# PROCEDURES AND INSTRUCTIONS FOR THE ADMINISTRATION OF COGNITIVE DEVELOPMENT AND ACHIEVEMENT INSTRUMENTS- ROUND 3

# FIELDWORKER'S MANUAL

	Fieldworker's Data	
Names:		
	Code:	

# INTRODUCTION

The present manual states the procedures that **must be followed** by all fieldworkers to ensure a standardized administration of the cognitive development and achievement instruments in Round 3 of the Young Lives project.

This manual is divided into two sections. The first section presents general guidelines that should be followed by fieldworkers during the administration of every instrument. The second section has specific instructions for administering each instrument.

The instruments that will be administered to the younger cohort are, in order:

- Peabody Picture Vocabulary Test (PPVT)-Form A (plus some items from Form B as decided by local panels)
- Reading and Writing Items
- Early Grade Reading Assessment (EGRA)
- Mathematics Achievement Test Younger Cohort

And the instruments that will be administered to the older cohort are, in order:

- Peabody Picture Vocabulary Test (PPVT)-Form A (same set of items used with younger cohort)
- Verbal Achievement Test (Cloze items)
- Mathematics Achievement Test Older Cohort (Booklets I and II)

#### I. GENERAL PROCEDURES

The instruments will be administered individually to the participants in the family's dwelling.

# Relationship with the child

From the beginning of the assessment the fieldworker must establish a relationship of trust with the child. The fieldworker must present him/herself and then tell the child what they are about to do. The fieldworker should say: "Hello (name of the child). My name is (name of the fieldworker) and I am here to do a special work with you." The fieldworker must call the participant by his/her name at all times.

It is important that the child who is being assessed is sitting close enough to the fieldworker, so they can hear each other without difficulties.

During the administration of the test, no one that is not part of the evaluation should be in the space where the child is being evaluated. However if the child requests the presence of his/her parents or legal guardian during the administration, the fieldworker must allow them to be present but ask them to sit **behind** the child to avoid interrupting the administration or that he or she get hints on how to respond.

Once a relationship of trust is established with the child, the fieldworker will proceed with the evaluation.

# **Required materials**

For the assessment of the younger cohort each fieldworker must have:

- a) Cognitive Development and Achievement Questionnaire 8 year olds
- b) PPVT templates
- c) Literacy card
- d) EGRA stimuli cards
- e) Numeracy cards
- f) Mathematics Achievement Test Younger Cohort

For the assessment of the older cohort each fieldworker must have:

- a) Cognitive Development and Achievement Questionnaire 15 year olds
- b) PPVT templates
- c) Verbal achievement test (Cloze)
- d) Mathematics Achievement Test Older Cohort Booklet I
- e) Mathematics Achievement Test Older Cohort Booklet II

Also, for both cohorts the fieldworker needs: a copy of this manual so that the instructions are delivered verbatim, a pencil and eraser for the child to write with and a stop watch that allows to count minutes and seconds and may be restarted easily.

# Place of administration

Whenever possible the test should be administered in a place that is as private as possible (e.g. far from interferences coming from street sounds, siblings, TV or radio) and has a chair (or equivalent for the child to sit on), a table or flat surface for the child to write on and for the field worker to show the items, it should not be excessively windy and must have good lighting.

#### Conditions of administration

It is very important that the fieldworker guarantees appropriate conditions for assessment. This means that the child had the necessary conditions and responded to the best of his/her abilities. An internal condition that might influence the child's performance is his/her ability to see clearly. If the child has a <u>severe</u> visual impairment that doesn't allow him/her to see clearly the templates or booklet, the fieldworker must register this in the appropriate question of the Cognitive Development and Achievement Questionnaire. Examples of severe seeing impairments that could discontinue the administration of a test are blindness, severe eye injuries that compromise ability to see, cataracts, etc.

If the child has a severe visual impairment the administration of the <u>tests that require</u> <u>seeing ability must be canceled</u>. If the child is from the younger cohort the only tests that should be administered are: EGRA Section C (Listening Comprehension) and Math items 7, 8 and 9. If the child is from the older cohort administration of all achievement tests must be canceled. This internal condition should be registered at the start of the Cognitive Development and Achievement Questionnaire.

In relation to external conditions, fieldworkers should be very careful especially with lighting conditions. The setting where the administration is being developed should have enough natural or artificial light. In case the administration was carried out at after sunset artificial light would be necessary for both the child and fieldworker to see

clearly either the templates or booklets. If lighting conditions are not adequate, the fieldworker should look for another space or reschedule the administration for the next day in order to have good lighting conditions.

At the beginning of each test you will find a reminder, like the one presented below, of the conditions of administration needed.

FIELDWORKER: It is very important to assure adequate conditions for the assessment. You should look for a place with adequate lighting (natural or artificial), relative absence of noise and a flat surface for the child to work on. If these conditions are not available, try to look for other space or reschedule if possible.

# Language used for administration

The fieldworker must indicate the language in which the test was administered. This section of questions is at the end of each test. The fieldworker must register a) language used by the fieldworker; b) language used by the child and c) language in which the test was written. If more than one language is used for administration mark the one that was used the most, but make a note of the use of multiple languages in your comments.

# **Duration of the administration**

The fieldworker *must* register the time of start and end of *each* test administered to the child, so that after the administration the average testing time for each test can be estimated. For this reason, the fieldworkers must have a watch at all times.

It is recommended that all the tests are administered in *one session*. However 5 minutes breaks can be taken **between** tests, so that the child may rest. If the participant is too tired or distracted the fieldworker may cut the test administration and return for a second session to complete the remaining tests (making a note of this). Every effort should be made to finish a test once it has started; in other words a test should be restarted in the second session only if the conditions in the first session were inadequate.

It is preferable that any given test section should not start before 7 a.m. or after 6 p.m. to avoid the participant from being too tired and not able to give his/her best performance.

# II. SPECIFIC INSTRUCTIONS FOR THE ADMINISTRATION OF THE TESTS

# 2.1. YOUNGER COHORT

The instruments that will be administered to the younger cohort are, in order:

- Peabody Picture Vocabulary Test (PPVT)
- Reading and Writing Items
- Early Grade Reading Assessment (EGRA)
- Mathematics Achievement Test Younger Cohort

# 2.1.1. Peabody Picture Vocabulary Test (PPVT-III) Form A

The Peabody Picture Vocabulary Test (PPVT) is a widely used test of receptive vocabulary. Its main objective is to measure vocabulary acquisition in individuals from 2.5 years old to adulthood. The PPVT has already been administered in Round 2 of YL as a measure of cognitive development.

#### Materials

- PPVT Templates
- Cognitive Development and Achievement Questionnaire
- Pencil and eraser

# **Testing time**

The PPVT-III is an untimed test so the test taker should not be hurried, but given an adequate time to select the picture of his or her choice. However, generally after 15 seconds the child should be encouraged to choose an answer.

