

KiuFunza II (2015-16) Intervention Endline Test Protocol

This test protocol is a part of the KF II (2015-16) Endline Field Manual and training. It will be used in all endline trainings and must be adhered to strictly in all endline tests.

General

KiuFunza II endline testing requires a team of volunteers to carry out one-on-one testing of pupils in selected KiuFunza schools. Tests are done in Grades 1, 2 and 3 in the subjects Kiswahili, English and Math. Testing takes place in a quiet classroom setting with a maximum of 7 students tested at the same time while disturbances are minimized. Students are called in one by one; grade 1 students first, then grade 2, then grade 3. Tests start with Kiswahili, then English, then Math and take about 15 minutes in total. The key for successful endline testing is to take preparation seriously: to select excellent volunteer teams and to train them well on test protocol, understanding of the individual test items and on the proper use of data forms. The KiuFunza intervention management team together with EDI ensures that all the test content and centralized training are delivered with quality.

After test teams have been trained they will go to the field carrying a set of tools. The main tools are the student test to measure student skills and the student data form to capture the test results.

Two school types

KiuFunza II has two types of schools, distinguished by the treatment they receive: **Stadi** and **Mashindano**. The two types differ in the endline testing, because for the Mashindano ranking we need very detailed knowledge about the students' abilities. This means that the endline test for Mashindano is more detailed. However, for cost and practical reasons, we only print one test booklet to be used in both types. This means that some test modules will not be used in the Stadi schools. Testers must know in what type of school they are and will need to navigate the test booklet accordingly. The data form will help testers to make the distinction: a Stadi data form will be shorter than a Mashindano form. All this will be carefully explained and trained by the DC and ADC.

Math test

Note that in 2015-16, we have a separate test sheet for the Math test. The reason for the separate Math sheet is that all students want to write the Math problem on paper before answering. We save time by giving them the problems printed on paper. The students are allowed to write on this paper and the volunteer will check whether the answers are correct. Volunteers will take the test sheets with them after the test is completed.

Data form and Marking

In 2015-16 the volunteer will have **one data form for each pupil** he/she tests. The basic format consists of a table and provides one cell for each question/item. Each correct answer/well read item is **ticked**; each incorrect / "don't know" / unanswered question that the student was supposed to answer is **crossed**. If an item is skipped according to protocol it remains blank.

Test summary

All test days start with Grade 1 (followed by grade 2 and then grade 3). All tests start with Kiswahili, then English, then Math. Kiswahili and English are reading tests, printed in a booklet. The Math test is printed on a separate sheet as it requires students to write. All test results are always written on one student data form.

KiuFunza makes use of 10 test sets. At the start of the test, the volunteer first needs to select the test number for a student. This is done using the **random numbers table**. The choice of the test number is based on the last name of the student and the last digit of the day of the month. The use of the random numbers table is explained during the training. **For now the volunteer needs to remember to fill the number of the test set on the student data form.**

In 2015-16, each test consists of 3 parts: the core test (section A), a low level test (B), and a high level test (C). **NB in Stadi schools only section A is used. In Mashindano schools A is always used; weak students will do section B and strong students section C in Mashindano schools.**

The table below shows a summary of the Grade 1 test. Each subject test consists of a few **skills** and for each skill the student needs to complete a number of **items**. For example, the Kiswahili core test for Grade 1 has three skills: Silabi, Maneno and Sentensi. Each of these skills have six items: for example, for Silabi, the student needs to read/pronounce 6 syllables. For Maneno, the student needs to read 6 words. **Note that the test items are ordered from easy to difficult. The test questions should be administered to the student in the order they are printed in the test booklet.**

The Grade 1 Math core test has 5 skills: Kuhesabu, Kutambua namba, Namba ipi ni kubwa, Kujumlisha, Kutoa. Here each skill has three test items. **Again, test items are ordered from easy to difficult.**

