** which number is bigger.

12   22

✓🔊 That's right, 22 is bigger. Let's continue.

✕🔊 The bigger number is 22. *[Point to 22]* This number is 12. *[Point to 22]* This is 22. 22 is bigger than 12. Let's continue.

Response if the answer is NOT correct.

27

EGMA administration – Untimed subtasks

Sheets B2 & B3 needed

No time limit

What the assessor says

Task 2: Number Discrimination	📖 B2 & B3	⏱ ✕

🔊 Look at these numbers. **Tell me** which number is bigger.

[Repeat for each item]

What to record

(✓) 1 = Correct.
(✕) 0 = Incorrect or no response.

7	5	*7*	1	0	94	78	*94*	1	0
11	24	*24*	1	0	146	153	*153*	1	0
39	23	*39*	1	0	287	534	*534*	1	
58	49	*58*	1	0	623	632	*632*	1	0
65	67	*67*	1	0	867	965	*965*	1	0

Record here

🖑
• If the child gets 4 successive errors

↺
• If the child doesn't respond after 5 SECONDS.

Stopping and moving condition

28

14

EGMA administration – Addition, Level 2

Task 4B: Addition: Level 2	📖 D3	⏱ ✗
🖉 ❖ Paper and pencil.		
🗣 Here are more addition exercises. You may use this paper and pencil if you want to. You do not have to do so. Start here [point to first problem]. ✎ (✓) 1 = Correct. (✗) 0 = Incorrect or no response. 13 + 6 = (19) [1] [0] 18 + 7 = (25) [1] [0] 12 + 14 = (26) [1] [0] 22 + 37 = (59) [1] [0] 38 + 26 = (64) [1] [0]		✋ • If the child did not answer any Level 1 question correctly. • If the child makes 4 consecutive errors. ↺ • If a child uses an inefficient strategy (e.g., tick marks), as the child "Do you know another way to solve the problem?" • If a child continues to use an inefficient strategy or stops on an item for 5 SECONDS.
To solve the problems, the child used: ☐ Fingers/tick marks ☐ Paper and pencil calculations ☐ Solved the problems in their head		

29

EGMA administration – Word problems

Task 6: Word Problems (practice)	📖 ✗	⏱ ✗
🖉 ❖ Counters, paper and pencil.		
🗣 I have some exercises that I am going to ask you to do for me. Here are some objects to help you. You can use them if you need them, but you don't have to use them. Listen very carefully to each exercise. If you need, I will repeat exercise for you. Okay, let's get started. 🗣 There are three children in the bus. One child gets out of the bus. How many children are left in the bus. ✓🗣 That's right. There are two children left in the bus. Let's do some more. ✗🗣 Imagine these counters are children [*point to counters*]. Count out three children. These children are in the bus. One child gets out of the bus. Using the counters, show me one child getting out of the bus with the counters. How many children are left in the bus? That's right. There are two children left in the bus. Let's do some more.		✋✗

30

15

Common administrator errors

- Forgetting to put bracket and/or time remaining
- Not adhering to 3-second rule (5 seconds for EGMA)
- Not reading directions verbatim
- Not starting stopwatch on time, or forgetting to stop it
- Overly encouraging or assisting children

31

Importance of supervision

32

EGRA and EGMA administration – Supervision

Supervision is key to accurate EGRA and EGMA administration and data collection.

The supervisor monitors how the assessor is giving the test. After the child leaves, the supervisor gives the assessor any feedback necessary to improve technique and ensure reliability of data.

33

Electronic data collection

- Easier assessment
- Better data
- Faster results

Video of EGRA administration using Tangerine: vimeo.com/36907469

34

Benefits of using Tangerine

- Easier to administer – fewer materials to juggle
- Reduces administrator error
- Reduces time from data collection to results – no data entry stage
- Reduces loss of data as well as inconvenience of paper (paper waste, storage, and carrying)
- Easier to add languages, reformat, etc.

35

Now, let's practice!

36