The fieldworker should be very careful in the registration of the time in which the administration of the PPVT – III started and finished. The start time of the test should not consider the administration of examples or the explanation of instructions.

Testing time should average around 15 minutes.

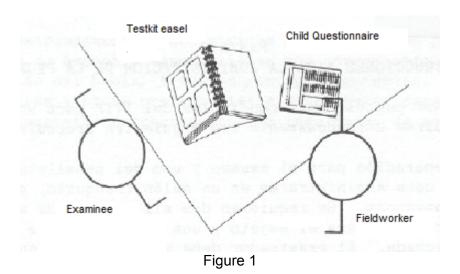
# **Test setting and conditions**

It is very important to try to assure that testing occurs in a quiet, private room away from distractions. Two chairs (one of comfortable size for the child) and a table or flat-topped desk of appropriate height are needed. The room temperature should be comfortable and lighting conditions must be adequate, as described before. Be sure that the templates are close enough to the child so that he/she is able to see them clearly.

If lighting conditions are not adequate please reschedule the administration of the test.

#### **Testkit easel feature**

The easel feature **must** be used with the four training items because the fieldworker's instructions are printed on one side of the training plates and must not be visible to the child. Most fieldworkers will want to continue to use the easel feature but it is not mandatory.



For a right handed fieldworker, the typical arrangement is that the fieldworker and child are seated across the corner of a desk or table from each other. With this arrangement the fieldworker is able to see both sides of the easel. The easel is placed so the child can only see the Picture Plate being considered. The Cognitive Development and Achievement Questionnaire is folded and placed behind the easel to shield the form from the child's view. For young children that use a pointing response, the fieldworker may wish to sit on the same side of a table or desk as the child to observe better the pointing responses.

Another way is to simply lay the templates on the table with the pages folded back and under so that the test taker sees only one picture plate at the time. Using this procedure the test takes more time than using the easel feature. If the picture plates are presented in this manner it is recommended that the fieldworker use a clipboard or similar device to hold the Cognitive Development and Achievement Questionnaire so the child cannot see the stimuli words or observe scoring.

# Relationship with the child

A good relationship with the child should be established in order to ensure a successful testing session.

There is no special way for doing so; some minutes of conversation prior to testing are a recommendation, also with older individuals, explaining the purpose of the test and how the results will be used can be helpful.

# Introducing the test and using training items

Use the instructions on the fieldworker's side of the training items in the test kit to introduce the test and administer the training items. Generally use training items A and B with children under age 8, and training items C and D with individuals aged 8 and older. It is however, permissible to use more advanced instructions and items with more capable children who are younger than age 8, and the easier instructions and items with older persons who are severely developmentally delayed.

Two guidelines should be followed in using the training items. First, since these items are used to train the individual to make the desired response, the fieldworker is free to use his or her ingenuity to teach the required response. Second in order to start testing, the child must respond correctly and without help to at least two consecutive training

words per items. However, the fieldworker may provide additional practice to be sure the child is ready to be tested.

# Rules for test item administration

To obtain valid results, carefully follow the rules below:

- PPVT-III test items are administered in prescribed sets of 12. Follow the Complete set Rule when testing: Once you begin to administer a set of test items, always administer all 12 items in order. Always start with the first item in the set.
- For children who use the pointing response, precede the first stimuli words with one
  of the following prompts. When it is clear that the child understands the task, you
  may wish to simply say the stimuli word.

Put your fin	ger on
Show me	<b>.</b>
Point to	
Find	
Where is	- ?

• For individuals who respond by saying the number of the picture they have chosen, precede the first few stimulus with the prompt:

What number is \_\_\_\_?

As the test proceeds, this introductory phrase usually can be omitted.

• As you administer the test, record the response (1, 2, 3 or 4) to each item in the Response Column on the Cognitive Development and Achievement Questionnaire (see figure 2). Indicate errors by drawing an oblique line through the E in the Error column. The numbers in the Key column indicate the correct response. Fieldworkers may need to use the code 77 if the child doesn't know the answer or if he/she doesn't respond. If the child refuses to respond use code 79. Such responses are scored as errors.

START Age	START Ages 8 – 9 SET 7				
Item	Word	Key	Resp.	Error	
73	Gigantic	(2)	2	Е	
74	Nostril	(4)	4	Е	
75	Vase	(3)	77	ℯ	
76	Knight	(1)	1	E	
77	Towing	(1)	4	Æ	
78	Horrified	(3)	3	É	
79	Trunk	(2)	2	Е	
80	Selecting	(1)	1	Е	
81	Island	(2)	77	Æ	
82	Camcorder	(4)	4	Е	
83	Heart	(3)	3	E	
84	Wrench	(4)	2	Æ	
			No. of Errors	,	

Figure 2

 A stimulus word may be pronounced more than once in these situations: when the child requests repetition; when repetition appears to be needed; or when significantly different pronunciations of a word are used in the culture or region. Practice saying the stimulus words before your first administration so you will articulate distinctly. Present the words in a normal tone.

- To coach or otherwise help on a test item will invalidate the results. Be careful not
  to give clues that a choice is correct or incorrect, either by facial expression or by
  exposing the key on the Performance Record. Keep in mind the following:
  - o Do not show the child the printed stimulus word.
  - Do not use the stimulus word in a sentence.
  - o Do not spell the stimulus word.
  - o Do not substitute a synonym for the stimulus word.
  - Do not convert stimulus words that are singular to the plural form, because doing so may provide a clue on certain plates where only one plural alternative exists.
  - Do not precede the stimulus word by an article word by an article (a, an, the) because only nouns are introduced by articles.
- Since the PPVT-III is an untimed power test and not a speed test, the child may
  take any reasonable amount of time per item to make a choice. However, if about
  15 seconds has passed and no choice has been made, encourage him or her by
  saying: "Try one. Point to the one you think it might be". If there is still no
  response, record NR for no response, and go on to the next item.

Conversely, if an individual is responding very quickly and does not appear to be considering each option, ask him or her to slow down and study all four alternatives carefully before making a choice. Going back over items is not permitted; therefore, promptly discourage the child's tendency to respond too quickly.

- Since there is no penalty for guessing on the PPVT-III, encourage reluctant responders by saying: "It's all right to guess". Since the scale is in multiple choice format, there is a chance in four that the answer will be correct. However, if an child is still unwilling to choose, record "77", on the Cognitive Development and Achievement Questionnaire, for doesn't know, when the child doesn't know the answer or record "79", on the Cognitive Development and Achievement Questionnaire, for refused to answer if the child refused, for whatever reason, to answer. Then say: "That was a difficult one. Let's try another". Go on to the next item and score each 77 or 79 as an error.
- Praise should be given generously, but should not be overdone. Be equally positive (in wording and tone of voice) with correct and incorrect responses. Comments such as the following have been found effective:

Good!