Table 1

GRADE 1	Booklet	Booklet	Separate sheet
A. Core test	Kiswahili	English	Math
Skills Rules: try 2 items; if 1 correct, complete skill test.	6 SILABI 6 MANENO 6 SENTENSI	6 LETTERS 6 WORDS 6 SENTENCES	3 Kuhesabu 3 Kutambua namba 3 Namba ipi ni kubwa 3 Kujumlisha 3 Kutoa
Mashindano only			
Skip: if each test skill 0/1, go to B .			
B. Lower end test items (Mashindano only)	6 PIC + LETTER 6 PICTURES	6 PIC + LETTER 6 PICTURES	NA
Skip: if each test skill full score, go to C .			
C. Higher end test items (Mashindano only)	AYA: 5 sentences	Paragraph: 5 sentences	3 multiplication

Test application in Stadi schools

We repeat: in a Stadi school, the volunteer only uses section A, the core test. He/she starts with Grade 1, Kiswahili; then English, then Math (then Grade 2 Kiswahili, and so on, until Grade 3 Math). Table 1 shows the modules for each subject in the core test (Section A), Grade 1.

Core test rule 1: FOR ALL SKILLS AT MINIMUM ITEMS 1 AND 2 MUST BE TRIED (Kiswahili, English and Math).

Core test rule 2: IF A STUDENT FAILS BOTH ITEMS 1 AND 2, THE VOLUNTEER SKIPS TO THE NEXT SKILL. IF A STUDENT GETS AT LEAST ONE OF THESE FIRST 2 RIGHT, ALL THE OTHER ITEMS IN THAT SKILL ARE TESTED TOO.

Test rule 2 is based on the order of difficulty: if the student cannot do the first 2 easy items, we can be confident to continue without testing the remaining more difficult items. This helps us save test time.

Example Stadi school: a Grade 1 student is tested in Kiswahili. The student starts with Silabi. She tries the first two and can read them both. She is now asked to try the four remaining items in Silabi. The volunteer marks the correct answers (tick) and incorrect answers (cross) on the data form. After Silabi the student starts on Maneno. She tries the first two and gets one right. She is asked to try the four remaining items in Maneno. The volunteer marks the correct answers (tick) and incorrect answers (cross) on the data form. Now the student starts on Sentensi. She tries the first two but cannot read either of these. The volunteer marks incorrect on the first two items. The student does **not** continue with the four remaining items (these remain blank) and has finished the Kiswahili test. Since this is a Stadi school only Section A applies and we move to English.

Test application in Mashindano schools

As in Stadi schools, the Mashindano test always starts with Grade 1, Kiswahili; then English, then Math (then, after completing all Grade 1 students, Grade 2 Kiswahili, English, Math; then Grade 3 Kiswahili, English, Math). For each subject, the volunteer starts with the core test modules. We call this Section A. The basic rules for the core test are the same as for Stadi schools.

Core test rule 1: FOR ALL SKILLS AT MINIMUM ITEMS 1 AND 2 MUST BE TRIED.

Core test rule 2: IF A STUDENT FAILS BOTH ITEMS 1 AND 2, THE VOLUNTEER SKIPS TO THE NEXT SKILL. IF A STUDENT GETS AT LEAST ONE OF THESE 2 RIGHT, ALL THE OTHER ITEMS IN THAT SKILL ARE TESTED TOO.

Skip rules to low/high module:

Skip rule 1: STUDENTS WHO HAVE SCORED **EITHER 1 OR 0 CORRECT ITEMS PER SKILL** IN THE CORE TEST SKIP TO SECTION B (THE LOWER END TEST) AND TRY ALL TEST ITEMS.

*The only exception here is Grade 1 Math which does not have a lower end section.

Skip rule 2: STUDENTS WHO HAVE SCORED **ALL ITEMS CORRECT OR FULL POINTS** IN THE CORE TEST SKIP TO SECTION C (THE HIGHER END TEST) AND TRY ALL TEST ITEMS.

*NB full points means: 3 points for reading paragraph/story; and both comprehension questions correct.

For all other students the test ends after the core test.