You are doing well.

That's fine.

A sensitive fieldworker soon learns the amount of encouragement needed to elicit a child's best performance.

- Do not tell the child whether a response is correct or incorrect. If asked, use a noncommittal reply such as: That was a good answer. NEVER DISCLOSE THE ANSWERS TO THE TEST BECAUSE THIS TEST WILL BE ADMINISTERED TO THEM AGAIN IN THE FUTURE.
- If the child has responded to an item but then spontaneously selects a different response, record and score the final choice, even if the change is from the correct to

an incorrect response. Be careful not to discourage such shifts. These spontaneous changes are acceptable even when made after you have administered subsequent items.

- If necessary, you may refocus the child's attention before administering and item by saying: Listen carefully. You should use this prompt whenever the child seems distracted from the task.
- Some individuals, especially young children, may perseverate by pointing to or naming the same choice over and over again, especially as they approach their ceiling. In these cases, it may be necessary to frequently repeat the following prompt:

"Be sure to look carefully at the pictures before choosing one."

If the child continues to perseverate, the fieldworker should point to each of the four pictures in turn while saying:

"Look at this one.... And this one... and this one... and this one."

End the sequence by pointing to a choice other than the one on which the child has fixated.

- It is permissible for the child to turn the Picture Plate pages since it may help keep his or her attention focused on the task.
- Do not omit test items that you consider unfair to the child and then prorate the score. Persons in all cultures and locations will find some items more familiar and some less familiar than others. However, these items tend to balance out over the course of the test.

# **Rules for Critical Range Testing by Sets**

By definition, the critical range includes only those test item sets that provide maximum discrimination among individual of similar ability. This range includes the Basal Item Set, the Ceiling Item Set, and all item sets in between. Thus, extremely easy and extremely hard sets are not administered. On average, an individual takes about five sets of 12 items each, or 60 test items out of 204 (30 percent) that most closely approximate his or her ability. This section provides detailed instructions for selecting the appropriate Start Item and establishing the Basal Item Set and Ceiling Item Set for the individual.

# Finding the correct Start Item

Recommended Start Items are indicated in box sets in the Cognitive Development and Achievement Questionnaire. The Start Item is the first item in the appropriate set of test items designated for the test taker's age. Starting points by age also are indicated in the banner above the item sets.

For example: children aged 8 start in item set 7 (figure 3) and children aged 15 start in item set 10 (figure 4).

START Age	START Ages 8 - 9 SET 7				
Item	Word	Key	Resp.	Error	
73	Gigantic	(2)		Е	
74	Nostril	(4)		Е	
75	Vase	(3)		Е	
76	Knight	(1)		Е	
77	Towing	(1)		Е	
78	Horrified	(3)		Е	
79	Trunk	(2)		Е	
80	Selecting	(1)		Е	
81	Island	(2)		Е	
82	Camcorder	(4)		Е	
83	Heart	(3)		E	
84	Wrench	(4)		E	
			No. of Errors		

Figure 3

START Age	START Ages 12 – 16 SET 10				
Item	Word	Key	Resp.	Error	
109	Solo	(4)		Е	
110	Citrus	(2)		Е	
111	Inflated	(3)		Е	
112	Lecturing	(3)		Е	
113	Timer	(1)		Е	
114	Injecting	(1)		Е	
115	Links	(4)		Е	
116	Cooperating	(2)		Е	
117	Microscope	(1)		Е	
118	Archery	(2)		Е	
119	Garment	(4)		E	
120	Fragile	(3)		E	
	<u>.                                      </u>		No. of Errors		

Figure 4

# **Establishing the Basal Set**

Basal Set rule: The lowest set of items administered containing 1 or no errors.

Establish the Basal Set first. If you have selected the appropriate Start Item, and if respondent has made one (1) or no errors in this item set, then the Basal Set has been established.

If the Basal Set has been established, begin testing forward with the next item set. However, if the test taker is aged 4 or older and makes more than one error in the first item set administered (i.e. the Start Item Set), drop back to the previous item set, begin with the first item in that set, and administer all 12 items. If the child again makes more than one error, drop back to the previous item set. Test in reverse sequential order by sets until the Basal Set Rule is met. When dropping back to a previous set, always begin with the first item in the set. Then test forward, by sets from where you began testing.

Some individuals may reverse all the way back to set 1. In these rare cases, use Set 1 as the **Automatic Basal Set** for purposes of calculating the raw score. When this

happens, continue testing forward until a Ceiling Set is established, which is discussed next. Do not discontinue testing just because a Basal Set cannot be established, except in extremely rare cases where eight (8) or more errors are made in the first set. In this event, the individual should be declared untestable with the PPVT-III because he or she has achieved only a "chance" score.

Occasionally a fieldworker will start a test at a level that is far too low or far too high. In such rare cases, two or more Basal Sets or Ceiling Sets may be established. If so, use the following rule to determine the raw score: Use the **lowest Basal Set** and the **highest Ceiling Score**. This rule will be repeated later in the section entitled "Calculating the Raw Score".

# **Establishing the Ceiling Set and ceiling item**

After establishing the Basal Set, continue testing forward, by complete sets, until a Ceiling Set is established.

**Ceiling Set Rule:** The highest set of items administered containing eight (8) or more errors.

As soon as the Ceiling Set is established, discontinue testing, since the individual has now been tested over his o her critical range. The **Ceiling Item** is the last item in the Ceiling Set.

Occasionally, a test taker will start with far too difficult an item set and the Ceiling Set will be immediately established in the first item set. If this occurs, reverse sequentially by sets until a Basal Set is established. Multiple Ceiling Sets may occur when dropping back sets. Just keep in mind the rule: In calculating the raw score, always use the highest Ceiling Set.

A very bright individual may continue to the end of the test without establishing a Ceiling Set. In these rare cases, Item 204 becomes the Automatic Ceiling Item.

**Example:** As illustrated in figure 5, testing was started at item 109, set 10, because the subject was 15 years and 3 months. The child made only one error in this set, so set 10 is her Basal Set. Testing continued through Set 13. In this set, the child made 8 errors, so Set 13 is her Ceiling Set. How to calculate the raw score will be discussed next.

	START Ages 12 – 16 SET 10				
Item	Word	Key	Resp	Error	
109	Solo	(4)	4	Е	
110	Citrus	(2)	2	Е	
111	Inflated	(3)	3	Е	
112	Lecturing	(3)	3	Е	
113	Timer	(1)	2	Æ	
114	Injecting	(1)	1	Е	
115	Links	(4)	4	Е	
116	Cooperating	(2)	2	Е	
117	Microscope	(1)	1	Е	
118	Archery	(2)	2	Е	
119	Garment	(4)	4	Е	
120	Fragile	(3)	3	Е	
	No. of Errors				

	SET 11				
Item	Word	Key	Resp	Error	
121	Carpenter	(2)	2	Е	
122	Dilapidated	(4)	4	Е	
123	Hazardous	(3)	3	Е	
124	Adapter	(2)	4	E	
125	Valve	(3)	3	Е	
126	Isolation	(1)	1	Е	
127	Feline	(2)	2	Е	
128	Wailing	(1)	2	Þ	
129	Coast	(4)	4	Е	
130	Appliance	(1)	1	Е	
131	Foundation	(4)	4	Е	
132	Hatchet	(3)	3	Е	
	No. of	Errors		2	

	SET 12				
Item	Word	Key	Resp	Error	
133	Blazing	(3)	3	Е	
134	Mammal	(2)	1	Æ	
135	Reprimanding	(1)	1	Е	
136	Upholstery	(4)	3	Æ	
137	Hoisting	(1)	1	Е	
138	Exterior	(1)	3	E	
139	Consuming	(4)	3	Æ	
140	Pastry	(4)	4	Е	
141	Cornea	(2)	2	Е	
142	Constrained	(3)	1	Æ	
143	Pedestrian	(2)	2	Е	
144	Colt	(3)	3	Е	
	No. of Errors				

;	START Ages 17 - Adult SET 13				
Item	Word	Key	Resp	Error	
145	Syringe	(4)	4	Е	
146	Transparent	(3)	2	Æ	
147	Ladle	(2)	1	Æ	
148	Replenishing	(3)	4	E	
149	Abrasive	(1)	2	Þ	
150	Parallelogram	(3)	3	Е	
151	Cascade	(4)	4	Е	
152	Lever	(1)	3	Æ	
153	Detonation	(2)	3	Þ	
154	Pillar	(2)	2	Е	
155	Cultivating	(1)	2	Æ	
156	Aquatic	(4)	3	Æ	
	No. of Errors				

Figure 5

# Calculating the Raw Score

The Raw score is determined by subtracting the individual's total number of errors over his o her critical range from the Ceiling Item. This score is based on the assumption that all items below the Basal Set are correct and all items above the Ceiling Set are incorrect.

First, use box at the end of the item sets in the Cognitive Development and Achievement Questionnaire, to total the child's errors. Simply record the ceiling item and subtract from it the total number of errors. This is the child's raw score.

Fieldworkers are encouraged to always verify the correctness of their scoring procedures.

It is essential to re-emphasize that fieldworkers must follow these two rules in calculating the raw score:

# Multiple Basal Set Rule: Always use the lowest Basal Set. Multiple Ceiling Set Rule: Always use the highest Ceiling Set

For example, in figure 5 the child's Ceiling Item is 156 and the fieldworker must record this in the appropriate box at the end of the item sets, see example in figure 6. After recording the Ceiling Item the fieldworker must count the errors the child made, in figure 5 the child made 1 error in set 10, 2 in set 11, 5 in set 12 and 8 in set 13. Thus in total she made 16 errors. That number must be recorded in the Cognitive Development and Achievement Questionnaire, see example in figure 6. Finally the fieldworker must subtract the errors from the Ceiling Item and the result will be the Raw Score, as shown in figure 6.

Ceiling item (possible values: from 1 to 204, -79=Refused to answer, -88=NA)	[ <u>156</u> ]
Minus errors (possible values: from 0 to 100, -79=refused to answer, -88=NA)	[ <u>16</u> ]
Raw score (possible values: from 0 to 204, -79=refused to answer, -88=NA)	[ <u>140</u> ]

Figure 6

# 2.1.2. Reading and Writing Items

These are two items: a reading item and a writing item used before in rounds 1 and 2 for the older cohort. The reading item assesses the skill to read letters, a word and a sentence. The writing item assesses the ability to write a short sentence. **These items should be administered exactly as they were administered in Round 1.** 

# **Materials**

- Pencil and eraser
- Cognitive Development and Achievement Questionnaire 8 years old
- Booklet of Mathematics Achievement Test Younger Cohort
- Fieldworker's Manual
- Literacy card

# **General Testing Guidelines**

It is very important that the fieldworker registers the exact time in which the administration begins and ends in the Cognitive Development and Achievement Questionnaire.

This test does not have time limit but it should take no longer than 5 minutes to administrate.

At the beginning of the test the fieldworker should say to the child: "Now I want to ask you about reading and writing".

# Reading item

Specific instructions for the administration of the item are in the back of the literacy card.

The fieldworker must say: "Can you please read me the letters, word and sentence on this card" and after that hand the Card to the child.

# Instructions for registering and correcting item

During administration fieldworkers must assess child's answer. For that they will need to register the child's answers in the Cognitive Development and Achievement Questionnaire by using one of the codes presented below.

The code should be assigned following the next considerations:

- 01 = Can't read anything. This code should be used when the child reads 0, 1 or 2 letters.
- 02 = Reads letters. This code should be used when the child reads the 3 letters correctly.
- 03 = Reads word. This code should be used when the child reads the word correctly. This code must be used even when the child has pronunciation problems but the word can be understood by anyone.
- 04 = Reads sentence. This code should be used when the child reads the word correctly. This code must be used even when the child reads slowly.

For this item only one code must be selected. This code must reflect child's best performance. For example, if the child can not read letters but he can read the word correctly, the code that should be chosen is 03 = Reads word. If the child doesn't read letters or words but he/she reads correctly "sun" or "hot" in the sentence the code that should be chosen is 03 = Reads word. These rare cases must be registered and commented in the observation section.

# Writing item

Specific instructions for the administration of the item are in the back of the literacy card.

Give the child a pencil and hand the child the Cognitive Development and Achievement Questionnaire opened in the **Answer sheet for 1.18: writing**. Then say: "Please write the following sentence". "I LIKE DOGS."

If the child makes a mistake and wants to start again tell him to cross out what he has written and start again on the next line.

After watching how did the child wrote the sentence choose one code from the survey to register his performance.

# <u>Instructions for registering and correcting item</u>

During administration fieldworker must assess child's answer. For that he will need to register the child's answers in the Cognitive Development and Achievement Questionnaire by using one of the codes presented below.

The code should be assigned following the next considerations:

- 01 = No. This code should be used when the child couldn't hold the pencil or if she/he holds it but wrote a sentence that isn't comprehensible in any way.
- O2 = Yes with difficulty or errors. This code should be used when the child writes the sentence in a comprehensible way but with one or more errors. For example, she/he forgot to write 1 or more letters, there are 1 or more incorrect letters or if she/he writes in a hardly comprehensible way. Child should not be penalized for writing slowly.
- O3 = Yes without difficulty or errors. This code should be used when the child writes the sentence clearly, in a comprehensible way and with no errors. The lack of capital letter at the beginning of the sentence, lack of final point or other punctuation or orthographic errors should not be taken into account.