Example Mashindano school: a Grade 1 student is tested in Kiswahili. The student starts with Silabi. She tries the first two and can read only one of them. She **tries** the four remaining items in Silabi but cannot read any of them. The volunteer marks the 1 correct answer (tick), and 5 incorrect (cross) on the data form. After Silabi the student starts on Maneno. She tries the first two but cannot read them (cross). She skips the four remaining items in Maneno (leave blank). The volunteer marks the incorrect answers (cross) on the data form, leaving open the boxes for the 4 items that were not tried. Now the student starts on Sentensi. She tries the first two and cannot read either of these. The volunteer marks incorrect on the first two items. The student does **not** continue with the four remaining items and has finished the Kiswahili test.

The volunteer checks and confirms this student has 1 correct item in the core test. The student is now offered module B: this has 6 picture + letter items and 6 picture items that the student has to name. The student must try all of the items in module B, and all the ticks (correct) and crosses (incorrect) are filled on the data form.

Grade 2 and Grade 3

The two tables below show the test content summary for grades 2 and 3. The same basic structure applies: section A is tested in all schools (Stadi and Mashindano), section B and C are applicable only to selected students in Mashindano schools.

GRADE 2			
A. Core test	Kiswahili	English	Math
Skills Rules: try 2 items; if 1 correct, complete skill test.	6 Maneno 6 Sentensi 1 Aya: 5 sentences	6 WORDS 6 SENTENCES 1 Paragraph: 5 sentences	3 Namba ipi ni kubwa 3 Kujumlisha 3 Kutoa 3 Kuzidisha
Mashindano only			
Skip: if each skill 0/1, go to B.			
B. Lower end test items	6 PICHA 6 SILABI	6 PICTURES 6 LETTERS	3 Kutambua namba 3 Namba ipi ni kubwa
Skip: if each skill full score, go to C.			
C. Higher end test items	2 Maswali Aya (comprehension)	2 Questions about paragraph	3 Division

GRADE 3			
A. Core test	Kiswahili	English	Math
Skills Rules: try 2 items; if 1 correct, complete skill test.	5 sentence Hadithi 2 Maswali	7 sentence Story 2 Questions	3 Kujumlisha 3 Kutoa 3 Kuzidisha 3 Kugawanya

Mashindano only			
Skip: if each skill 0/1, go to B .			
B. Lower end test items	6 Maneno 6 Sentensi Aya 5 sentences	6 Words 6 Sentences Paragraph 5 sentences	3 Kutambua namba 3 Namba ipi ni kubwa
Skip: if each skill full score, go to C .			
C. Higher end test items	Hadithi++ & questions	Story++ & questions	3 Division++

Special Attention: grading paragraph and story reading

The volunteer is required to note correct/incorrect on the data form for each test item as the test progresses. For example, in Grade 1 Kiswahili, the first skill is Silabi with 6 items. For each item that the pupil can read the volunteer puts a tick, indicating “correct” or “can read”.

In Grades 2 and 3 (and Grade 1 higher end) the pupil needs to read a paragraph or story. In 2015-16, the volunteer needs to do more than indicate “can read”. He/she needs to grade the reading ability on a 0-3 scale, as follows:

- 0 = cannot read anything;
- 1 = insecure reader, hesitant and many mistakes;
- 2 = standard reader, some mistakes;
- 3 = good reader, fluent and with understanding.

So when grading paragraphs and stories the volunteer needs to give a grade between 0 and 3 and write this number in the box on the data form that corresponds to the paragraph or story. When there are also comprehension questions there will be room to tick (correct) or cross (incorrect) for each question.

Q: What about “Core test rule 1” in paragraph reading? Remember that:

Core test rule 1: FOR ALL SKILLS AT MINIMUM ITEMS 1 AND 2 MUST BE TRIED (Kiswahili, English and Math).

A: When a student reads a paragraph or story, this means: the student needs to try reading sentence 1 and 2 of the paragraph or story.

Q: What about “Core test rule 2” in paragraph reading? Remember that:

Core test rule 2: IF A STUDENT FAILS BOTH ITEMS 1 AND 2, THE VOLUNTEER SKIPS TO THE NEXT SKILL. IF A STUDENT GETS AT LEAST ONE OF THESE 2 RIGHT, ALL THE OTHER ITEMS IN THAT SKILL ARE TESTED TOO.