# 2.1.3. Early Grade Reading Assessment (EGRA)

EGRA is an adaptation from a USAID instrument aimed at measuring early grade reading abilities. The test is divided into three sections: a) familiar word identification, b) passage reading and c) listening comprehension. Specific instructions for each section will be given in the following paragraphs.

# **Materials**

- Pencil and eraser
- Cognitive Development and Achievement Questionnaire 8 years old
- Fieldworker's Manual
- EGRA stimuli card
- Stopwatch

# **General Testing Guidelines**

It is very important that the fieldworker registers the exact time in which the administration begins and ends in the Cognitive Development and Achievement Questionnaire.

The fieldworker must have a stopwatch that allows him/her to control the time in some sections of the evaluation, and must record the child's answers in his/her Cognitive

Development and Achievement Questionnaire. This symbol will let you know which sections are timed.

The child should perceive the tests almost as a game to be enjoyed rather than a severe situation. It is important to read aloud slowly and clearly.

At the beginning of the test the fieldworker should say to the child: "In this test I am going to ask you to read some words and a short story out loud. Using this stopwatch, I will see how long it takes you to read. May we get started?"

# Section A. Familiar Word Identification



Show the child card 1 of the EGRA stimuli cards and say: "Here are some words. I would like you to read me as many words as you can (do not spell the words, but read them). Here is an example: "CAT". Now You Try: Tell me the name of this word [Have the student read the word "he"]"

If the child responds correctly say: "Good, this word is "HE." If the child does not respond correctly, say: "This word is "HE."

Then say: "Now try again: Tell me the name of this word [point to "ball"]: If the child responds correctly say: "Good, the word is "BALL." If the child does not respond correctly, say: "The word is "BALL."

If the child does at least one example correctly then continue with the section. However if the child does not do any of the examples correctly discontinue this section and go on to section C. Listening Comprehension. Make a note of this in the comments box of the Cognitive Development and Achievement Questionnaire.

After establishing that the child understood the instructions and is able to respond correctly to at least one example say the following: "Do you understand what you are to do? Please start here (point to the left-most letter on the top row), and go across (point from left to right). "When I say "begin," read all of the words as best as you can. Point to each word as you read it. Put your finger on the first word. Ready? Begin."

Start the stopwatch when you say "begin". Mark each incorrect word with a slash mark (/). Count self-corrections as correct. Stay quiet, except when providing answers as follows: if the child hesitates for 3 seconds, provide the word, point to the next word and say "Please go on." Mark the word you provided as incorrect. After one minute, say, "stop." Mark the final word attempted before you said "stop" with a bracket (]).

# STOP THE CHILD AT 60 SECONDS AND MARK WITH A BRACKET (]).

Figure 7 is an example of how to mark in the Cognitive Development and Achievement Questionnaire.

Exampl	les:	cat		he	ball	
sad	dog	red	do	eat	/5	
,and	us	to	.girl	then	/10	
as	hat	_if	seem	get	/15	
house	sun	stop	Jøts	ear	/20	
foed	at	they	big	the	/25	
last	run	fly	we ]	on	/30	
saw	walk	school	best	time	/35	
boy	wall	chair	all	me	/40	
will	blue	size	fall	go	/45	
hope	far	man	her	was	/50	
rat	have	fat	good	pet	/55	
up	try	small	eye	love	/60	

<b>The child can read at least one example</b> (possible values: 01=yes, 02=no, -79=Refused to answer, -88=NA)	[ <u>01</u> ]
Total words read at 60 seconds (possible values: from 1 to 50, -79=Refused to answer, - 88=NA)	[ <u>29</u> ]
<b>Total incorrect words at 60 seconds</b> (possible values: from 0 to 50, -79=refused to answer, -88=NA)	[ <u>12</u> ]
<b>Total correct words in 60 seconds</b> (possible values: from 0 to 50, -79=refused to answer, -88=NA)	[ <u>17</u> ]

Figure 7

In the previous example the child was able to read at least one example word so the fieldworker wrote "01" in the corresponding line and continued with the section. The child read 29 words in 60 seconds and 12 of those where incorrect. So in total, the child read 17 correct letters in 60 seconds (subtract number of incorrect letters from the number of letters read to get Total correct words in 60 seconds).

If the child did not read any of the examples, the fieldworker must mark the first item of figure 7 as "02". The items of that section and section b that did not get administrated must be coded as "88".

# Section B. Passage reading



# Reading aloud

Show the child card 2 of the EGRA stimuli cards and say: "There is a story in this card and I would like you to read it aloud for me. When I say "begin," read the story as best as you can. Are you ready? Begin". Start the stopwatch when you say "begin".

During the administration stay quiet, except when providing answers as follows: if the examinee can not read a word after 3 seconds, provide the missing word and encourage the child to continue by saying: "Good effort. Please keep trying." If you provided the word, mark it as incorrect.

Mark each incorrect word with a slash (/). Count self-corrections as correct. MARK THE LAST WORD THE CHILD READ AT 60 SECONDS WITH A BRACKET, (]).

When 60 seconds have gone by please ask the child to stop reading aloud.

In the Cognitive Development and Achievement Questionnaire the fieldworker must mark if the child was able to read the text or not. It should be considered as being able to read when the child has read the title of the text and the first 2 lines within the 60 seconds. If the child has not read the title and the first 2 lines after 60 seconds discontinue the administration of the second part (reading in silence) and go on to Section C. Listening Comprehension. Do not forget to fill out items 1.29, 1.30 and 1.31 after finishing the administration and when the child is no longer present.

Figure 8 is an example of how to mark in the Cognitive Development and Achievement Questionnaire.

Sandra and her grey cat	5
My name is Sandra and I am eight years old.	15
My little brother is Charlie and he is four. We	25
like to play with our cat. Our cat is grey∕and fat	37
and she likes to hide behind the big furniture.	46
One day, our cat went missing. We thought	54
she was just ] playing hide and seek, but we	63
could not find her in her favorite places . So we all	73
searched all around the house for the cat.	81
Finally, she was under the bed, but she was	91
not alone! She had given birth to three kittens:	100
two grey and one white. When we told our parents	110
about the kittens, they told us that mom was also	120
having a baby. We are going to have a sister!	130

The child can read the text (possible values: 01=yes, 02=no, 79=refused to answer, 88=NA)	[ 01 ]
Tatal and at CO as a superior form of the 400 TO Define dita annual	[57]

<b>Total words read at 60 seconds</b> (possible values: from 1 to 120, -79=Refused to answer, -88=NA)	[ <u>57</u> ]
Total incorrect words at 60 seconds (possible values: from 0 to 120, -79=refused to answer88=NA)	[9]
Total correct words in 60 seconds (possible values: from 0 to 120, -79=refused to answer, -88=NA)	[48]

Figure 8

In the previous example the child was able to read the title and the first two lines, so the fieldworker fills with a "01" the first item of this section. Moreover, the child could read 57 words in 60 seconds, 9 of those where incorrect. So in total, the child read 48 correct words in 60 seconds (subtract number of incorrect words from the number of words read correctly).

If the child completed the paragraph in less than 60 seconds the exact number of seconds that he/she took must be registered in item 1.32 of the Cognitive Development and Achievement Questionnaire.

# Reading in silence

After the child finishes reading aloud, ask him to read the text in silence. Say: "Good. Now, I would like you to read the story again in silence. When you finish, I will ask you some questions about what you have read. Do you understand what you are to do? Go on and let me know when you finish."

Let the child keep the text after he/she reads it because some questions about it will be asked to him/her. After you read each question, give the child at most 15 seconds to answer each question. Record the exact answer given by the child in your Cognitive Development and Achievement Questionnaire. **Do not mark the answers to the questions as correct or incorrect**. The answers are going to be assessed centrally by a professional with experience in test grading.

Say: "Now I am going to ask you a few questions about the story you just read. Try to answer the questions as best as you can."

Read the following questions to the child (slowly) and give him/her 15 seconds to answer.

Who is telling the story?

Why was the cat fat?

What is Sandra's little brother's name?

What do Sandra and Charlie like to do?

Why did Sandra and Charlie say the cat was not alone?

How many kittens did the cat have?

Where did Sandra and Charlie find the cat?

Why do you think the cat was missing for a while?

Figure 9 is an example of how to record the exact answer given by the child.

Who is telling the story?	[_]
Child's response: Sandra	
values 01= correct, 02= incorrect, 77=Doesn't know 79=refused to answer, 88=NA	
Why was the cat fat?	[_]
Child's response: She was playing hide and	
seek	
values 01= correct, 02= incorrect, 77=Doesn't know 79=refused to answer, 88=NA	

Figure 9

In the previous example, the fieldworker wrote the exact responses of the child but not mark any of them as correct or incorrect, as indicated.

# Section C. Listening Comprehension

This is **not** a timed exercise and there is **no stimuli card**. The fieldworker reads aloud the following passage slowly (about 1 word per second). Say: "Now, I am going to read you a short story aloud TWICE and then ask you some questions. Please listen carefully and answer the questions as best as you can. Do you understand what you are to do?"

Story:

A yellow little chicken was walking through a bridge. Suddenly, he slipped and fell in the river. "Help me! I can't swim!" he cried. There was a mouse passing by that saw the little chicken and came to help, but he fell in too. "What do we do now? I can't swim either" said the mouse. "I see something that is coming our way!" the chicken replied. They both climbed on the log and rowed to the shore. "We are saved!" they shouted when they finally arrived to land.

After you read each question, give the child at most 15 seconds to answer each question. Record the exact answer given by the child in your Cognitive Development and Achievement Questionnaire. **Do not mark the answers to the questions as correct or incorrect**. The answers are going to be assessed centrally by a professional with experience in test grading.

Read the following questions to the child (slowly):

Who fell in the river first?

Who fell in the river last?

Why did the little chicken fall in the river?

Where was the chicken when he fell in the river?

Why did the little chicken cried for help?

How did the chicken and the mouse get out of the river?

Figure 10 is an example of how to record the exact answer given by the child.

Who fell in the river last?	[]
Child's response: <u>Chicken</u>	
values 01= correct, 02= incorrect, 77=Doesn't know 79=refused to answer, 88=NA	
Why did the little chicken fall in the river?	[_]
Child's response: <u>Because he was distracted</u>	
values 01= correct, 02= incorrect, 77=Doesn't know 79=refused to answer, 88=NA	

Figure 10

As seen before, in this example, the fieldworker wrote the exact responses of the child but not mark any of them as correct or incorrect, as indicated.

#### 2.1.4. Mathematics Achievement Test

The Mathematics Achievement Test - Younger Cohort measures various numerical abilities appropriate for children aged 8 and it has two parts. In the first part the fieldworker will show the child a series of cards and will ask him/her to answer some questions orally. In the second part the fieldworker will give the child the test booklet and explain the instructions found in there to him/her.

Administration	Ítems	Materials
Oral	1 – 9	Numeracy Cards
Written	10 – 29	Booklet

# Materials

- Numeracy Card
- Mathematics Achievement Test Younger Cohort
- Cognitive Development and Achievement Questionnaire 8 years old
- Pencil and eraser
- Stopwatch

# **General Testing Guidelines**

The fieldworker must not, under any circumstances solve doubts about the content of the questions, nor read the questions to the child or lead him/her to an answer. The fieldworker should just encourage him/her to give his/her best effort.

The child is **NOT** allowed to use a calculator to solve any part of the test.

The tests must be picked up and **NOT** left with the participant. The items of the test should not be photocopied by anyone external to the project.

# **Testing time**

It is very important that the fieldworker registers the exact time in which the administration of each part begins and ends in the Cognitive Development and Achievement Questionnaire. The fieldworker must have a watch that allows him/her to control the duration of the evaluation.

Part 1 has no time limit but it should take about 4 minutes for the administration of items 1 to 9. However Part 2 has a maximum duration of 8 minutes.

If the child seems frustrated with the items, the fieldworker should try to calm him/her down by saying "Don't worry, if you don't know the answer to a question, why don't you continue with the next one" or "This is a hard question, do your best but don't feel bad if you don't know an answer".

# Part 1. Items 1 to 9

In part 1 the fieldworker will ask the child to answer orally or by pointing to the response that he/she thinks is correct. The answers, as stated by the child must be registered in the provided space of the Cognitive Development and Achievement Questionnaire.

Have the numeracy cards in hand and before showing them to the child say the following: "Now we are going to work with numbers and I will ask you to identify some numbers and count things. I will ask you different questions each time I show you a card, are you ready? Let's begin!"

For items 1, 2 and 3 show the child the card A of the numeracy cards with the numbers facing him. Ask him/her the following questions:

Please put your finger on number 21 (twenty-one)
Please put your finger on number 312 (three hundred twelve)
Please put your finger on number 3126 (three thousand one hundred twenty-six)

Before passing on to the next question check if the child answered correctly or not and write the appropriate value in the value column of your Cognitive Development and Achievement Questionnaire. For specific instructions to record child's answers correctly go to "Instructions for correcting child responses", present shortly in this manual.

For item 4 show the child card B and ask him: "Please count how many balls there are here" (Answer: 12) Compare the child's answer with the correct answer and record the appropriate value in your Cognitive Development and Achievement Questionnaire.