A: The volunteer needs to assess for each of the first 2 sentences whether it is a “pass” or a “fail”. Simply put, if the child can read at least 1 of these 2 sentences he/she continues with the rest of the paragraph/story. If the child cannot read either of these 2 sentences, **the volunteer marks 0**.

Q: What about the Mashindano skip rules in paragraph reading? Remember that:

Skip rule 1: STUDENTS WHO HAVE SCORED EITHER 1 OR 0 CORRECT ITEMS PER SKILL IN THE CORE TEST SKIP TO SECTION B (THE LOWER END TEST) AND TRY ALL TEST ITEMS.

A: the story or paragraph reading mark is used to decide. A mark of 1 or 0 means “1 or 0 correct items”.

* Example: a student in Grade 2 Kiswahili, who has scored 1 correct Maneno, 1 correct sentensi, and 1 mark for Aya reading has “1 correct items per skill” and skips to Section B.

* Example: a student in Grade 3 English, who has received a mark of 0 for Story skips directly to Section B. (A student who scores 0 on the story does not need to answer the story comprehension questions, and instead skips directly to Section B.) A student who scores 1 on the story will move on to the next skill, story comprehension questions, and try to answer the questions. If they score either 1 or 0 correct items in all of the skills, then they will go to Section B.

Example Stadi school, Grade 2 Kiswahili:

A Grade 2 student is tested in Kiswahili. The student starts with Maneno. She tries the first two and can read them both. She is now asked to try the four remaining items in Silabi. The volunteer marks the correct answers (tick) and incorrect answers (cross) on the data form. After Maneno the student starts on Sentensi. She tries the first two and gets one right. She is asked to try the four remaining items in Sentensi. The volunteer marks the correct answers (tick) and incorrect answers (cross) on the data form.

Now the student starts on Aya, a paragraph of 5 sentences. She tries the first two sentences and can read one of these. She continues but struggles with most sentences, with many reading mistakes. The volunteer grades her as 1 (insecure reader). Since this is a Stadi school only Section A applies and we move to English.

Example Mashindano school, Grade 3 English: a Grade 3 student is tested in English. This test has a story with two comprehension questions. The student starts and tries the first two sentences and cannot read either of these. The volunteer marks 0 (cannot read anything) and the student does **not** continue with the remaining sentences. See skip rule 1: this student skips to Section B and tries all items.

Other example Mashindano school, Grade 3 English: a Grade 3 student is tested in English. This test has a story with two comprehension questions. The student starts and tries the first two sentences and **can** read both of these but with some hesitation. The volunteer allows her to continue and she reaches the end. The volunteer marks 2 (standard reader). The student then answers the story comprehension questions. Sections B or C do not apply.

Materials for DCs/ADCs:

- student photos
- original registration/attendance photocopies
- school data form
- individual student data forms (grades, 1, 2, and 3) provided to volunteers
- student name lists (grades 1, 2, and 3)
 - for the teacher to call the names

- and as a back-up for DCs in case a student form gets lost

Materials for Volunteers:

- ink
- blue pens (at least 2)
- test booklets (grades 1, 2, and 3)
- Maths test sheets
- individual student data forms (grades, 1, 2, and 3) provided by DCs
- random numbers table to choose test set
- small exercise books
- watch
- sharpened pencil (at least 2)

Before Test Day:

- DC will call the school's HT 3 business days before your visit date to explain that
 - DC, ADC, and volunteers will address the students on the morning of your visit, to calm them
 - HT should prepare all teachers in the school about testing
 - all Grade 5 and 6 students that they are not to come to school during the day of your visit
 - school needs to prepare at least 3 empty classrooms for testing
 - and any other arrangements that provide a conducive testing environment for the students

Test Day, Before Testing:

- Field Set Up
- Instructions to Volunteers
 - identify which of the 3 testing rooms you have been assigned to
 - proceed to that assigned testing room and identify and go to the exact location you will use to test students
 - go to that location, prepare all of the necessary items (as listed above) and make sure that you are seated comfortably before testing begins