For item 5 show the child card C and ask: "Which number should come in the space in blank?" (Answer: 28) Compare the child's answer with the correct answer and record the appropriate code in your Cognitive Development and Achievement Questionnaire.

For item 6 show the child card D and ask him the question "Which number should come in the space in blank?" (Answer: 10) Compare the child's answer with the correct answer and record the appropriate code in your Cognitive Development and Achievement Questionnaire.

For item 7 show the child card E and ask him: "Jane has two apples and she receives three more apples. How many apples does she have now?" (Answer: 5). Compare the child's answer with the correct answer and record the appropriate code in your Cognitive Development and Achievement Questionnaire.

For item 8 show the child card F and ask him: "Joseph has 20 dollars and he bought a 4 dollar ice-cream. How many dollars does he have left" (Answer: 16) Compare the child's answer with the correct answer and record the appropriate code in your Cognitive Development and Achievement Questionnaire.

For item 9 (it does not need a card) ask the child the question "Please tell me the answer of this calculation: Two times four?" (Answer: 8). Compare the child's answer with the correct answer and record the appropriate code in the Cognitive Development and Achievement Questionnaire.

# Part 2. Items 10 to 29

Give the child the Mathematics Achievement Test Younger Cohort and read the instructions from the test with him/her to make sure he/she understands the instructions.

Before the child starts working by him/herself tell him/her that he/she must **answer the questions in order**. Then let the child work by him/herself with the test under your supervision. Do not interfere with his/her work unless he/she has a question about how to answer. The fieldworker must not read the questions to the child.

The participants must record their own answers in the test, and they will work alone but under the supervision of the fieldworker. During the test the fieldworker must check on the child's work to verify that he/she is recording the answers correctly and that he/she is answering them in order.

The child can use the test to make notes and calculations.

# **Testing time**

Give the Mathematics Achievement Test Younger Cohort – Booklet. Math computing to the child. Read the instructions with the child to make sure she/he understands the instructions (child must answer the questions in order). Then let the child work by herself/himself with the test under your supervision. **After 4 minutes** you should register the last item completed by the child without interrupting his/her work. Let the child continue working **until 8 minutes** have passed since the beginning of the test. Then stop the administration.

If the child finishes the entire test (20 items) before 4 minutes, the fieldworker must write down "29" in the question: last item completed after 4 minutes.

As mentioned before it is very important that the fieldworker registers the exact time in which the administration of part 2 begins and ends in the Cognitive Development and Achievement Questionnaire. Time spent on the explanation of instructions must not be considered.

As soon as the child finishes the test, the fieldworker must write down the finish time in the appropriate section of the questionnaire.

If the child requests to continue answering the test after 8 minutes because he is not done, the fieldworker must say kindly to the child that that's not necessary and stop the administration. If the fieldworker notices the child is very upset or anxious he must try to calm her/him down by saying that what he/she did is enough and that is not necessary to complete all the items in the test.

# <u>Instructions for coding child responses</u>

In part 1, the fieldworker will write the exact response given by the child in the line that states "Child's response". Then the fieldworker must compare it with the correct response and afterwards write the appropriate value in the value column of the Cognitive Development and Achievement Questionnaire. Figure 11 shows examples of correct (math item 1) and incorrect (math item 2) responses:

Math Item 1: Please put your finger in number twenty one	[ 01 ]
Child's response: 21	
(Correct answer: 21)	
(values: 01= correct, 02=incorrect, 77=NK, 79=refused to answer, 88=NA)	
Math Item 2: Please put your finger in number three hundred and twelve	[ <u>02</u> ]
Child's response: 3126	
(Correct answer: 312)	
(values: 01= correct, 02=incorrect, 77=NK, 79=refused to answer, 88=NA)	

Figure 11

In math item 1 from the example the fieldworker wrote the exact response given by the child (21) in the appropriate space and compared it with the correct answer (correct answer: 5) given. After that, fieldworker looked for the value for "correct" (01= correct), in the value options line and then wrote this code in the value column (01). Equally, for math item 2 the fieldworker recorded the answer of the child (3126) and then contrasted it with the correct answer for the item (Correct answer: 312). After that, fieldworker selected the proper value for incorrect answer (02=incorrect) and wrote this code in the value column.

For part 2, after the child has finished all the tests and he/she is no longer in the room, the fieldworker must record the child's answers in the Cognitive Development and Achievement Questionnaire. The fieldworker will only record the exact answer given by the child directly on the value column. Figure 12 shows an example of this kind of responses:

Math Item 11 (values from 0 to 999, -77=NK, -79=refused to answer, -88=NA)	[ <u>05</u> ]
----------------------------------------------------------------------------	---------------

Figure 12

In math item 11, from the example, the fieldworker record the exact answer given by the child in the value column (05), as indicated for this kind of item.

# 2.2. OLDER COHORT

The instruments that will be administered to the older cohort are, in this order:

- Peabody Picture Vocabulary Test (PPVT) Form A
- Verbal Achievement Test (Cloze items)
- Mathematics Achievement Test Older Cohort (Booklets I and II)

# 2.2.1. Peabody Picture Vocabulary Tests (PPVT-III)

Since the PPVT will be administered to both cohorts, the administration instructions are similar as for the younger cohort (see section 2.1). The fieldworker should follow the same procedures to administer the test to children in the older cohort.

# 2.2.2. Verbal Achievement Test (Cloze)

The Verbal Achievement Test for the Older Cohort consists of a series of sentences which are missing a word; the child must complete the sentence with the word that best fits the blank.

# **Materials**

- Verbal Achievement test
- Pencil and eraser
- Cognitive Development and Achievement Questionnaire 15 years old
- Stopwatch

# **General Testing Guidelines**

The fieldworker must give the test to the child and then read the instructions with him/her to make sure that they are understood.

Before the child starts working by him/herself tell him/her that he/she **must answer the questions in order**. Then let the child work by him/herself with the test under your supervision. Do not interfere with his/her work unless he/she has a question about how to answer. The fieldworker must not read the questions to the child.

The participants must record their own answers in the test, and they will work alone but under the supervision of the fieldworker. During the test the fieldworker must check on the child's work to verify that he/she is recording the answers correctly and that he/she is answering them in order.

The fieldworker must not, under any circumstances solve doubts about the content of the questions, nor read the questions to him/her or lead the child to an answer. The fieldworker should just encourage him/her to give his/her best effort.

If the child seems frustrated with the items, the fieldworker should try to calm him/her down by saying "Don't worry, if you don't know the answer to a question, why don't you continue with the next one" or "This is a hard question, do your best but don't feel bad if you don't know an answer".

The tests must be picked up and **NOT** left with the participant. The items of the test should not be photocopied by anyone external to the project.

# **Testing Time**

The fieldworker must have a watch that allows him/her to control the duration of the evaluation. It is very important that the fieldworker registers the exact in which the administration begins and ends in the Cognitive Development and Achievement Questionnaire. The beginning time must not include the explanation of instructions.

Give the Verbal Achievement Test Older Cohort – **cloze** to the child and read the instructions of this section with the child to make sure she/he understands the instructions (child must answer the questions in order). Then let the child work by herself/himself with the test under your supervision. **After 5 minutes** you should register the last item completed by the child without interrupting his/her work. Let the

child continue working **until 10 minutes** have passed since the beginning of the test. Then stop the administration.

If the child finishes the entire test (24 items) before 5 minutes, the fieldworker must write down "24" in the question: last item completed after 5 minutes.

# Copying child responses onto the questionnaire

After the child has finished all the tests and he/she is no longer in the room, the fieldworker must record the exact answers given by the child in the Cognitive Development and Achievement Questionnaire.

Fieldworkers must not assess the answers as correct or incorrect because this will be done centrally.

#### 2.2.3. Mathematics Achievement Test - Older Cohort

The Mathematics Achievement Test Older Cohort measures various numerical abilities appropriate for children aged 15. The test includes two booklets: calculation and problem solving. The fieldworker will give the child the test and explain the instructions found in there to him/her.

# **Materials**

- Mathematics Achievement Test Older Cohort Booklet 1
- Mathematics Achievement Test Older Cohort Booklet 2
- Cognitive Development and Achievement Questionnaire 15 years old
- Pencil and eraser
- Stopwatch

# **General Testing Guidelines**

The fieldworker must have a watch that allows him/her to control the duration of the evaluation. It is very important that the fieldworker registers the exact in which the administration begins and ends in the Cognitive Development and Achievement Questionnaire. The beginning time must not include the explanation of instructions.

Present the test to child saying: "Now we are going to work with numbers. First you will solve some calculations exercises and then solve some math problems. Are you ready? Let's begin!" Give the child the Mathematics Achievement Test Older Cohort and read the instructions from the test with her/him to make sure she/he understands the instructions. Then let the child work by her/himself with the test under your supervision.

If the child seems frustrated with the items, the fieldworker should try to calm him/her down by saying "Don't worry, if you don't know the answer to a question, why don't you continue with the next one" or "This is a hard question, do your best but don't feel bad if you don't know an answer".

Do not interfere with her/his work unless she/he has a question about how to answer.

The fieldworker must not, under any circumstances solve doubts about the content of the questions, nor read the questions to him/her or lead the child to an answer. The fieldworker should just encourage him/her to give his/her best effort.

The child is **NOT** allowed to use a calculator to solve any part of the test.

The tests must be picked up and **NOT** left with the participant. The items of the test should not be photocopied by anyone external to the project.

The participants must record their own answers in the test, and they will work alone but under the supervision of the fieldworker. During the test the fieldworker must check on the child's work to verify that he/she is recording the answers correctly.

The child can use the test to make notes and calculations.

Start the administration with Booklet 1 of the Mathematics Achievement Test Older Cohort and read the instructions with the child. Let her/him work following the indications given before. Take into account time limit procedures explained below. After Booklet 1 is finished hand the child Booklet 2 and follow the same procedures given before but take into account the following time limit procedures.

# **Testing time**

# Booklet 1: Math computing

Give the Mathematics Achievement Test Older Cohort – **Booklet 1** to the child. Read the instructions with the child to make sure she/he understands the instructions (child must answer the questions in order). Then let the child work by herself/himself with the test under your supervision. **After 4 minutes** you should register the last item completed by the child without interrupting his/her work. Let the child continue working **until 8 minutes** have passed since the beginning of the test. Then stop the administration.

If the child finishes the entire test (20 items) before 4 minutes, the fieldworker must write down "20" in the question: *last item completed after 4 minutes*.

# **Booklet 2: Problem solving**

Give the Mathematics Achievement Test Older Cohort – **Booklet 2** to the child. Read the instructions with the child to make sure she/he understands the instructions (**child must answer the questions in order**). Then let the child work by himself/herself with the test under your supervision. **After 10 minutes** finish the administration. Do not forget to register the finish time.

# <u>Instructions for correcting child responses</u>

After the child has finished all the tests and he/she is no longer in the room, the fieldworker must record the child's answers in the Cognitive Development and Achievement Questionnaire. As in Math Achievement Test Younger Cohort, in the present test there are three kinds of items. In some items the fieldworker just has to write the response given by the child. In others the fieldworker will write the exact response given by the child in the Cognitive Development and Achievement Questionnaire and then compare it with the correct response and afterwards write the appropriate value in the Cognitive Development and Achievement Questionnaire.

Figure 13 shows examples of how to write and mark the child responses in the Cognitive Development and Achievement Questionnaire.

Math Item 10 (values from 0 to 999, -77=NK, -79=refused to answer, -88=NA)	[_3]
Math Item 11 Child's	[ 02 ]
response: <u>17.03</u> (Correct answer: 17.43) (values 01= correct, 02= incorrect, 77=NK, 79=refused to answer, 88=NA)	

Figure 13

In math item 10, from the example, the fieldworker wrote the exact answer given by the child in the value column, as indicated before. Additionally, in math item 11 the fieldworker wrote the exact response given by the child (17.03) in the appropriate space and then compared it with the correct answer (correct answer: 17.43) provided. After that, fieldworker looked for the proper value for "incorrect", in the value options line of the item, and then wrote the value for incorrect in the value column (02= incorrect).

The last kind of items also demands the fieldworker to select a code or value that corresponds to the answer provided by the child. They are placed only in Booklet 2 of the Mathematics Achievement Test Older Cohort and they represent multiple choice answer questions. The following example illustrates the case of a five value option line, but fieldworkers must remember the procedure to complete this kind of items is the same in a four value option line.

<b>Math Item 25</b> (values 01=a, 02=b, 03=c, 04=d, 05= e, 77=NK, 79=refused to	[ <u>05</u> ]
answer, 88=NA)	

Figure 14

The example shows math item 25. The values represent each possible option of answer given to the child. In Figure 14, the child chose letter "e" as an answer. Consequently, the fieldworker wrote value "05" in the value column.

# 3. Final Notes on the Use of Young Live Codes

In this section we present a more detailed description of Young Lives's Codes in order to clarify their application during field work.

- Code 77: is assigned by the field worker when the person doesn't know the answer (i.e. leaves blank because could not provide with an answer).
- Code 79: means the child refuses to answer (e.g. the child answers up to a point and then does not want to continue with the test).
- Code 88: does not apply; could be used when the child was for some reason not administered the test (e.g. does not understand even simple instructions).

Sometimes we suggest using negatives (i.e. -77, -79 and -88) so that there is no confusion with actual student responses or item numbers in the test (see questionnaire).