Test Day, During Testing:

- divide students by grade into each of the three "holding rooms"
- switch off all phones during testing
- grade 1 will be tested first, by all volunteers, followed by grade 2 and then grade 3

- **Organization of students (DC and ADC)**
 - The students to be tested will be in a “holding” classroom.
 - Their teacher will use the **List of Student Names** to call the first 20 students to be tested in each of the testing rooms. Once a student is identified, the DC will give the student the correct data form which he/she will take into the test room with him/her and hand to the volunteer.
 - After these students go into the testing rooms, the teacher will use that same list to call the next 10 students at a time to be tested, in exactly the order that their names appear in that list. These 10 students will wait immediately outside of this “holding” room until they are called into the testing rooms.
 - The ADC will be situated strategically outside of that “holding room” in view of both the “holding” room as well as the testing rooms.
 - The ADC will direct each of these 10 students to go to the particular room as soon as a student completes testing in one of those testing rooms.
 - Once you are done testing a student, a new student will arrive into the room. Please signal non-verbally, so as to not disturb others testing in the room, to that student using your hands to come to your testing location in the room.
 - This process will continue until all the students from the registration list are tested.
 - Any students still untested in the holding rooms will be tested if and only if the following is confirmed:
 - Confirm that the student is registered and note their registration number
 - If that registration number is bigger than the smallest registration number we have in our list of students AND smaller than the largest registration number we have in our list of students, then the student in question can be tested
 - Otherwise, the student will NOT be tested
 - For these students, use one of the blank student data forms provided, fill in the necessary information at the top of the form (Name, Gender, Stream, Registration Number, and Year of Birth), and send them into the testing room with this form.
- **Administering the Test (Volunteers)**
 - Prepare the test booklet for whichever grade you are testing at the time (grade 1 first, then grade 2, then grade 3)
 - The students will now begin to enter the testing rooms
 - When a student sits down at your desk, take their data form from them, greet them according to the script in your field manual, and double check that they have the correct data form (ask “Is your name _____?”). If the data form is not correct, send them back out to the DC to get the correct form.
 - Select the test version you will use to test the student using the random numbers table
 - Record this test version on the data form
 - Record the start time.
 - test the student in Kiswahili according to the testing protocol, recording which questions they got right and wrong on the data form. During the entire test, the student should not write on the test, but keep the test booklet on the table so the student can see it.

- test the student in English according to the testing protocol, recording which questions they got right and wrong on the data form. During the entire test, the student should not write on the test, but keep the test booklet on the table so the student can see it.
- test the student in math according to the testing protocol, recording which questions they got right and wrong. During the entire test, the student should not write on the test, but keep the test booklet on the table so the student can see it.
- When a student has finished Kiswahili, English and math, record the end time and sign your name, confirming that you have testing the student according to all instructions provided during training.
- mark the student's pinky finger with blue ink, thank the student and tell him or her that they are free to go.
- Complete the above steps for grades 2 and 3

Test Day, After Testing:

- arrange all your Data Forms in a neat manner. Make sure that everything is filled in and you have signed all necessary pages on which you have recorded any data.
- Hand the Data Forms and test booklets to your DC or ADC
- Be sure to assist the DC or ADC in whatever tasks required before leaving the school.
- Thank the school community and prepare to move on to the next school

Daily Timetable

- Testing will occur from 8am until sunset
- The DC will select 10 of you to get a 15 minute break at 11 am until 11:15 am. The remaining 10 will continue testing during this time and take their 15 minute break at 11:15 am until 11:30am once the first 10 have returned to their testing stations.
- The DC will select 10 of you to get a 20 minute break at 2 pm until 2:20 pm. The remaining 10 will continue testing during this time and take their 20 minute break at 2:20 pm until 2:40pm once the first 10 have returned to their testing stations. This set up allows for testing to continue uninterrupted throughout the day so that testing is done in 1 business day (or 2 for exceptionally large schools).